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2023-2024



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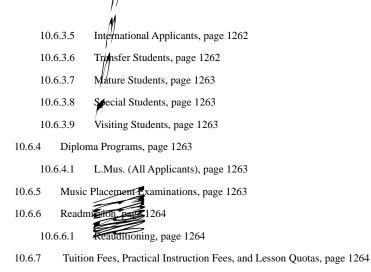
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# 1 University Regulations and Resources

## 1.1 General Policies and Information

You must inform yourself of University rules and regulations and keep abreast of any changes that may occur. The *General Policies and Information* section of this document contains important details needed by you during your studies at McGill and should be periodically consulted, along with other sections and related publications.

## 1.1.1 Authorization, Acknowledgement, and Consent

When applying for admission to the University, you are bound by and agree to observe all statutes, rules, regulations, and policies at McGill University and the faculty or faculties to which you may be accepted and registered in, including policies contained in the University calendars and related fee documents. Your obligation as a student begins with your registration and ends in accordance with the University's statutes, rules, regulations, and policies.

You should verify all information or statements provided with your application. Incorrect or false information may jeopardize your admission. The University reserves the right to revoke an admission that is granted based on incorrect or false information in an application or supporting documents.

## 1.1.2 Student Rights and Responsibilities

Student Rights and Responsibilities is produced jointly by the Office of the Dean of Students and the Secretariat. It contains regulations and policies governing your rights and responsibilities as a student at McGill, and is available at mcgill.ca/students/srr.

Further details regarding your rights and responsibilities are also available at mcgill.ca/secretariat/policies-and-regulations.

# 1.1.3 Language Policy

Responses on multiple-choice exams are normally checked by the Exam Security Computer Monitoring program. The program detects pairs of students with unusually similar answer patterns on multiple-choice exams. Data generated by this program can be used as admissible evidence in an investigation of cheating under Article 17 of the *Code of Student Conduct and Disciplinary Procedures*.

The Office of the Dean of Students administers the academic integrity process as described in the Student Rights and Responsibilities.



**Note:** All newly-admitted undergraduate and graduate students must complete a **mandatory online academic integrity tutorial** in their first semester, accessed through *Minerva* > *Student Menu* > *Academic Integrity Tutorial* or a registration "hold" will be placed on their record. Prior to Fall 2018, undergraduate students completed the tutorial in myCourses via the course AAAA 100, but as of Fall 2018 the tutorial must be completed in Minerva. For more information, see *mcgill.ca/students/srr/honest/students/test*.

#### 1.1.5 University Student Assessment Policy

The *University Student Assessment Policy* includes all disparate policies with regard to all types of student assessments. This policy is meant to protect students from excessive workloads, and to ensure that all students are treated equally.

This policy applies to undergraduate and graduate courses offered by the University that are evaluated by any form of assessment. Except where otherwise indicated, this policy applies to all faculties, including those which administer their own examinations.

You can consult the policy on the Secretariat website.

## 1.1.6 Policy Concerning Access to Records

The University sends statements of account and all other correspondence directly to students. You retain full control over who has access to your records or accounts; however, officers and members of the University staff also have access to relevant parts of your records for recognized and legitimate use. The University does not send progress reports or any other information to your parents and/or sponsors unless you specifically request it in writing.

Personal information is protected in the Province of Quebec by the Act Respecting Access to Documents held by Public Bodies and the Protection of Personal Information (the "Access Act"). The Access Act provides that McGill University can only release personal information contained in your file with your authorization or if specifically authorized by law.

For the purpose of consent and acknowledgement at the time of application, personal information includes, but is not limited to: name, address, telephone number, email address, date of birth, citizenship, McGill ID, program, student status, and academic record information.

Registered students may oppose the release of certain personal information by completing an Opposition Form.

After having reviewed the information relating to access to personal information at the time of application, you will be asked to agree that the University may collect, use, disclose, or otherwise manage your personal information as described below, as necessary and as the case may be.

At the time of application, you will be asked to **consent to the release of personal information** contained in your admissions or student records file to the following persons or bodies, as necessary to each body, in the exercise of their mission:

- student associations recognized by McGill University for the categories of student to which you belong (limited to your contact and program information);
- · schools or colleges that you have attended;
- a professional body or corporation, where relevant;
- the Ministère de l'Immigration, de la Francisation et de l'Intégration and/or the Régie de l'assurance maladie du Québec; Immigration, Refugees, and Citizenship Canada; and/or the Ministère de l'Éducation et de l'Enseignement supérieur;
- Universities Canada, the Association of Registrars of the Universities and Colleges of Canada, and the BCI (*Bureau de coopération interuniversitaire*, previously known as CREPUQ), or the member institutions of these organizations, for the purpose of admissions operations and the production of statistics:
- libraries of other Quebec universities with which McGill has established reciprocal borrowing agreements;
- the appropriate authorities involved with e

to a McGill professor, researcher or graduate student, strictly for research or teaching purposes; and to a University teaching/affiliated hospital or health centre to which you apply/or join for residency or rotations.

In addition to the above, **if you are a candidate for admission to the Schulich School of Music, you will be asked to consent to** the use of your name and images in public recognition of academic achievement and in the advertising and audio and video recording of student ensemble concerts for distribution using different media and formats.

At the time of application, you will be asked to authorize the University to:

- · collect and maintain your personal information for the purpose of administering your University admissions and student record files;
- obtain copies of your transcripts from the *Ministère de l'Éducation et de l'Enseignement supérieur*; the Ontario Universities' Application Centre; and/or the British Columbia Ministry of Education;
- make inquiries to and obtain personal information from the *Ministère de l'Immigration*, *de la Francisation et de l'Intégration*; Immigration, Refugees and Citizenship Canada; and/or the *Régie de l'assurance maladie du Québec* to verify the validity of your immigration or health insurance status;
- 1



**Note:** When on a leave of absence, if you wish to be covered by the undergraduate supplemental health insurance and/or international health insurance, you must contact your respective campus-wide student association (e.g., Students' Society of McGill University, Macdonald Campus Students' Society) and International Student Services to make arrangements. Note that there will be additional student society fees to be paid in order to be considered a member eligible for the insurance plans. For information about the student societies' supplemental health and dental coverage, click *here*.



**Note:** Once a leave of absence is granted, you must consult *Scholarships and Student Aid* in order to assess the impact of the leave on student aid (e.g., government loans and bursaries, etc.).



Note for M.D., C.M. students: Refer to the Absences & Leaves Policy of the M.D., C.M. Program.

If you need to take a leave of absence because of pregnancy or because you need to care for a dependant, please consult section 1.1.9.5: Academic Accommodation of Pregnant Students and Students Caring for Dependants.

## 1.1.8 Information Technology (IT) Policies and Regulations

McGill University students, faculty, staff, and other members of the McGill community benefit from a variety of Information Technology resources, which are used in accordance with University policies and directives. Visit the *IT policies* site for further details.

Here are some key references for students:

- section 1.1.8.1: Responsible Use of McGill Information Technology Resources
- section 1.1.8.2: Report Security Incidents
- section 1.1.8.3: Use of Cloud Services
- section 1.1.8.4: Two-Factor Authentication (2FA)
- section 1.1.8.5: Email Communication
- section 1.1.8.6: Secure your Journey

#### 1.1.8.1 Responsible Use of McGill Information Technology Resources

Each of us has responsibilities when using McGill's IT resources. The *Policy on the Responsible Use of McGill Information Technology Resources* is a code of conduct that identifies what is acceptable when working with McGill technology resources.

For more information, view the Policy on the Responsible Use of McGill Information Technology Resources, available on the Secretariat website.



Note for M.D., C.M., and D.M.D. Programs: For guidelines regarding the use of social media by M.D., C.M., and D.M.D. students, see *mcgill.ca/ugme/policies-procedures/guidelines-social-media* and *mcgill.ca/thewelloffice*.

## 1.1.8.5 Email Communication

All students are assigned a McGill email address (usually in the form of *firstname.lastname@* mail.mcgill.ca) and are given a McGill email mailbox. It is your responsibility to monitor your McGill email regularly because this is the official means of communication between McGill University and its students. Ensure that you read and act upon the emails in a timely fashion.

**Note:** Confirm your McGill email address or set your McGill password on *Minerva*, under the *Personal Menu*. ou can also change or reset your McGill password by following the instructions on the *McGill P* d *Reset Checklist*.

Telephone: 514-789-8775 or 1-866-795-4435 (Monday to Friday, 9 a.m. to 5 p.m.)

Website: www.studentcare.ca

If you are a Canadian student from **outside Quebec**, you should check with your provincial medicare office to ensure that you have valid provincial health coverage while studying at McGill.

## Canadians who have been residing outside of Canada

If you are a Canadian student who has been living abroad, you may not be eligible for provincial health insurance coverage. To verify your *eligibility* for the Quebec provincial health plan, contact:

Régie de l'assurance maladie du Québec (RAMQ) 425 Boulevard de Maisonneuve O., Suite 301 Montreal OC H3A 3G5

Telephone: 514-864-3411

Website: www.ramq.gouv.qc.ca/en/pages/home.aspx

**Important:** If you are not eligible, in order to ensure adequate health insurance coverage you may enrol in the *group plan* offered through International Student Services for international students. **Please note that this option is available only during the first month of each new semester at McGill.** 



**Note for Continuing Studies:** Continuing Studies students also have access to a health and dental plan offered by MACES; please refer to <a href="http://studentcare.ca/rte/en/IHaveAPlan\_MACES\_Home">http://studentcare.ca/rte/en/IHaveAPlan\_MACES\_Home</a> for eligibility and other information.



Note for Graduate and Postdoctoral Studies: Graduate students classed as Canadian full-time or Additional Session, Thesis Evaluation, Non-Thesis Extension, as well as postdoctoral candidates are automatically covered by their society's extended Health and Dental Plan (PGSS). Eligible students not charged automatically for insurance fees can choose to enrol themselves during the appropriate Change-of-Coverage period. For more information on what this plan covers, as well as enrolment, opt-out procedures, and deadlines, please refer to the latest information at studentcare.ca/rte/en/McGillUniversitygraduatestudentsPGSS\_Home. Students without valid Canadian medicare, please see section 1.1.9.2: Health Insurance – International Students, or the Canadians who have been residing outside of Canada section above.

#### 1.1.9.4 Special Medical Needs

If you have special medical needs, please book an appointment with the Student Wellness Hub to discuss how to manage your health while at McGill.

If you anticipate encountering ongoing barriers in the academic or physical environment due to disability, injury, or illness, please consult with the *Student Accessibility & Achievement* to determine an appropriate individualized accommodation plan. Appropriate medical documentation may be required, and can be discussed with an Access advisor. Academic accommodation planning and support is available to students at the Downtown Campus as well as the Macdonald Campus, and to students in Continuing Studies. Please refer to *mcgill.ca/access-achieve/* for more information, or to book an appointment.



Note for Medicine and Health Sciences: See the WELL Office at mcgill.ca/thewelloffice.

## 1.1.9.5 Noad@midkingcBolinoodation of Pregnant Students and Students Caring for Dependants

McGill acknowledges the particular challenges facing you as a pregnant student and/or as a student caring for a dependant.

McGill supports you in your desire to further your education while meeting your family obligations.

Wishing to provide an environment in which you may be able to continue in your program of study and fulfil your university commitments, these guidelines aim to set out how, and in what exceptional circumstances, you may request academic accommodation.

## 1.1.10 Non-Smoking Policy

Quebec law prohibits smoking in public buildings. Smoking on University Property is permitted only within outdoor Designated Smoking Areas. Smoking is prohibited outside any Designated Smoking Area on University Property. For more information, see mcgill.ca/ehs/policies-and-safety-committees/policies/mcgill-smoking-policy and mcgill.ca/secretariat/policies-and-regulations.

Note: For the purposes of the Tobacco Control Act, "smoking" also covers the use of an electronic cigarette or of any other device of that nature; "tobacco" also includes the following accessories: cigarette tubes, rolling paper and filters, pipes, including their components, and cigarette holders. Please consult Chapter L-6.2 e4u87 296.36 TmTm(olling paper and filter)T0 0 1 rt olli956rt

#### 1.2 **Personal Information**

You must inform yourself of University rules and regulations and keep abreast of any changes that may occur. The Personal Information section of this publication contains important details pertaining to nominative information, legal documents, and ID cards, as well as other topics, and should be consulted periodically.

#### 1.2.1 **Updating Personal Information**

It is important to keep your McGill record up to date with your personal information, especially a mailing or billing address, as these are used by the University year-round. Upon initial registration, students are prompted to provide this information. Every 6 months thereafter, students a prompted to update this information as needed.

You must update your address(es) and/or telephone number(s) and emergency contact information on *Minerva* under the *Personal Menu*.

If you need to change important personal information that requires the University to verify official documents—such as a name change, gender, or a correction of your birth date—refer to the instructions at mcgill.ca/student-records/personal-information/name-gender. Macdonald Campus students can request changes in person at the Macdonald Campus Student Affairs Office, Laird Hall, Room 106.



Note for Continuing Studies: If you need to change important personal information that requires the University to verify official documents, such as a change to your name, gender, citizenship, or a correction of your birth date, you must go in person (as soon as possible) to the School of Continuing Studies Client Services Office. Such changes can only be made in person at the School of Continuing Studies, Client Services Office, 688 Sherbrooke Street West, Room 1199.



Note for Nursing: A Quebec address and telephone number are required for Nursing students on Minerva to meet OIIQ registration requirements.

#### 1.2.2 Online (Distance) Programs

Students registered in exclusively online (sometimes referred to as 'distance') programs are required to declare where they are geographically located while studying for every term they are registered in the online program. For students pursuing an online program, location while studying is considered — along with the fee residency status (i.e. Quebec Resident, Canadian or International) — when determining what fees are charged.

The following programs are designed to be offered exclusively online and, with some exceptions, are not offered on one of McGill's campuses:

## **Undergraduate Programs**

: Bachelor of Nursing (B.N.I.) - Integrated Nursing (65 credits) \*\*

## **Graduate Programs**

```
: Graduate Certificate (Gr. Cert.) Chronic Pain Management (15 credits)
: Graduate Certificate (Gr. Cert.) Cybersecurity (15 credits)
: Graduate Certificate (Gr. Cert.) Educational Leadership 1 (15 credits) **
: Graduate Certificate (Gr. Cert.) Educational Leadership 2 (15 credits)
: Graduate Certificate (Gr. Cert.) Educational Leadership 3 (15 credits)
: Graduate Certificate (Gr. Cert.) Healthcare Management (15 credits)
: Graduate Certificate (Gr. Cert.) International Leadership in Educational and Administrative Development (15 credits)*
: Certificat d'études supérieures (Cert.ed.sup.) pédagogie de l'immersion française (15 crs)
: Graduate Certificate (Gr. Cert.) Public Relations & Communication Management Practice (15 credits)
: Graduate Certificate (Gr. Cert.) Teaching English as a Second Language (15 credits)
: Master of Management (M.M.) IMHL (Non-Thesis) (45 credits)
```

#### Continuing Studies Programs (Undergraduate and Graduate Levels)

- : Certificate (Cert.) Applied Cybersecurity (30 credits) : Certificate (Cert.) Computers and Information Technology (30 credits)
- : Certificate (Cert.) Indigenous Business Management (30 credits)
- : Certificate (Cert.) Public Administration and Governance (30 credits)
- : Diploma (Dip.) Public Administration and Governance (30 credits)
- : Graduate Diploma (Gr. Dip.) Legal Translation (30 credits)



\*: This program is self-funded



\*\*: This program may also have an on-campus equivalent. Only students in the online version of the program must use Minerva to submit a declaration of location for a registered term.

Students in the online version of an

#### **Ouebec and Canadian Out-of-Province Students**

account to verify that your status is updated correctly (Select Student Menu > Student Accounts Menu > View your Tuition and Legal Status)

You have applied to McGill from another Quebec university

- Proof of Canadian status is required: Canadian birth certificate; or Canadian citizenship card or certificate (both sides); or Certificate of Indian status card; or Makivik Society card; or valid Canadian Confirmation of Permanent Residence document (Note 2); or valid Canadian Permanent Resident card (both sides of the card)
- Additionally, for Quebec residency status, usually no documents are required, unless McGill cannot confirm this from the Government of Quebec. Check your Minerva account to verify that your status is correct

You were born in Quebec

Quebec birth certificate (Note 4)

You were born in (or are a Landed Immigrant from) a Canadian province other than Quebec

- Canadian birth certificate; or Canadian citizenship card or certificate (both sides); or Certificate of Indian status card; or Makivik Society card; or valid Canadian Confirmation of Permanent Residence document (Note 2); or valid Canadian Permanent Resident card (both sides of the card)
- Permanent Code Data Form (Notes 1 and 5)

You are a Quebec resident as defined by one of the other situations outlined • by the Government of Quebec

- Canadian birth certificate; or Canadian citizenship card or certificate (both sides); or Certificate of Indian status card; or Makivik Society card; or valid Canadian Confirmation of Permanent Residence document (Note 2); or valid Canadian Permanent Resident card (both sides of the card)
- Permanent Code Data Form (Notes 1 and 5)
- Attestation of Residency in Quebec Form (Note 5)
- Other supporting documents, depending on which situation you checked on the above Attestation of Residency Form

### **International Students**

You will be studying at McGill for less than six months (i.e., for only one academic semester) as a non-degree student (e.g., Exchange, Special, Visiting)

- You may need a Visitor's Permit or eTA issued by Immigration, Refugees, and Citizenship Canada at your port of entry into Canada. To determine if you are required to have a visa, please refer to the Immigration and Citizenship website
- Photo page of your passport
- Permanent Code Data Form (Notes 1 and 5)

You will be in Canada for more than six months (i.e., you are enrolled in a degree, certificate, or diploma program, usually for two or more consecutive academic semesters)

- Certificate of Acceptance of Quebec (CAQ)
- Study Permit issued by Immigration Canada (Note 3)
- Permanent Code Data Form (Notes 1 and 5)



Note 1: Your signed Permanent Code Data Form is usually required. If the names of your parents appear on your birth certificate, if you have clearly identified your parents' names on your application to McGill, or if you have already provided McGill with your Permanent Code, you do not need to supply this form.



Note 2: Your valid Canadian Permanent Resident status can be proved by a copy of your Canadian Confirmation of Permanent Residence (IMM 5292 or IMM 5688) document or with your Canadian Permanent Resident card (both sides). Alternatively, you may provide your Immigration Record of Landing (IMM 1000) document. Note that McGill reserves the right to ask you for copies of both your PR card and your IMM document.



Note 3: If you are a refugee, your Convention Refugee Status document is required instead of a Study Permit.



Note 4: Usually McGill needs your birth certificate to prove your place of birth in Quebec. If you already have a valid Quebec Permanent Code, McGill will accept a copy of your valid Canadian passport that indicates your birthplace as being within the province of Quebec as proof that you are eligible for Quebec residency.



**Note 5:** You can find links to download and print the Permanent Code Data and Attestation of Quebec Residency forms at *mcgill.ca/legaldocuments/forms*.

## 1.2.3.2.1 Fee Exemptions

Exemption from the out-of-province or international supplement tuition fees is possible for students in any of the following three categories, as authorized by the Government of Quebec:

- 1. French Course Fee Exemptions Full-time international students are charged fees at the Quebec tuition rate by default for certain eligible French courses (note exclusions as listed at mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/tuition-fee-exemptions).
- 2. Out-of-Province Tuition Supplement Exemptions Non-Quebec Canadian students in the following categories are exempted from out-of-province tuition supplements (details at mcgill.ca/student-accounts/tuition-fees/general-tuition-and-fees-information/tuition-fee-exemptions):
  - Students in a Ph.D. program
  - Students in a Postgraduate Medical Education program: Medical Residents, Clinical Fellows, Clinical Research Fellows, Research Fellows
  - Students registered full-time in the Master's in French (*Maîtrise en français*). The exemption begins at the moment the student registers in the program, without retroactive effect
- 3. International Students Eligible for Fee Exemptions Based on Legal Status in Canada Students with one of the following statuses may be exempt from International Supplements (certain categories may be assessed at the Canadian tuition rate; full details regarding eligibility criteria are listed at mcgill.ca/legaldocuments/exemption):
  - Citizens of France
  - Citizens of certain countries with an agreement with the Government of Quebec
  - · Diplomatic, consular, or other representatives of international organizations
  - Convention refugees
  - · Students awaiting permanent residency in Canada and holding an eligible CSQ
  - Students whose spouse holds, or unmarried students whose parent holds a Temporary W

# 1.2.3.5 Where and How Do I Send My Documents?

You must send in all your documents after you have accepted your offer of admission but before the start of classes.

## 1.2.4.2 ID Card Schedule for the Macdonald Campus

New students can obtain their ID card 24 hours after registering for their first course. Registration dates for new students can be found here.

The Macdonald Campus ID Centre is in the Student Affairs Office, Laird Hall, Room 106. Information on when the ID Centre is open can be found *here*.

## 1.2.5 Legal Name and Gender

#### 1.2.5.1 Legal Name

Your legal name is the name that will appear on your degree, diploma, or certificate upon graduation, and on your e-bills, tax receipts, and official transcript. It is also used by the Government of Quebec to create a *Permanent Code*.

After confirming your offer of admission and registering at McGill, the name provided on your admission application is validated, and in the event of a variation updated, to match the legal name appearing on one of the following documents:

- 1. Canadian birth certificate, copy of an act of birth, or citizenship certificate
- 2. Canadian Immigration Record of Landing (IMM 1000 or IMM 5292 or IMM 5688 and Permanent Residence card)
- 3. Canadian Immigration Study or Work Permit
- 4. Certificate of Acceptance of Quebec (CAQ)
- 5. International passport (Note: If you possess Canadian citizenship, a Canadian citizenship card or certificate is required as a Canadian passport is not acceptable)
- **6.** International birth certificate (with an official translation in English or French)
- 7. Letter from international student's consulate or embassy in Canada
- **8.** Marriage certificate issued outside of Quebec—translated into English or French by a sworn officer if in another language (**Note**: Quebec marriage certificates are only acceptable if issued prior to 1984)
- 9. Certificate of Name Change or Certificate of Change of Sex Designation and Name issued by the Quebec Directeur de l'état civil or applicable force in any Canadian Province

In the case of a variation in the spelling of the name among these documents, the University will use the name on the document that appears first on the above list.

Should McGill require a copy of one of the documents listed above, both or all sides of the document must be copied and presented.

In order to update the legal name on your student record you must:

- 1. Complete a Personal Data Change Form
- Provide us with a copy of the appropriate legal document with the updated legal name (if we don't already have a copy); the list of acceptable documents is listed above
- 3. Submit the completed form and copy of the legal document by email attachment (PDF or TIFF format) to

- Student advising transcripts
- For a complete list of examples, please refer to Student Records

The student's legal name must appear on official university documents, such as:

- Official university transcripts
- Reports to government
- Letters of attestation
- Diplomas and certificates
- Tuition fee e-bills
- For a complete list of examples, please refer to Student Records

It is important to note that making a request to use a preferred first name at McGill does not change a student's legal name in the McGill student record or records with government authorities.

You can provide a preferred first name on your application for admission or, once admitted, on Minerva, under the Personal Menu



**Note for Medicine and Health Sciences:** All M.D.,C.M. and D.M.D. students must complete registration online, as per *section 1.3.1: Registration Periods*, by adding the prescribed courses on *Minerva* in the Fall term. Medical students should refer to information provided by Medical Admissions (Med-1 students) or the UGME office (Med-2 to 4) for registration deadlines.

## 1.3.1 Registration Periods

The dates given below were accurate when this publication was finalized. Although changes are not anticipated, you should confirm the dates in the *Important Dates Search Tool*.



Note for Medicine and Health Sciences: You must register in all courses no later than August 14 and attend the Faculty of Medicine and Health Sciences and Faculty of Dental Medicine and Oral Health Sciences mandatory orientation & registration session, where your course registration can be confirmed. Information on the mandatory orientation & registration session is available on the Faculty of Medicine and Health Sciences Office of Admissions website.

## 1.3.1.3 Newly Admitted Students Entering in January 2024

Registration will take place between December 5, 2023 and January 4, 2024 without penalty. See section 1.3.1.4: Late Registration for more info.

Some faculties and departments require that you meet with an adviser before registration and set specific dates for advising and registration within these dates. Please refer to the faculty sections of this publication, as well as the *Welcome to McGill* publication or *website*, or the *Essential Guide for New Students*, *Macdonald Campus*, which are included with your acceptance package.



Note for Dentistry: Students accepted into the DMD Advanced Standing for Foreign Trained Dentists Pathway will begin classes the first week of December 2023.



Note for the Faculty of Law: There is no Winter term admission to the Faculty of Law.

#### 1.3.1.4 Late Registration

If you fail to register during the normal registration period, you can register within the period designated by the University for late registration with the payment of a **late registration fee**. For late registration fees, see *Late Registration and Course Change Changes* on the *Student Accounts website*.

Returning Students: You may register late via Minerva from August 15 until and including September 12, 2023.

New and Readmitted Students (Fall): You may register late via Minerva from August 15 until and including September 12, 2023.

New and Readmitted Students (Winter): You may register late via Minerva from January 5 until and including January 16, 2024.

Special Late Registration: If you cannot register online during the late registration period, usually due to late admission, you may receive special permission to register in person. This information is included with your letter of acceptance.

## 1.3.2 Course Information and Regulations

The University reserves the right to make changes without prior notice to the information contained in this publication, including the revision or cancellation

# 1.3.2.2 Multi-Term Courses

Most courses at McGill are single term (Fall or Winter or Summer) courses with final grades issued and any credits earned recorded at the end of that term. Single term courses are identified by a seven-character course number

• Continuing students whose CGPA is above 3.50 may tak

The instructor will report grades in the normal fashion.

- Grades of A through C are converted to "Satisfactory" (S)
- Grades of D, F, and J are converted to "Unsatisfactory" (U)

The courses taken under the S/U option will be excluded from the grade point average (GPA) calculations, but they will be included in the attempted credits total. Credits for courses with a final grade of S will also be included in the number of credits earned.



**Note:** To be considered for in-course awards, including Dean's Honour List designations, and/or the renewal of entrance scholarships, you must complete at least 27 graded credits in the regular academic session (unless otherwise stated by your faculty), not including courses completed under the S/U option.



Note: The S/U option is not available via Minerva to Visiting, Exchange, or Quebec Inter-University Transfer Agreement (IUT) students. These students must first contact their home university to ensure that a course taken under the S/U option is acceptable to their home university and that the credits are transferable. After receiving approval from their home university and before McGill's course change deadline, they must then consult their McGill Faculty Student Affairs Office for approval.



**Note:** Special Students are not eligible to select the S/U option.



Note for Agricultural & Environmental Sciences, Arts, B.A. & Sc. and Science: Freshman year (U0) students are not eligible to select the S/U option.



#### **Note for Engineering:**

- B.Eng. students may use the S/U option for Complementary Studies courses (i.e., Group A Impact of Technology on Society and Group B
   Humanities and Social Sciences, Management Studies and Law), Natural Science Complementary Courses (for Computer Engineering students
   from CEGEP and all Software Engineering students), and Elective Courses (for Mechanical Engineering students from CEGEP). You cannot
   use the S/U option for courses in any other category of the Engineering programs. If you choose not to use the S/U option, a grade of D is
   acceptable as a pass for these Complementary Studies courses.
- B.Sc.(Arch.) students may use the S/U option for elective courses taken outside the School of Architecture. You cannot use the S/U option for courses in any other category of the Architecture program. If you choose not to use the S/U option, a grade of D is acceptable as a pass for these elective courses.
- You cannot use the S/U option for courses that are taken to satisfy a minor.



### Note for Law:

- The S/U option is available for Law and non-Law electives and Law complementary courses within the BCL/JD. program.
- The S/U option is limited to one course in the BCL/JD. program for a maximum of 4 credits.
- Students are not permitted to choose the S/U option for required courses.
- The S/U option is not permitted for courses that are taken to satisfy a minor.



**Note for Management:** The S/U option is not available on Minerva for Management students. Requests for the S/U option can only be made during the official add/drop period. Please contact the BCom Office (mcgill.ca/desautels/programs/bcom/contact-us) for details on the conditions that apply.



**Note for the M.D., C.M. program:** The M.D., C.M. program functions on a pass/fail system. Your final grade for each course is recorded on your university transcript as S *satisfactory* (pass) or U *unsatisfactory* (fail). See : *Assessment System* for further details.



Note for Schulich School of Music: Music students may use the S/U option for electiv693 444.2 Tm(acceptable 0acce001 60i)Tj1 0 0 13

FYS classes are limited to a maximum of 25 students and are designed to provide closer interaction with the professor, and better working relations with peers than are available in large introductory courses. The seminars endeavour to teach the latest academic developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis.

For a listing of First-Year Seminars, see Faculty of Arts > Undergraduate > Browse Academic Units & Programs

* If you are in multi-term courses with course numbers ending in N1 and N2 (course begins in the Winter term, skips the Summer term, and is completed in the subsequent Fall term) you may withdra				

Note for M.D.,C.M. program: Course changes are not permitted and withdrawals are only permitted when the student is on an

a music or a non-music minor alongside their degree. A few music minors are open to students from other faculties. Visit the Music *Minor Programs* website for more information: *mcgill.ca/music/programs/minor*.

# 1.3.6 Interfaculty Transfer

If you are a McGill student, have not graduated, and want to transfer into another undergraduate faculty, you may apply using the Minerva Faculty Transfer/Readmission Menu (mcgill.ca/minerva), unless otherwise indicated in mcgill.ca/student-records/transfer-readmission.

You must also refer to your faculty website for faculty-specific rules and to determine what supporting documents must be submitted for your application. To access the faculty websites, and for more information on how to apply and deadlines for faculty transfers, please see <a href="mailto:mcgill.ca/student-records/transfer-readmission">mcgill.ca/student-records/transfer-readmission</a>.

#### 1.3.7.2 Quebec Inter-University Transfer Agreement: Visiting IUT Students



Note for Health Sciences: This section applies only to the Ingram School of Nursing.

If you are a student at another Quebec university and wish to take courses at McGill using the Quebec Inter-University Transfer (IUT) agreement, you must initiate an online application to request the required authorizations at mcgill.ca/students/iut. You should also refer to your home university website for regulations on the number of credits allowed, as well as the policies for transferring the credits.



Note: Once the Quebec Inter-University Transfer (IUT) application is approved by both the home and host universities, you remain responsible for registering in the approved course. At McGill, you have to register on Minerva (mcgill.ca/minerva). Once your application has been approved, you will be informed via email of the necessary registration steps. You must allow sufficient time to complete and submit your electronic application, because you are responsible for adhering to all of McGill's registration deadlines. If you decide later to drop or withdraw from the approved course(s), you will need to drop or withdraw from the course on Minerva and submit this change to the online Quebec Inter-University Transfer (IUT) application.



Note for Engineering: Summer courses administered by the Faculty of Engineering are open to McGill students only.



Note for Continuing Studies: If you are a Visiting IUT student and your application has been approved, you must register in-person, by appointment only (see *University Regulations & Resources > Continuing Studies > Registration for Continuing Studies Students > Other Ways to Register > : In-Person Registration.* 

McGill will automatically submit your grades for any completed courses to your home university.

## 1.3.8 University Withdrawal

If you are considering withdrawing from the University, you are strongly encouraged to consult with your advisor and Student Affairs Office (mcgill.ca/students/advising/advisordirectory) before making a final decision.

#### 1.3.8.1 Student's Responsibility

It is solely your responsibility to initiate University withdrawal by submitting a form or writing to your Student Affairs Office. Neither notification of the

• Deadline for University withdraw



Note for Music: Applicants to the Schulich School of Music are not eligible to apply for deferred admission.



Note for Law: The Faculty of Law does not normally accept requests for deferred entry. You will be expected to start your course on the date and term you applied for and as indicated on your admission offer letter. If you still wish to seek an admission deferral, you must first accept the offer of admission and pay the deposit. Once the offer of admission has been accepted, you must submit, in writing, a request for the deferral. The request should be addressed to the

Some courses may require special permission. You should consult this publication and/or the *Class Schedule* well in advance of the course change period to determine if permission is required of the instructor, the department, or the Faculty for any course you want to take.

If you believe that you have valid reasons for taking a course that may not be credited toward your program, you must obtain the permission of the Associate Dean or Director.

#### 1.3.11.3 Education

Some courses will be available in the evenings only, or will be offered during the Summer term.

Students should give particular notice to prerequisite and corequisite courses and registration for Field Experience courses.

### 1.3.11.4 Engineering

Most courses offered by the Faculty of Engineering, including the School of Architecture, are restricted to Engineering students. Non-Engineering students should obtain permission from a Faculty adviser in the Student Affairs Office, *Engineering Student Centre*, to register for Engineering courses.

A limited number of School of Architecture (ARCH) courses are open to students not registered in the School. Please refer to individual course descriptions.

The average number of hours per week of course activities is indicated in the course listing in a note underneath the course description. For example, (3-1-5) indicates a course consisting of three lecture hours per week, one hour of tutorial or labs, and five hours of personal study per week.

#### 1.3.11.4.1 Extra Courses

Courses that you choose to take outside your program may be classified as "extra", provided that you choose this option at the time of registration. The course will be designated as "extra" ("RX" at the time of registration, and "E" once the course is graded) on your transcript, and the grade earned in that course will not be included in your grade point average (GPA) calculation. This option will not be added to your record after the course change (add/drop) deadline. Courses that are taken to satisfy your engineering program requirements or minor requirements cannot be designated as "extra".

### 1.3.11.4.2 Prerequisites and Corequisites

You must ensure that you have completed any course prerequisite(s) and/or corequisite(s) before course registration. If you have registered for a course and did not satisfy the prerequisite(s) and/or corequisite(s), the course may be dropped from your record automatically by Minerva.

If you received advanced credit(s)/exemption(s) or passed a placement exam for a course and are blocked from registration because of a prerequisite or corequisite error, you must go to your department/school in order to receive the appropriate permit override.

#### 1.3.11.5 Management

Management students should give particular notice to the following sections under Desautels Faculty of Management > Undergraduate:

- section 9.7: Grading and Credit
- Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.1: BCom Program Credit Structure: General Management Program (Concentrations)
- Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.2: BCom Program Credit Structure: Major or Honours Programs

If you tak

Term		Payment Due Date	
Returning and	nts	January 4, 2024	

Late Payme a have an outstanding balance greater than \$100 on your account on October 31 (February 28 for the Winter term), you are charged a late payme he fee schedule found at *section 1.4.6: Other Fees.* When a student has a student aid deferral, government aid deferral, or graduate funding defe ended, their next e-bill will show that there is no longer a deferral in effect. Should the balance not be paid in full by the payment due date on a student has a student and the payment at the payment at penalty fee will be a student has a student and the payment at penalty fee will be a student has a student and the payment at penalty fee will be a student has a student and the payment at penalty fee will be a student has a student and the payment at penalty fee will be a student has a student and the payment at penalty fee will be a student has a student and the payment at penalty fee will be a student has a student has a student and deferral, government aid deferral, or graduate the payment at penalty fee will be a student has a student h

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### 1.4.2.4 Pocedures

Please see the counts website at *mcgill.ca/*.

If the second their guests.

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decide if a fee deferral is warranted. No prior interest is submitted before the first fee payment for

Students in on-line programs must self-declare for m, where they will be located during that term, on Minerva under the *Student Menu* > *Location of Study - Online (distance) program.* Students of these online programs will be notified by email that the Minerva form for the upcoming term is open and can be accessed for completion. Students studying within the pro vernment for in-province students. Students who are located outside Quebec while studying, will be subject to deregulated tuition rates.

### ent .1 Quebec Students and Non-Quebec (Canadian or Permanent Resident) Students

In accordance with provincial government requirements, students must provide proof that they qualify for assessment of fees at the Quebec or non-Quebec Canadian rates; see mcgill.ca/legaldocuments for details. In certain cases, non-Quebec Canadian students pay the same rate of tuition as Quebec students—for

### ent .2 International Students

# 1.4.6.1 Other Fees: Health Sciences

Fees specific to Health Sciences students are listed in each Health Sciences faculty or school section:

- Dentistry
- Medicine
- Nursing
- Physical & Occupational Therapy

under Undergraduate or Professional > Health Sciences: General Information > Fees: Health Sciences.

# 1.4.7 Fees and Withdrawal from the University

If you decide not to attend the term(s) in which you are registered, you must officially withdraw from the University in accordance with section 1.3.8: University Withdrawal. Otherwise, y

### 1.4.8.1 Overdue Accounts

All tuition and fees assessed by the University must be paid in full or arrangements must be made to settle the debt.

Students' accounts are considered delinquent if they are not paid in full within 60 days after the bill is issued. McGill places a financial hold on these accounts, preventing students from obtaining official academic transcripts and from accessing Minerva for any registration functions. In the event that a student's account has a hold preventing registration or the release of transcripts, the University may require a guaranteed form of payment, for instance, a certified cheque or money order. Certain financial holds prevent the release of diplomas. Other financial holds can affect access to non-registration functions, for example Meal Plan Top-Ups.

**Interest:** Interest is charged on overdue balances at the monthly rate of 1.24% (14.88% annually), multiplied by the balance outstanding after the due date (within 2–3 days). The rate is evaluated each Spring, and then it is set for the following academic year. See *mcgill.ca/student-accounts/your-account/deadlines-and-penalties/overdue* for more information.



Note: You should regularly verify your account balance on Minerva.

The University has no obligation to issue any transcript of record, award any diploma, or re-register you as a student if you do not pay your tuition fees, library fees, residence fees, or loans by their due date.

### 1.4.8.1.1 Information for Registered Students

If you register for a term but still owe amounts from previous terms, you must either pay your previous term account balance or make payment arrangements with the Student Accounts Office before the end of the course add/drop period. If you have financial difficulty, first contact the

International students who are charged fees at the self-financed rate (all undergraduate or graduate level non-research programs) who are absent (i.e., not enrolled) for more than one term (excluding the summer), will be charged the tuition rate in effect for newly admitted students in the term in which they resume their studies. A term of withdrawal from the University is included in the calculation of the break in enrolment when students are not charged tuition for that term. Terms for which students are registered on an officially approved leave of absence, exchange or study away program are not calculated as part of a break in enrolment. This policy is not applicable to Visiting and Special students as international students in these categories always pay the fees of the new academic year.

# 1.4.8.4 Fees for Students in Two Programs

Students in two programs are normally billed additional fees for their second program. Depending on the lev

# 1.5.1.2 Academic Standing: Faculty of Agricultural and Environmental Sciences

Agricultural and Environmental Sciences students, see Faculty of Agricultural and Environmental Sciences > Undergraduate > About the Faculty of Agricultural and Environmental Sciences, including School of Human Nutrition (Undergraduate) > Faculty Information and Regulations > section 2.4.6.5: Academic Standing.

F

• you are strongly advised to consult an academic advisor, before withdraw

### 1.5.1.7 Academic Standing: School of Continuing Studies

If you are in Unsatisfactory Standing, you must apply to the Appeals Committee of your academic area.

### 1.5.1.8 Academic Standing: Schulich School of Music

Music students, see Schulich School of Music > Undergraduate > Academic Information > section 10.7: Academic Policies in the Schulich School of Music.

### 1.5.2 Credit System

The faculties listed in this publication use the credit system, where each course is assigned a credit rating reflecting the number of weekly contact hours. In general, a three-credit course indicates three hours of lectures per week for one term, but this does not apply to all faculties. Laboratory contact hours usually count for fewer credits. Credits also reflect the amount of effort required of you and generally assume two hours of personal study for each contact hour.

The credit weight of each course is indicated in parentheses beside the course title.



**Note:** One credit equals about 45 hours of work. This may be a combination of lecture, laboratory, tutorial, and conference time plus personal study hours. Personal study hours may include required activities, group activities, time spent doing assignments, and preparing and reviewing for a course. All synchronous activities should be held within the time the course is scheduled per the *Minerva Class Schedule*. Credit hours normally do not require a set number of synchronous hours, allowing for flexibility in course design and scheduling options. However, some programs, such as those with accreditation requirements, may require a minimum of synchronous contact hours.



**Note:** Credit for multi-term courses (courses with the suffixes: D1, D2; N1, N2; J1, J2, J3) is granted only after successful completion of all components in the specified time frame. For example, a student would have to take D1 and D2 components in consecutive terms and successfully complete them both in order to obtain credit.



**Note for Agricultural and Environmental Sciences, and Science:** As a guideline, a one-credit course would represent approximately 45 hours of total work per course. This is, in general, a combination of lecture hours and other contact hours such as laboratory periods, tutorials, and problem periods as well as personal study hours.



**Note for Engineering:** One credit normally represents three hours total work per week. This is, in general, a combination of lecture hours and other contact hours such as laboratory periods, tutorials, and problem periods as well as personal study hours. As a guide, the average number of hours per week of course activities is indicated in the course listing underneath the course description. For example, (3-1-5) indicates a course consisting of three lecture hours per week, one hour of tutorial or lab, and five hours of personal study per week.



**Note for Summer Studies:** For Summer courses, a three-credit course usually indicates ten hours of lectures per week starting in either the May, June, or July session and spanning a maximum period of five weeks.

### 1.5.3 Grading and Grade Point Averages (GPA)



**Note for Physical and Occupational Therapy:** A grade of C+ is the minimum required passing grade for courses with the subject codes of OCC1, PHTH, and POTH. A grade of C is the minimum required passing grade for all other courses. For complete details, refer to the Rules and Regulations, available at *mcgill.ca/spot/programs*.

Instructors may submit final grades as either letter grades or in percentages, but the official grade in each course, which is displayed on the transcript is the letter grade. Where appropriate, a class average appears on transcripts expressed as the letter grade most representative of the class performance. In such cases, the class average is calculated for courses, where the total number of grades in all of its course sections is 25 or more, and the grades have a grade point (e.g. grades of S, U, or P do not have grade points).

Since Fall 2002, the University has only used letter grades on transcripts and verification forms.

Grades A through C represent satisfactory passes, D a conditional (non-continuation) pass, and F a failure. Certain courses have been approved for Pass/Fail (P/F) grading. Students may also designate elective courses to be graded under the S/U option. See *Courses Taken under the Satisfactory/Unsatisfactory (S/U) Option*.



# **Policy on Pass/Fail Grading:**

For a course to be graded P/F, a proposal must be approved by the Program Director, approved by the Faculty Curriculum Committee, and approved by the Subcommittee on Courses and Teaching Programs (SCTP). Courses that are approved to be graded P/F must indicate this in the course syllabus. Pass/Fail grading applies to all students in a course section and cannot be selectively added to individual students.

Grades of Pass are not included in the GPA calculation and as such are not normally applied to required courses. Grades of F are included in GPA calculations. However, both grades of P and F are included in the count of completed credits for determining eligibility for scholarships and awards.

Please refer to the Satisfactory/Unsatisfactory option for information on that grading option for students.

You must obtain a grade of C or better in courses that you take to fulfil program requirements. You may not register in a course unless you have passed all the prerequisite courses with a grade of C or better, except by written permission of the appropriate department chair.

Grades	Grade Points	Numerical Scale of Grades
A	4.0	85 – 100%
A-	3.7	80 - 84%
B+	3.3	75 – 79%
В	3.0	70 – 74%
B-	2.7	65 – 69%
C+	2.3	60 – 64%
C	2.0	55 – 59%
D	1.0	50 – 54%
F (Fail)	0	0 – 49%



Note for Engineering: The Faculty of Engineering does not use this numeric scale. See Note for Engineering below.



Note for Law: Faculty of Law does not use this numeric scale.

The University assigns grade points to letter grades according to the table above. Your Academic Standing (e.g., satisfactory, probationary), which is your academic status at the end of each term, is determined by a grade point average (GPA), which is calculated by multiplying the course credit by the grade points and dividing the sum by the total GPA course credits. The GPA result is truncated by two decimal points and not rounded up to the nearest decimal point. For example, a GPA of 3.596 will display on the transcript as 3.59 and is NOT rounded up to 3.60.

GPA course credits are the credits of courses with final grades that are assigned grade points according to the table above (e.g, a 3-credit course with a final grade of A has 3 GPA course credits, but a 3-credit course with a final grade of P has no GPA course credits because a grade of P does not have a grade point value).

$$GPA = \frac{\sum (course \ credit \ x \ grade \ points)}{\sum (GPA \ course \ credits)}$$

complementary courses, laboratory complementary courses, or courses in any other category of Engineering programs. Individual departments/schools will decide if a student with a D in a prerequisite course(s) may take the subsequent course.

# Grades have the following designations:

A, A-	Very Good
B+, B, B-	Good
C+, C	Satisfactory
D	Conditional Pass

F Fail

# 1.5.3.1 Grading and Grade Point Averages (GPA): Other Grades



**Note:** Not all grades listed below apply to every faculty, school, or level. Faculty policy prevails when determining if a student may be eligible to receive one of these grades.

Other Grades		
J	_	unexcused absence (failed); the student is registered for a course but does not write the final examination or complete other required work; calculated as a failure in the TGPA and CGPA
K	_	incomplete; instructor has extended the deadline for submission of work in a course
		further extension granted for submission of work in a course, approval from the Faculty SA

# Other Grades

W-- or -- — no grade; student withdrew from the University, not calculated in TGPA or CGPA (applicable only to courses taken pre-Fall 2002)



Note for Physical and Occupational Therapy: Grades of S/U are not applicable.

Note for Medicine: Refer to

Paper official transcripts are printed on secure paper that cannot be copied. eTranscripts are digitally signed and certified PDF documents that cannot be copied.

For more information on requesting official transcripts, refer to Official Transcripts.

Note: The University may not be held responsible for the loss or delay of transcripts in the mail.

Note: You cannot submit a transcript request in Minerva if you have holds on your record (e.g., accounting, registrar, library, etc.). Please verify the top of your unofficial transcript in *Minerva* for any holds.

## 1.5.4.2 Unofficial Transcripts

If you require a copy of your student record, access Minerva (mcgill.ca/minerva) to view and print an unofficial transcript. This applies to records from 1976 to the present. For pre-1976 records, your transcript is archived, and you must order an official transcript. See section 1.5.4.3: Official Transcripts.

### 1.5.4.2.1 Verification of Student Records: Unofficial Transcripts

Subject to section 1.5.8: Changes to Student Records after Normal Deadlines, you are responsible for verifying your academic record on Minerva using the unofficial transcript to ensure that you are registered in the proper courses, and that the correct program information and expected term of graduation appear on your record.

If you are graduating, verify your record on Minerva before the end of your final term to ensure that the correct expected graduation term appears on your unofficial transcript; if not, you may be overlooked for graduation. You should direct any questions or problems with your record to your Student Affairs Office.

Note for the Faculties of Arts and Science (including B.A. & Sc.): Requests are made at *Service Point* (3415 McTavish Street). However, it is important that you also see a Faculty advisor in *Arts O* 



Note 1 for Law students: In the Faculty of Law, permission to delay submission of required term work must be obtained from the Director (Student Life & Learning). It cannot be granted by the instructor. If, in the opinion of the Director (Student Life & Learning), there is sufficient reason to permit a delay in the submission of required term work, the Director may grant you an extension of the deadline after the end of the course. In this case, the instructor will submit a grade of K (incomplete). If an extension of the deadline is granted, the Director (Student Life & Learning) will indicate the date by which you must complete the work. If the instructor submits a new grade within the new deadline, both the new grade and the grade of K will appear on your faculty reports and verification forms. However, on your official transcript the new grade will replace the K. If the required work is not completed before the deadline, a grade of KF will be updated on your record. A KF denotes a failed course and is calculated in the TGPA and CGPA the same as an F. In exceptional circumstances, and with the approval of the Director (Student Life & Learning), the deadline may be extended further, in which case the grade of KE (further extension granted) will appear. If the extended deadline is not met, a grade of KF will replace the KE.



Note 2 for Law students: If, without a valid excuse, you do not participate in or write a final examination or submit required term work for any courses you were registered in, you will receive a final grade of J (unexcused absence).

### 1.5.6 Transfer Credits

Students who have been approved to transfer credits from another university and students who participate in a formal university exchange could be eligible to transfer earned credits to McGill if the grade earned in the host university course(s) is equal to or higher than the grade/CGPA required to graduate from the host university. The policy will apply to both elective and required courses and, to be counted, courses must be taken at the host institution for the same purpose (i.e., major, minor, elective, etc.) than they would have at McGill. Please note that grade/GPA requirements may differ across programs and that your Student Affairs Office will determine the category to which credits are transferred to your program.

You need to obtain approval from your Student Affairs Office for courses taken at other universities. In some faculties, you will need approval from your Student Affairs Office and your academic advisor before taking the course, especially if they are part of your program requirements. Please note that credits that have not been preapproved might not be transferred. Admissions, Faculties, and Departments vet the courses they approve for credit and thus have the right to refuse certain courses that do not satisfy program requirements.

You may be granted credit for courses meeting the requirements described above at other universities if you are within the number of credits imposed by McGill's residency and program requirements for some faculties. In general, a minimum of 60 credits completed at McGill is needed to qualify for a McGill degree. You must be in Satisfactory Standing to be granted the transfer credits.

Grades for transfer courses earned at the host university are not entered on your McGill transcript and are not part of the TGPA or CGPA calculation. Courses at a host university which you fail or from which you withdraw will appear on your McGill transcript with zero credit granted.

For univ

# 1.5.6.1 Advanced Standing Transfer Credits

Students who have successfully completed their high school studies, including courses or programs that may result in the awarding of Advanced Standing and exemptions, such as the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, and other qualifications, must declare these studies upon applying for admission to McGill University. Advanced Standing and exemptions will be given for these completed studies.

Students who have been granted advanced standing for the International Baccalaureate, Advanced Placement examinations, GCE A-Levels, French Baccalaureate, and other qualifications, but who wish to complete a four-year undergraduate program at McGill, will be permitted to do so, with the appropriate limitations on the repetition of courses for which they have received exemptions. This gives students with Advanced Standing the option of completing 120 McGill credits.

Interested students should contact their Faculty or School advisors.

# 1.5.7 Tracking Student Progress

## 1.5.7.1 myProgress

myProgress is a web-based tool that allows students to track their progress towards completion of their de

Note for the Faculties of Arts and Science (including B.A. & Sc.): Requests are made at Service Point (3415 McTavish). However, it is important



**Note for Medicine:** Refer to mcgill.ca/ugme/policies-procedures/examinations.



Note for Continuing Studies Students: You should consult the academic sections of this publication for particular regulations.

# 1.6.1 Examination Accommodations for Students registered with the Office for Student Accessibility & Achievement

Students registered with the Office for Student Accessibility & Achievement with an active accommodation plan may register for accommodations for all tests, quizzes, exams, and finals. For more information see: mcgill.ca/osd/student-resources/forms/exam-sign.

### 1.6.2 Credit by Examination

In certain exceptional cases and in certain faculties, you can apply to the Associate Dean or Director to write a final examination in order to obtain credit in a course that you were not registered in. This is possible only in those courses where there is no other assessment except the final examination.

#### 1.6.3 Final Examinations

Final examinations in regularly scheduled courses are held during the final examination period at the end of the term. The format of the final exams can be either online or in person, depending on the situation. The dates of the final examination periods are listed at *mcgill.ca/exams*.



Important Note: You are advised not to make travel plans prior to the release of the Final Exam Schedule. Vacation plans *do not* constitute grounds for the deferral or re-scheduling of final exams.



Note for Summer Studies: All information pertaining to final exam conflicts can be found at mcgill.ca/summer/finalexams.

In some courses there is no final examination; your final grade in these courses is determined by different forms of assessment(s) indicated in the course outline. During the first week of class, students will be provided with a course outline, which along with other details, will include the types of assessment to be used in the course and the weight accorded to each assessment.

### 1.6.3.1 Final Examinations: University Regulations Concerning Final Examinations

### 1.6.3.1.1 Preamble

The objectives of these regulations are as follows:

- 1. to protect students from excessive workloads;
- 2. to use the entire term to maximum advantage.

### 1.6.3.1.2 Regulations

- These regulations shall apply to undergraduate courses up to and including the 500 level that are evaluated by the use of written examinations. They
  shall not apply to clinical, field, laboratory, performance, and seminar courses, or to other courses that are evaluated solely by means of a design, paper,
  program, or project.
- 2. Written examinations (including take-home examinations) shall not be held during the last two weeks of scheduled classes during the Fall and Winter terms, except where a pattern of continuous evaluation has been established, in which case the total value of examinations given in this period shall comprise no more than 10% of the final grade.
- 3. If the written examinations in a course constitute 50% or more of the final grade, one of these shall be giv

**Instructors are not permitted to grant any special treatment regarding examinations to any student.** Students who believe there are circumstances which might justify making special examination arrangements for them or which might legitimately be taken into account in evaluating their performance should apply to the Associate Dean or Director of their faculty.

Note for the Faculties of Arts and Science (including B.A. & Sc.): Requests are made at aluating th21.5951 141.473 69476 Tf1 7.52 78.56 Tm( Students w34

## Step 2: Find out if you are eligible for a deferred exam

The following are the eligibility requirements for a deferred exam:

- Requests are submitted according to your Faculty Guidelines (see "Submitting a request").
- You must cite a valid reason for requesting a deferred exam, even if this is your first-time request. Valid reasons are:
  - · Serious medical illness;
  - · Serious personal issues/circumstances;
  - · Serious unforeseeable or extenuating circumstances.



Note: Travel plans are not a valid reason.

- If this is not your first deferred exam request, you must also provide supporting documentation (such as a medical note) which confirms your inability to write the exam on the original date. Documents should be submitted as soon as you submit your deferral request in *Minerva*. Incomplete requests will be cancelled, and late documents will not be accepted. See "Submitting a request" for details on accepted supporting documents and how and when to submit supporting documents.
- First-time requests: Students in eligible faculties (**listed below**) who request a **first-time** exam deferral due to illness or other serious extenuating circumstance may be granted the deferral without the need for supporting documentation (such as a medical note). Students requesting a first-time deferral are nonetheless required to have a valid reason, and all other requirements and deadlines for submitting a request for a deferred exam will apply.

#### Eligible faculties:

- Science (including the Bachelor of Arts & Science)
- Management
- Law
- Engineering (including School of Architecture)
- Education
- Arts (including Schools of Social Work and Religious Studies)
- · Agricultural and Environmental Sciences

### Ineligible faculties/schools:

- · Continuing Studies
- Nursing
- · Information Studies
- Physical and Occupational Therapy
- Dentistry
- · Medicine and Health Sciences
- Music
- Graduate and Postdoctoral Studies
- For ineligible faculties/schools, the *guidelines* for your home faculty or school are applicable.

### Step 3: Submit your request

- 1. Read Step 1: Options and consequences, and Step 2: Eligibility .
- 2. Check the deadlines for submitting a request applicable to you. Visit My Exams to view deferred exams application deadlines.
- **3.** Submit your request. You must do this by the posted *deadline* in your *faculty guidelines*.

- · A Dental Surgeon or Dentist
- A Psychologist, Psychotherapist, or Social Worker
- · A Physician, Psychiatrist, or Surgeon
- · A Nurse or Nurse Practitioner
- A health professional from any of the McGill health services (i.e., Student Wellness Hub)

All supporting documents must be clear, complete, and include the following:

- a. Your full name, and where applicable McGill ID#
- b. Information about your health practitioner:
  - · their name, address, and license #
  - · their signature
  - the date you met with them
- c. Information about your circumstances:
  - a statement of capacity, indicating that you weren't/aren't able to attend your exam and why;
  - the date(s) that you were/are incapable of doing so;
  - the date on which you'll be able to resume your studies/exams.

#### When do you need to provide it?

Supporting documents must be sent as soon as you have submitted your Minerva request. Note that incomplete requests will be cancelled.

- Arts and Science students:
  - Submit PDF copies of your documents to Service Point by completing the Current student Contact form
     mcgill.ca/servicepoint/current-student-contact-form and selecting the option "Final Exams".
- Students from all other Faculties must submit documents directly to their Faculty Student Affairs Office.

### Step 4: Understanding your decision (approved or refused)

### If your deferred exam request is approved

- It is your responsibility to verify the Deferred Exam schedule for the exact date, time, and location of your exam. The schedule will be posted at
   mcgill.ca/exams approximately two weeks prior to your deferred exam period.
  - Exams deferred from the **December exam period** (i.e., from the Fall term) are scheduled in the **Winter term Reading Break**.
  - $\bullet$  Exams deferred from the **April exam period** (i.e., from the Winter term) are scheduled in the  $3^{rd}$  week of August.
  - You are **expected to be available during a deferred exam period** to write your exam.
- You can only defer your final exam once. If you request a late course withdrawal (late-W) from a course with an approved exam deferral and the
  reasons for the late-W are similar to those for your deferred exam request, then your request will not be granted.
- If you requested a deferred exam and then ended up writing the original final exam, you will no longer be eligible to write the deferred exam, even
  if your request was approved. It is your responsibility to inform your Student Affairs office (or Service Point, for Arts and Science students) that you
  wrote the final exam at the originally scheduled time. Failure to meet this obligation may place you in violation of the Code of Student Conduct and may
  involve disciplinary measures.

- You have made previous requests for similar or the same reasons and there is no evidence that you have taken measures to address the challenges
  you are facing during exam periods.
- You must write the final exam at its originally scheduled date and time. If you do not or did not write your final exam, you will receive a grade of J, which counts as a failure in your TGPA and CGPA. If you receive a J, a supplemental exam may be an option for you if you meet the eligibility requirements. See *Supplemental Exams*.
- If you are an Arts or Science student, you may make a written request to have the decision reviewed; there must be new information or documentation relevant to your initial request that you did not originally submit.

If you believe that your situation warrants a decision review, submit your written request no later than 5 business days after the refusal of your initial request.

- How to submit a request:
  - Write a concise (max 500 words) statement explaining why you are requesting a decision review, and what new and relevant information you are sharing to support your request.
  - Email your statement including PDF-formatted supporting documents to *servicepoint@mcgill.ca* from your McGill email account, ensuring that the subject line reads "Decision Review: Deferred Exam".
- Decisions are reviewed by a committee consisting of the following individuals: Director, Service Point; Registrar and Executive Director of Enrolment Services; and either the Associate Dean (Arts OASIS) or the Director of Advising (Science SOUSA), depending on your Faculty.
- Decisions made by this committee are final.

Note for the Faculties of Arts and Science (including B.A. & Sc.):, submittated supporting docunts - to, Seryour F3415m yT Tm(v)Tj1 0 6.04514.232 487.0

## 1.6.3.3.1 Reassessments and Rereads: Faculties of Arts and Science (including B.A. & Sc.)

There are two recognized types of impartial reviews: reassessments and rereads:

- · reassessment of coursework completed during the term (term papers, mid-terms, assignments, quizzes, etc.)
- · reread of a final exam

In both cases, rather than correct and grade the work again, reviewers assess the **appropriateness** of the original grade based, for example, on the application of the grading key to the student's work. If a grade is deemed unfair, it is changed, whether the new grade is higher or lower than the original, i.e., the reviewer's grade takes precedence over the original grade.

## 1.6.3.3.1.1 Reassessment of Coursework

These reassessments are administered and conducted solely by the units involved according to procedures specified by the units and made available to staff and students. Requests for such reassessments must be made within 10 working days after the graded material(s) has been made available for students to view. Reassessments should normally be completed within 20 working days of the request.

### 1.6.3.3.1.2 Rereads of Final Examinations

Deadlines to request final exam rereads:

- March 31 for courses in the Fall term
- September 30 for courses in the Winter and Summer terms

Exam reread fees apply; refer to the Student Accounts website for fee amounts and information.

For students pursuing a Bachelor of Arts, Bachelor of Science, or Bachelor of Arts & Science:

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- · Fall courses: last working day of March
- · Winter courses: last working day of July
- Summer courses: last working day of September

Non-Engineering courses: Rereads in courses not in the Faculty of Engineering are subject to the deadlines, rules, and regulations of the relevant faculty.

#### 1.6.3.4 Supplemental Examinations

If you are in *section 1.5.1: satisfactory or probationary standing* and received a grade of D, F, J, or U, you may be eligible to write a supplemental exam, which will count for a substantial percentage of your final grade. Your initial grade will still appear on your transcript, and both will be calculated into your CGPA

To apply for a supplemental examination for a course, you must submit a request on Minerva (mcgill.ca/minerva) by going to Student Menu > Student Records Menu > Supplemental Exam Application.

The following rules and conditions apply:

- · You must be in Satisfactory or Probationary Standing;
- You must have received a final grade of D, F, J, or U in the course;
- A non-refundable fee for each supplemental exam application is assessed at the time of application and charged directly to your McGill account; consult the Student Accounts website for the fee at mcgill.ca/student-accounts/tuition-fees/non-tuition-charges/other;
- Only one supplemental examination is allowed in a course;
- Supplemental examinations are available for most courses given in the Faculties of Arts, Science, Education, Religious Studies, and the School of Social Work;
- · Supplemental examinations are not available for courses administered by Agricultural and Environmental Sciences, Engineering, Management or Music;
- Special permission is required if you want to write supplemental exams totalling more than 8 credits;
- The format of the supplemental examination (e.g., multiple-choice or essay questions) will not necessarily be the same as the final examination, so you should consult the instructor before you write the supplemental examination;
- The supplemental result may or may not include the same proportion of class work as did the original grade; the instructor will announce the arrangements to be used for the course by the end of the Course add/drop Period;
- The supplemental grade will not replace the grade originally obtained, which is used in calculating the GPA; both the original grade and the supplemental result will be calculated in the CGPA;
- For courses in which both a supplemental examination and additional work are available, you may choose the additional work, or the examination, or both; where both are written, only one supplemental grade will be submitted, reflecting grades for both the supplemental examination and the additional work:
- There are no supplemental examinations for Summer Studies courses;
- Additional credit will not be gibo(A; both the origio be used for tdditional w)Tj1Tm(9 1 181.6151 2 Ta Dxamin38 Tml56 Ty4.84 Tm(e recei)T501 0 2 1 181.6151



**Note for the Faculty of Law:** Regular supplemental examinations are available to a student who has failed a course, but who is not required to withdraw from the Faculty. Regular supplemental examinations may be written in up to two courses that do not exceed a total of seven credits together, or in any one course even if it exceeds seven credits. Supplemental examinations are written at the Law Faculty in the month of August. For more information, see *Supplemental Examinations* at *mcgill.ca/law-studies/courses/exams*.

# 1.6.3.5 Additional Work: Faculty of Science (including B.A. & Sc.)

Instructors of courses that include graded, written term work may choose to provide the option of additional work to eligible students. The following conditions apply:

- if there is an option for additional work, it must be announced in the course outline at the beginning of the course;
- · additional work involves revising one or more previously submitted papers or submitting new written work to replace the original work;
- you must be in Satisfactory or Probationary Standing;
- you must have received a final grade of D, J, F, or U in the course;

•

# 1.6.6 Laptop Examination Policy for the Faculty of Law

All students wishing to write one or more final examinations on their laptop must:

- 1. ensure laptop compatibility with Faculty-approved software;
- 2. complete the Faculty of Law Laptop Examination Agreement;
- 3. download the Faculty-approved software;
- **4.** run a test prior to the start of the examination period;
- **5.** if necessary, sign an IST *Customer Services-Computer Repair Waiver*.

The Student Affairs Office will provide term-specific deadlines. Y

# 1.7.2 Exchange Programs

For information on Exchange Programs, refer to Study Abroad & Field Studies > Undergraduate > section 12.4: Exchange Programs.



Note for Arts students: Further information on exchanges and studying away may be obtained from the Arts OASIS website at mcgill.ca/oasis.



**Note for Engineering students:** For further information, contact the Faculty of Engineering Student Affairs Office in the Engineering Student Centre, and see *mcgill.ca/engineering/students/undergraduate/exchanges-study-away*.

Note for Law students: Students should consult mcgill.ca/law-studies/bcljd-studies/exchange

# 1.8.1.1 Application Procedures

- One-Year Scholarships: by applying to McGill, all eligible applicants who meet the minimum academic requirements are automatically considered. No separate application is required. For more information, see <a href="mailto:mcgill.ca/studentaid/scholarships-aid/future-undergrads/entrance-scholarships/criteria">mcgill.ca/studentaid/scholarships-aid/future-undergrads/entrance-scholarships/criteria</a>.
- Major (renewable) Scholarships: candidates can apply on the web by the scholarship deadline dates after their application for admission has been 679.02 Tm(1 0

#### Canada

Email: work.study@mcgill.ca

Website: mcgill.ca/studentaid/work-study

#### 1.8.3.1 Student Aid

Telephone: 514-398-6013 Email: student.aid@mcgill.ca Website: mcgill.ca/studentaid

#### 1.8.3.2 Scholarships

Telephone: 514-398-6013 Email: scholarships@mcgill.ca

Website: mcgill.ca/studentaid/scholarships-aid

### 1.9 Graduation

In order to graduate, you must complete faculty and program requirements in the program you were admitted to and registered in. It is your responsibility to meet all faculty and program requirements before graduation.

At the time of graduation from an undergraduate degree, you must be in Satisfactory Standing with a minimum CGPA of 2.00. Some faculties may require a higher CGPA in order to graduate.

You should contact your advisor (graduate students should contact their department) early in the graduating year to make sure you will meet your program requirements by graduation time. For contact information on advisors, see <a href="mailto:mcgill.ca/students/advising/advisordirectory">mcgill.ca/students/advising/advisordirectory</a>.

Once your record has been approved for graduation, your unofficial and official transcripts will indicate the notation "Degree Granted" after approval by the University Senate.

- Fall term graduation (courses completed by the end of December; transcript will indicate "Degree Granted" in February after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of November.
- Winter term graduation (courses completed by the end of April; transcript will indicate "Degree Granted" in May after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of February.
- Summer term graduation (courses completed by the end of August; transcript will indicate "Degree Granted" in October after approval by the University Senate; diploma will be conferred at Fall convocation): You must apply on Minerva by mid-May

For more information on applying to graduate, refer to the Apply to Graduate

# **Minimum Residency Requirement**

The total number of McGill credits required to graduate is known as the minimum residency requirement. You must successfully complete a minimum of 60 McGill credits to obtain a McGill undergraduate degree. Some programs have specific requirements on the type of credits that must be completed at McGill. For example, two-thirds of all program requirements must be completed at McGill. For specific information refer to your faculty section of this publication.

Students completing a second undergraduate degree at McGill must successfully complete a minimum of 60 McGill credits to obtain their degree. You should check with your Faculty advisor for any conditions applicable to the McGill credits required toward your degree.

Graduate students should refer to their faculty under *Faculties & Schools > Graduate > Program Requirements* for information on minimum residency requirements for graduate programs. This information is listed for each faculty, and you can also access it through your faculty's graduate pages.



Note for Continuing Studies: Minimum Residency Requirement (Continuing Studies):

- You must successfully complete a minimum of 21 McGill credits (excluding prerequisites and corequisites) in order to obtain a McGill undergraduate certificate. For specific information refer to your department section of this publication.
- Students completing a second undergraduate certificate at McGill must successfully complete a minimum of 21 McGill credits (excluding
  prerequisites and corequisites) to obtain their certificate. You should check with your advisor for any conditions applicable to the McGill credits
  required toward your certificate.

# 1.9.1 Apply to Graduate

Most undergraduate students and non-thesis graduate students (master's, certificates, diplomas) must use *Minerva* to apply to graduate (go to *Student Records > Apply for Graduation for Your Primary Curriculum*). It is your responsibility to inform the University of your intention to graduate. You need a minimum residency requirement of 60 credits at McGill to qualify for a McGill undergraduate degree. For more information, see *section 1.9: Graduation*. The minimum CGPA required to graduate is 2.00, and you must be in Satisfactory Standing.

The Application for Graduation is available on Minerva when you register for your final year (e.g., U3 or U4), except if you are in the Faculty of Medicine and Health Sciences or Faculty of Dental Medicine and Oral Health Sciences, where you are automatically flagged for graduation in your final year. For more information on how to apply on Minerva, go to mcgill.ca/graduation/applying.

Once you apply to graduate, you are authorizing the University to:

- 1. include your name and image in the McGill Convocation programs, web streamed convocation broadcast, and other convocation-related communications
- 2. to have your ID, name, degree and ceremony provided to the Academic Regalia provider for the purposes of Convocation preparation
- 3. to have your ID, name, email, degree and ceremony provided to the Convocation Photographer for the purposes of Convocation preparation
- 4. to have your name, email, degree and confirmation of graduation sent to your professional order, if you are in a professional program (e.g. Engineering OIQ, Nursing OIIQ), for licensing or accreditation purposes

If you want to opt out of your information being sent to any of the above (1, 2, 3, or 4), you must complete an *Opposition Form* by March 15 for Spring convocation, and September 15 for Fall convocation.

#### 1.9.1.1 Deadlines

- Fall term graduation (courses completed by the end of December; transcript will indicate "Degree Granted" in February after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of November.
- Winter term graduation (courses completed by the end of April; transcript will indicate "Degree Granted" in May after approval by the University Senate; diploma will be conferred at Spring convocation): You must apply on Minerva by the end of February.
- Summer term graduation (courses completed by the end of August; transcript will indicate "Degree Granted" in October after approval by the University Senate; diploma will be conferred at Fall convocation): You must apply on Minerva by mid-May.

If you miss one of these deadlines, contact your faculty Student Affairs Office immediately.

Note for the Faculties of Arts and Science (including B.A. & Sc.): Requests are made at *Service Point* (3415 McTavish Street). However, it is important that you also see a Faculty advisor *Arts OASIS* or *SOUSA* to talk about your options and the effects that your request may have on your studies. For more information, see *mcgill.ca/students/advising*.

# 1.9.3.1 Dean's Honour List

If you are graduating with an undergraduate degree, you may be awarded the designation Dean's Honour List under the following conditions:

- 1. you have completed a minimum of 60 McGill credits toward your degree; and
- 2. you are in the top 10% of your faculty's graduating class; this calculation is based on the CGPA.

• some departments have additional requirements which must be met before you are recommended for *Honours* or *First-Class Honours* (please consult the relevant department)

Students in an Honours program whose program GPA or CGPA is below 3.00, or who did not satisfy certain additional program requirements, must consult their advisor to determine if they are eligible to graduate in a program other than Honours.

## 1.9.3.5 Honours and First Class Honours for Faculty of Agricultural and Environmental Sciences

Departments may recommend to the Faculty that graduating students registered in an honours program be awarded Honours or First-Class Honours under the following conditions:

- you must complete all honours program requirements; for Honours, the CGPA at graduation must be at least 3.00;
- for First-Class Honours, the CGPA at graduation must be at least 3.50;
- . some programs may impose additional requirements, which must be met before you are recommended for Honours or First-Class Honours.

Students in an honours program whose CGPA is below 3.00, or who did not satisfy certain program requirements, must consult their academic advisor to determine their eligibility to graduate in a program other than Honours.

### 1.9.4 Replacing a Diploma

#### 1.9.4.1 Required Documents

Diplomas are normally distributed to new graduates at their Convocation ceremony, in either May or October/November. **Diplomas are not available prior to your Convocation date.** 

#### Replacing a lost diploma

To replace a lost diploma, you must submit an order and pay for its replacement and delivery by courier using the ES Services eStore.

#### Requesting a diploma following your Convocation ceremony

If you did not attend your Convocation ceremony and need your diploma, you can submit an order and pay for its deliv

#### 1.11.1 Your Academic Career at McGill

### 1.11.1.1 University-Wide Regulations

This publication contains the regulations about your undergraduate academic career at McGill. It includes regulations concerning when to register, when to add, drop, or withdraw from courses, the consequences of missing deadlines, how grading appears on your transcript, and other important information.

### 1.11.1.2 Faculty-Specific Regulations

McGill has 11 faculties, and every student belongs to one of them. When you are admitted to McGill, your offer letter indicates the faculty, degree, and program to which you have been accepted, and the number of credits you need to complete for your degree.

You should consult the appropriate faculty section in this publication for information pertinent to your degree and program, and for faculty-specific regulations.

#### 1.11.1.3 Your Academic Program

You are registered in a **degree**, but for many degrees there are associated programs (a major, minor, major concentration, etc.). For some degrees, such as Bachelor of Engineering, you will typically 1 T

appropriate, with other University services and resources to help support you throughout your0support you throd.432 728.56 380.676ity servicesgree432 728.56 380.676ity servicesgree.	98.2

Service Point (3415 McTavish Street, Montreal QC H3A 0C8; 514-398-7878; mcgill.ca/servicepoint) is the student-facing customer-service arm of Enrolment Services, which provides administrative services and assistance related to official documents, student records, tuition and fees, and student exchanges.

On the Macdonald Campus, information is provided by the Student Affairs Office, Laird Hall, Room 106; mcgill.ca/macdonald.



**Note for Medicine:** The Faculty of Medicine and Health Sciences' *WELL Office* also provides services to M.D., C.M. students, including career planning advising offered by the Faculty's *Undergraduate Career Planning Office*.

# 1.11.3 Contact Information for Faculty & School Student Affairs Offices

The following contact information is for faculty-level student affairs offices. For student affairs/advising information for a specific department within a faculty

Opening hours: please refer to mcgill.ca/servicepoint Email: please refer to mcgill.ca/servicepoint/contact-us

#### 1.13 Student Services

McGill offers a full range of student services and resources that support your life, learning, personal, and academic achievements.

#### 1.13.1 Office of the Executive Director, Services for Students

William and Mary Brown Student Services Building 3600 McTavish Street, Suite 4100 Montreal QC H3A 0G3

For information, contact:

Telephone: 514-398-8238 Website: *mcgill.ca/studentservices* 

The Executive Director, Services for Students (EDSS), coordinates all student services at McGill to help promote student success and well-being. The EDSS is available to provide assistance and/or information on almost all aspects of non-academic student life. Concerns of an academic nature are directed to the proper individual, office, or department.

#### 1.13.2 Support for Students: Office of the Dean of Students

The Dean and the Associate Dean of Students coordinate and promote initiatives concerned with important aspects of the student experience, such as advising, academic integrity, student discipline, student recognition programs, and outreach to families, the McGill community, and the broader local community.

William and Mary Brown Student Services Building 3600 McTavish Street, Suite 2100 Montreal QC H3A 0G3

For information, contact (Dean/Associate Dean):

Telephone: 514-398-4990 Email: deanofstudents@mcgill.ca Website: mcgill.ca/deanofstudents

# 1.13.3 Student Services - Downtown Campus

Unless otherwise indicated, all **Student Services** on the Downtown Campus are located in the William and Mary Brown Student Services Building:

Brown Student Services Building, Suite 4100

3600 McTavish Street Montreal QC H3A 0G3

Email: student.services@mcgill.ca General Information: 514-398-8238 Website: mcgill.ca/studentservices

A list of services available is given below. For further information, see the *Student Services website*. This list also includes services offered by McGill offices external to the Student Services office.

- section 1.13.3.1: Campus Life & Engagement (CL&E)
- section 1.13.3.2: Career Planning Service (CaPS)
- section 1.13.3.3: First Peoples' House
- section 1.13.3.4: International Student Services (ISS)
- section 1.13.3.5: Office of Religious and Spiritual Life (MORSL)
- section 1.13.3.6: Office for Sexual Violence Response, Support, and Education
- section 1.13.3.7: Student Accessibility & Achievement
- section 1.13.3.8: Office of Sustainability
- section 1.13.3.9: Scholarships and Student Aid Office

# 1.13.3.1 Campus Life & Engagement (CL&E)

Supports all students, new and returning, and connects them to resources and opportunities that will enhance their student experience.

Brown Student Services Building 3600 McTavish Street, Suite 4100 Telephone: 514-398-6913

Email: cle@mcgill.ca
Website: mcgill.ca/cle

# **Incoming first-year students:**

Email: firstyear@mcgill.ca
Website: mcgill.ca/getready

### 1.13.3.2 Career Planning Service (CaPS)

Provides career education, industry events, advising, mentoring, workshops and a comprehensive job posting system (myFuture) to help you find permanent/part-time/summer jobs and internships, explore your career or graduate education options, and build your network.

Brown Student Services Building, East Wing, Suite 2200

Service also available at Macdonald Campus, in Centennial Centre, Room 124. Please mention campus location when booking your appointment.

Telephone: 514-398-3304 Email: careers.caps@mcgill.ca Website: mcgill.ca/caps

myFuture: caps.myfuture.mcgill.ca

### 1.13.3.3 First Peoples' House

Macdonald Campus

Centennial Centre, Room 124 Telephone: 514-398-7992

Website: mcgill.ca/macdonald-studentservices/health-wellness

#### 1.13.4 Student Services - Macdonald Campus

Students who study on the Macdonald campus may make full use of all Student Services on both campuses. A complete list of Student Services can be found at *mcgill.ca/studentservices/services*. All **Student Services** at Macdonald Campus are located in the Centennial Centre, unless otherwise noted:

Centennial Centre, Room 124 21,111 Lakeshore Road

Sainte-Anne-de-Bellevue QC H9X 3V9

Telephone: 514-398-7992

 $Email: {\it stuserv.macdonald@mcgill.ca}$ 

Website: mcgill.ca/macdonald-studentservices

A list of services available is given below. For detailed information, please visit our website and the main Student Services website.

- section 1.13.4.1: Career Planning Service (CaPS)
- section 1.13.4.2: International Student Services (ISS)
- section 1.13.4.3: Student Accessibility & Achievement
- section 1.13.4.4: Student Wellness Hub
- section 1.13.4.5: Scholarships and Student Aid
- section 1.13.4.6: Other Services

#### 1.13.4.1 Career Planning Service (CaPS)

Provides career education, industry events, advising, mentoring, workshops, and a comprehensive job posting system (myFuture) to help you find permanent/part-time/summer jobs and internships, explore your career or graduate education options, and build your network.

Telephone: 514-398-3304 Email: careers.caps@mcgill.ca Website: mcgill.ca/caps

myFuture: caps.myfuture.mcgill.ca

### 1.13.4.2 International Student Services (ISS)

Offers support to international students; orientation and transition programs, and immigration and health insurance information.

Telephone: 514-398-4349

Website: mcgill.ca/internationalstudents

### 1.13.4.3 Student Accessibility & Achievement

Student Accessibility & seTj/F1 8.1ty aa 0 ib 0 2148ity 1udent W

### 1.13.4.4 Student Wellness Hub

The Student Wellness Hub provides physical and mental health and wellness resources to all McGill students who pay the Student Services fee. Access doctors, nurses, counsellors, access advisers, local wellness advisers, dietitians, psychiatrists (by referral only), sexologists, and lab technicians. In addition, information, support, and programming are available through the Student Wellness Hub's Healthy Living Annex.

Macdonald Campus Clinic Centennial Centre, room 124 Telephone: 514-398-6017 Website: mcgill.ca/wellness-hub

Downtown Campus

Brown Student Services Building, 3rd floor

Telephone: 514-398-6017 Email: hub.clinic@mcgill.ca

Website:

- Leisure activity and hobby clubs
- Networking and leadership development clubs
- Political and social acti

A Campus Day Care Centre, located adjacent to the Macdonald Campus, is an independently run centre that can accommodate approximately 60 children, ranging in age from four months to five years. Preference is given to the Macdonald Campus community. Early application is recommended.

The Centre is located at:

1 Maple Avenue Ste.-Anne-de-Bellevue QC H9X 2E3

Telephone: 514-398-7951

### 1.14 Residential Facilities

McGill residences offer you a variety of accommodations that reflect the diversity of our student population on both the Downtown and Macdonald campuses.

#### Mission statement

To continuously develop a safe home and nurturing community for our students through the following means:

- · Keeping the value of respect for ourselves, others, and the physical environment as our cornerstone
- · Making environmentally and economically sustainable choices
- · Being responsive to student needs and supporting student initiatives
- · Maintaining open lines of communication and collaborative decision-making
- · Working together to provide a comfortable, clean, and secure environment
- · Keeping current with developing technology, practices, and professional development
- Maintaining integrity and accountability
- Thinking critically about what we do and having the courage 1 0 DchginTj1 0 0 1 67.52 5446071Tm(•)Tj1 0 0 1 81.693 5246071Tm(•)Homiing cor corich hioneran

# 1.14.1.2 Apartment-Style Residences

- Solin Hall is a modern, award-winning apartment-style residence that has two-, three-, and four-bedroom apartments. Located four Metro stops west of the Downtown Campus, Solin features large common areas (TV and game rooms) as well as a computer lab, and houses mostly first-year students. Each apartment has a living room, dining room, kitchen, and bathroom(s), with appliances and basic furniture such as tables, chairs, sofas, lamps, and drapes. Bedrooms have a bed, desk, chair, and dresser. All apartments and public-area floors are carpeted. Shopping areas are within short walking distance. Limited indoor parking is available.
- The **Greenbriar Apartments** residence is located one block from the campus. It houses both upper-year undergraduate and graduate students in self-contained studio and double-occupancy, one-bedroom apartments. Apartment kitchens have a stove, fridge, and sink, and bedrooms have a bed, desk, table, chairs, dresser, and blinds.
- Similar to Greenbriar, Hutchison Apartments

- Laird Hall, with a capacity of 250 students, is a co-ed residence that provides accommodation for undergraduate, graduate, and Farm Management Technology students. Residents enjoy comfortable rooms, modern kitchens, cozy lounge facilities, and other amenities that help make their residence life a complete and meaningful part of their university experience. Included in the room rent is high-speed Internet service.
- The **EcoResidence** accommodates 100 students. This residence will appeal to students who enjoy independent living in self-contained fully furnished apartments of two or six single-bedroom units. Units are split-level with large, airy, common living areas.

#### 1.14.2.1 Residence Fees – Macdonald Campus

Residence fees are paid separately from tuition, in accordance with regulations of the Fee Payment Option selected at the time of signing a Residence Lease.

At time of publishing, all fees for the new academic year were not available. Prices for the previous year are displayed below for your guidance; however, we recommend consulting the fee sheet will be available on the Macdonald residence website at <a href="http://www.mcgill.ca/students/housing/fees-applying/mac-fees/mcgill.ca/students/housing/fees-applying/mac-fees/mcgill.ca/students/housing/fees-applying/mac-fees for the most up-to-date pricing.">http://www.mcgill.ca/students/housing/fees-applying/mac-fees/mcgill.ca/students/housing/fees-applying/mac-fees</a> for the most up-to-date pricing.

There is no meal plan offered on the Macdonald Campus. Students may, however, load their *One Card* to purchase meals; refer to *mcgill.ca/onecard* for more information. Meals are also available on a cash basis from *the Café Twigs*, located on the ground floor between the Macdonald-Stewart Building and Barton Library. For budgeting purposes, the cost of meals for the academic year is approximately \$3,500.

#### 1.14.2.1.1 Laird Hall

A co-ed residence that provides accommodation for undergraduate, graduate, and Farm Management Technology students.

Laird Hall				
	Rent will be charged in 8 equal monthly installments of:	oneCard Fees	Activity Fees	Annual Fees (2023-2024 amounts)
Single Room	\$577	\$150	\$30	\$4,796
Double Room	\$526	\$150	\$30	\$4,386
Renovated Single Room	\$601	\$150	\$30	\$4,989
Renovated Double Room	\$548	\$150	\$30	\$4,561
Single with Bathroom	\$611	\$150	\$30	\$5,072
Double with Bathroom	\$558	\$150	\$30	\$4,647
Graduate Room	\$612	\$150	\$30	\$5,045

#### 1.14.2.1.2 EcoResidence

Each EcoResidence unit is a self-contained, fully furnished apartment with two or six single-bedrooms, and large, open common living areas.

EcoResidence				
	Rent will be charged in equal monthly installments of:	oneCard Fees	Activity Fees	Annual Fees (2023-2024 amounts)
Duplex 20 units (40 beds) Single Room - 12 month	\$612	\$150	\$30	\$7,530
Duplex 20 units (40 beds) Single Room - 8 month	\$649	\$150	\$30	\$5,369
Sixplex 10 units (60 beds) Single Room - 8 month	\$630	\$150	\$30	\$5,220

#### 1.14.2.2 Residence Occupancy - Macdonald Campus

The residence fees cover the period from **August 22, 2023 to April 30, 2024**. You must vacate your room at the end of the lease term. Only under exceptional circumstances will you be granted permission to arrive prior to the beginning date of the lease or remain in residence during the summer months. In these cases, you must apply to the *Campus Housing Office*; an additional fee will be charged if permission is granted.

You can request permission to extend your stay in residence (at the normal weekly charge) if you are taking extended courses after the regular session, employed on campus, or registered for summer courses.

In exceptional circumstances, international students or students coming from a distance may be admitted early. Permission from the Campus Housing Office must be obtained prior to arrival. Floor Fellows may be admitted before the opening date of courses, if permission is granted by the Campus Housing Office.

# 1.14.2.3 Facilities for Non-Resident Students – Macdonald Campus

The Centennial Centre features common lounging areas such as the **Eco-Niche** CC Lobby, and when available, the **Ceilidh**. Lockers are available in the Macdonald-Stewart Building. Y

- tennis courts
- playing fields
- outdoor TrekFit gym
- outdoor volleyball court
- large expanses of green space
- Mac Paddle Shack

Students can participate in instructional, recreational, intramural, and intercollegiate activities. There are nominal fees for intramurals and fitness courses. Sporting equipment (x-country skis, snowshoes, stand up paddle boards, kayaks, canoes, Frisbees, balls, etc.) is available for loan or rent.

Athletics offices are located in the Stewart

**Zoom** is the cloud-based tool used for attending remote classes when on-campus classes are not available.

See the *Teaching & Learning Services website* for more information.

### 1.16.4 Minerva

Minerva is McGill's web-based information system serving applicants, students, staff, and faculty. To access Minerva, go to *mcgill.ca/minerva* and log in with your McGill username and password or with your McGill ID and Minerva PIN. Once logged in, you can:

- Apply to McGill and view your application status
- View class schedules, including course descriptions and spaces available in course sections
- Register and make course changes
- Change your major or minor program (not all faculties)
- View your unofficial transcript and degree evaluation reports
- View your McGill Username, used to access computers on campus, W

Most libraries are open up to 90 hours per week, and several branch libraries extend *opening hours* during exam periods. The Library offers a variety of comfortable and attractive spaces, such as individual quiet study areas and group study rooms that can be *booked* for use. Wireless access is available throughout the library, as are hundreds of computers, and all libraries have printing, scanning, and copying machines. Facilities are available for vision and hearing impaired users.

Special library services like the *Course Readings Service* allows you to access digital items on course reading lists in the Library's catalogue and in *my*Courses. You can also borrow materials from any library and return them anywhere across the system. If you need material not owned by the McGill University Library, our *Interlibrary Loan and Document Delivery Service* will obtain it for you at no cost for McGill students, faculty, and staff. Interlibrary loans can be picked up at any branch.

# 1.17.2 McGill Writing Centre

The McGill Writing Centre (MWC), established in 2010, is the University's central resource for writing and communication. Staffed by specialists in writing pedagogy, the Writing Centre offers a slate of credit courses and non-credit activities that attract undergraduate and graduate students from across disciplines.

The MWC's core set of credit courses focus on a number of relevant topics, e.g., academic or scholarly communication, creative writing, digital genres, business communication, and communicating science to broad audiences. In addition to courses, students can also access non-credit programming (e.g., workshops, writing retreats) and individualized writing consults with the Tutorial Service.

The courses in academic, creative, digital, and professional writing may be taken as electives or to fulfil language requirements in some undergraduate degree programs. In some faculties, you need to obtain approval from your Student Affairs Office as well as from your academic adviser before you take courses outside of your faculty, especially if the courses do not form part of your program requirements.

For further information, please visit the MWC website at mcgill.ca/mwc.

### 1.17.2.1 McGill Writing Centre Course Information

Undergraduate course offerings can be found at mcgill.ca/mwc/courses/undergraduate.

Graphos graduate course offerings can be found at mcgill.ca/graphos/courses.

Continuing Education (non-credit) course offerings can be found at mcgill.ca/mwc/special-interest-courses.

### **Course Coordinator Information:**

If you have inquiries about courses, please contact the specific course coordinator listed at mcgill.ca/mwc/contact-us.

#### 1.17.2.2 McGill Writing Centre Tutorial Service

The McGill Writing Centre Tutorial Service provides writing instruction and support for all McGill students. Out tutors work with students at every stage of the writing process, from outlining to final revision. For more information, visit mcgill.ca/mwc/tutorial-service.

#### 1.17.2.3 McGill Writing Centre Contact Information

McGill Writing Centre McLennan-Redpath Library Main Floor, Room #02 3459 McTavish Street Montreal QC H3A 0C9 Telephone: 514-398-7109

Fax: 514-398-7416 Website: mcgill.ca/mwc

General Inquiries: mwc@mcgill.ca

Graphos

Website: mcgill.ca/graphos Inquiries: graphos@mcgill.ca

MWC Tutorial Service

Website:mcgill.ca/mwc/tutorial-service Inquiries: mailto:mwctutorial@mcgill.ca

# 1.17.3 University Archives

The McGill University Archives (MUA) acquires, preserves, and makes available to students, faculty, staff and researchers (including the general public) more than 30,000 metres of records dating from 1797 to the present. These records document McGill University faculty, research, alumni, and student organizations, and certain Montreal-based organizations. Archived media include:

· textual records;

- photographs;
- · audio tapes;
- film;
- · video;
- · plans;
- · University publications;
- artifacts.

The MUA acquires private records to complement its collection of the University's documentary heritage and to support University research goals. The MUA manages the University's corporate memory and information assets through its records management program. This program manages the lifecycle of administrative records and protects vital evidence of University functions and activities according to federal and Quebec archives and records legislation, in addition to professional standards.

The MUA Reading Room is open Monday to Friday, from 10:00 a.m. to 6:00 p.m.; however, appointments are recommended. The MUA website features virtual exhibitions, tools to search the MUA holdings, and a large bank of digitized images.

McGill University Archives McLennan Library Building, 4th Floor 3459 rue McTavish Montreal QC H3A 0C9 Telephone: 514-398-4711

Email: refdesk.archives@mcgill.ca Website: mcgill.ca/library/branches/mua

## 1.17.4 Redpath Museum

The Redpath Museum is an academic unit of McGill University. Its mission is to foster understanding and appreciation of the diversity of our biological, geological, and cultural heritage through scientific research, collections-based study, and education. Its collections have been growing for over a century, and provide resources for research and for graduate and undergraduate education in biology, geology, anthropology, and other fields. Its largest collections include fossils from the ancient sea floor of eastern Quebec, the oldest land plants, a vast range of minerals, molluscs from around the world, Egyptian and classical antiquities 0 1 50nd

# 1.17.6 Lyman Entomological Museum and Research Laboratory

Located on the Macdonald Campus, this institution is the insect collection and systematic entomology laboratory of McGill University. The collection houses 2.8 million specimens of insects and other arthropods, making it the second-largest insect collection in Canada, and the largest university insect collection in the country. The Lyman Museum is not generally open to the public since its main functions are research and teaching, not exhibitions. However, tours are available by appointment to interested parties.

Telephone: 514-398-7914

Website: mcgill.ca/historicalcollections/departmental/lyman

#### 1.18.2 Incorporated and Affiliated Colleges

### 1.18.2.1 Incorporated College

### Royal Victoria College

3425 University Street, Montreal QC H3A 2A8

The Royal Victoria College, a non-teaching college of McGill University, provides residential accommodation for both men and women in a co-education environment.

### 1.18.2.2 Affiliated Theological Colleges

# Montreal Diocesan Theological College

3473 University Street, Montreal QC H3A 2A8

Principal: Rev. Dr. Jesse Zink; B.A.(Acad.), M.A.(Chic.), M.Div.(Yale), Ph.D.(Camb.)

### **Presbyterian College of Montreal**

3495 University Street, Montreal QC H3A 2A8

Principal: Rev. Dr. Roland de Vries; B.A.(Guelph), M.Div.(The Presbyterian College), S.T.M., Ph.D.(McG.)

### **United Theological College of Montreal**

3475 University Street, Montreal QC H3A 2A8

Principal: Rev. Maylanne Maybee; B.A.(Tor.), Dip.Theol., Cert.Ed.(Oxon), M.Div.(Trin. Coll., Tor.)

The above three colleges train students for the ministry and grant certificates for ordination but they have remitted their degree-granting powers, except with respect to the M.Div. and honorary doctorates, to the University.

# 1.18.3 University Government

McGill University is a corporation created by a Royal Charter granted by the Crown of the United Kingdom, a general supervisory power being retained by the Crown and exercised through the Governor General as Visitor.

The Go

All of McGill's degree programs are approved by the Government of Quebec.

#### Governance: Board of Governors 1.18.5

# 1.18.5.1 The Visitor

#### The Visitor

Her Excellency the Right Honourable Mary Simon; C.C., C.M.M., C.O.M.,

Administrator of the Government of Canada O.Q., C.D., Governor General and Commander-in-Chief of Canada

# 1.18.5.2 Board of Governors

# **Board of Governors**

Maryse Bertrand,

Chair

# **Directors of Schools**

Linda Wykes Human Nutrition

Sylvie de Blois Environment

Kimiz Dalkir Information Studies
TBA Medicine, School of

Anita Gagnon Nursing

Laurie Snider Physical and Occupational Therapy

Currently, Macdonald Campus is home to the Faculty of Agricultural and Environmental Sciences, the School of Human Nutrition, and the Institute of Parasitology. The Faculty is comprised of the Departments of Animal Science, Bioresource Engineering, Food Science and Agricultural Chemistry, Natural Resource Sciences, and Plant Science. The Faculty is one of the founding members of the Bieler School of Environment, and is also home to the Farm Management and Technology Program. The current enrolment exceeds 2,000 undergraduate and graduate students.

# 2.3 Macdonald Campus Facilities

# 2.3.1 Morgan Arboretum

Canada

Telephone: 514-398-7925 Website: *mcgill.ca/macdonald* 

The Faculty of Agricultural and Environmental Sciences and the School of Human Nutrition are located on the Macdonald Campus of McGill University, at the western end of the island of Montreal. Served by public transport (STM <a href="https://www.stm.info">www.stm.info</a>, bus, and train), it is easily reached from the McGill Downtown Campus and from the Pierre Elliott Trudeau International Airport. Special arrangements can be made for prospective students to use the McGill inter-campus <a href="https://students.nutrices.com/sharport/">shuttle bus service</a>. The shuttle service is available to all registered students who attend classes on both campuses.

The Faculty of Agricultural and Environmental Sciences,

Student Affairs Office Macdonald Campus of McGill University 21,111 Lakeshore Road

Sainte-Anne-de-Bellevue QC H9X 3V9

Telephone: 514-398-7925

Email: studentinfo.macdonald@mcgill.ca Website: mcgill.ca/macdonald/prospective

For information about interfaculty transfers, see *University Regulations and Resources > Undergraduate > Registration > section 1.3.6: Interfaculty Transfer*.

## 2.4.5 Student Information

Friendly staff are on hand to answer your questions about academics, residence, athletics, student life, health concerns, and much more.

## 2.4.5.1 Student Rights and Responsibilities

The regulations and policies governing student rights and responsibilities at McGill University are published jointly by the Dean of Students' Office and the Secretariat, and they can be found at mcgill.ca/secretariat/policies-and-regulations.

## 2.4.5.2 The Student Affairs Office

The Student Affairs Office—located in Laird Hall, Room 106—provides a wide variety of academic services. These include information about admission (prerequisites and program requirements), transfer credits, Academic Standing, examinations (deferrals, conflicts, rereads), exchange programs, interfaculty transfers, program changes, registration (course change, withdrawals), scholarships (entrance and in-course), second degrees, second majors, minors, acTm(>—0 T4m(

## 2.4.5.7 Immunization for Dietetics Majors

As a student in the Dietetics Major, you are required to initiate and complete the Compulsory Immunization Program for Health Care Students in Fall of U1, in the NUTR 208 Professional Practice Stage 1A course. Students will meet with our health nurse at the beginning of U1 and should have all previous vaccination records available at that time. Participation in any further Professional Practice (Stage) courses in the Dietetics program will only be permitted if all immunization requirements are complete. Updates to your immunizations may be required during your program. For full details, see <a href="mailto:mcgill.ca/wellness-hub/hub-clinical-services/medical-notes-and-immunization-reviews">mcgill.ca/wellness-hub/hub-clinical-services/medical-notes-and-immunization-reviews</a>.

## 2.4.5.8 Language Requirement for Professions

Quebec law requires that candidates seeking admission to provincially recognized Quebec professional corporations or *Ordres* have a working knowledge of the French language, i.e., be able to communicate verbally and in writing in that language. Agrologists, chemists, dietitians, and engineers are among those within this group.

For additional information, see *University Regulations and Resources > Undergraduate > Admission to Professional and Graduate Studies > section* 1.10.1: Language Requirements for Professions.

## 2.4.6 Faculty Information and Regulations

Each student in the Faculty of Agricultural and Enviraculty of

Following are the regulations and procedures for Second Academic Majors:

- 1. You must be in Satisfactory Academic Standing with a minimum CGPA of 3.00 in order to apply for a Second Academic Major.
- In consultation with the appropriate authority associated with each major (Academic Adviser, Associate Dean), you must construct a proposal showing all the courses that are to be taken to satisfy the entrance and program requirements of both the First and Second Academic Majors.
- 3. A minimum of 36 credits must be unique to the Second Major (i.e., not part of the required or complementary courses taken for the First Major).
- 4. You must obtain prior approval for all proposed Second Academic Majors from your Academic Adviser and the Student Affairs Office and from the Associate Dean, adviser, or appropriate committee of the other faculty concerned.
- 5. Normally, proposals for Second Academic Majors will be initiated before completion of U1 year of the First Academic Major.
- **6.** The academic standards applicable to each major will be respected.

## 2.4.6.8.1 Procedures for Minor Programs

If you want to register for a Minor program, you must complete a *Minor Approval form* (usually at the beginning of your U2 year), and return it duly completed and signed to the Student Affairs Office (saoadvisor.macdonald@mcgill.ca). The Minor program will then be added to your record and will automatically continue each year unless you officially cancel it in writing. If you w

In addition, if you are a student in the Dietetics program, you must have completed the Stages of professional formation requiring a CGPA of 3.00.

You must have completed all Faculty and program requirements; see section 2.4.6.1: Minimum Credit Requirement in this publication.

In order to qualify for a McGill degree, you must complete a minimum residency requirement of 60 credits at McGill. If you are in the B.Sc.(Ag.Env.Sc.), you must take a minimum of two-thirds of your course credits within the Faculty of Agricultural and Environmental Sciences.

Note for B.Eng.(Bioresource) students: If you are completing a B.Eng.(Bioresource) degree, you must complete a minimum residency requirement of 72 credits at McGill. Note that the total credits for your program (143 credits) includes those associated with the year 0 (Freshman) courses.

## Programs Offered by the Faculty of Agricultural and Environmental Sciences

section 2.5.11: Diploma Program (Undergraduate) (Overview)

section 2.5.12: Diploma in Collegial Studies (Overview)

section 2.5.13: Environmental Sciences Programs (Overview)

## 2.5.1 Internship Opportunities

Internships allow students to gain practical, hands-on experience and develop skill sets that are frequently in high demand by employers. Internships involve a work placement where you are exposed to the main areas of operation of your employer. Each work placement is unique, and you benefit from a program. Each w.06y

## 2.5.3.1 Majors and Honours

Graduates of programs marked with an asterisk (\*) can be eligible for membership in the Ordre des agronomes du Québec and other provincial institutes of agriculture.

- Agricultural Economics \*
- Agro-environmental Sciences \*
- Environmental Biology
- Global Food Security
- Life Sciences (Biological and Agricultural)
- Environment see *Bieler School of Environment* >

Together with other B.Eng. programs offered by peer engineering departments in the Faculty of Engineering, Bioresource Engineering is accredited through Engineers Canada Accreditation Boards. Therefore, graduates of the bachelor bioresource engineering program are eligible for registration as professional engineers in any province in Canada, as well as some international jurisdictions. The available Professional Agrology option also qualify graduates to apply for registration to the *Ordre des agronomes du Québec* and similar licensing bodies in other provinces.

The Complementary portion of the Bioresource Engineering curriculum is organized according to three non-restrictive streams, including: Bio-Environmental Engineering, Bio-Process Engineering, and Bio-Production Engineering.

Students who follow the **Bio-Environmental Engineering** stream will learn to be responsible stewards of the environment and natural resources. This stream includes the study of soil and water quality management and conservation, organic waste treatment, urban and rural ecology, sustainability engineering, biodiversity preservation, climate change adaptation, and many other related topics.

Through the **Bio-Process Engineering** stream, students apply engineering to transform agricultural commodities and biomass into products such as food, fibre, fuel, and biochemicals. Topics include the engineering of foods and food processes, physical properties of biological materials, post-harvest technology, fermentation and bio-processing, the management of organic wastes, biotechnology, the design of machinery for bioprocessing, etc.

Students who follow the **Bio-Production Engineering** stream use natural sciences and engineering skills to design systems and machines for the production of different types of crop, animal-based products, and biomass. Students learn about design of machines and structures, different production systems and technologies, instrumentation and controls, geospatial data management, precision agriculture, and emerging intelligent bio-production concepts.

In addition, students may choose to follow the **Professional Agrology** option of Bioresource Engineering (usually associated with the Bio-Production Engineering stream) as well as the Bioresource Engineering Honors Program. Multiple minors are also available. F

Please refer to section 2.6.7: Post-Baccalaureate Certificate Programs for program descriptions and details.

## 2.5.11 Diploma Program (Undergraduate) (Overview)

Diploma Program (Undergraduate)

• Diploma in Environment – see Bieler School of Environment > Undergraduate > Diploma in Environment > section 7.7.8.1: Diploma (Dip.) Environment (30 credits)

## 2.5.12 Diploma in Collegial Studies (Overview)

**Diploma in Collegial Studies** 

• section 2.7.3: Farm Management and Technology Program

## 2.5.13 Environmental Sciences Programs (Overview)

## 2.5.13.1 Bieler School of Environment

The Bieler School of Environment is a joint initiative of the Faculty of Agricultural and Environmental Sciences, the Faculty of Arts, and the Faculty of Science. It offers a B.Sc.(Ag.Env.Sc.) Major in Environment, a B.Sc. Major in Environment, a B.A. & Sc. Interfaculty Program in Environment, a B.A. Faculty Program in Environment, a Minor in Environment, and a Diploma in Environment. These programs al 19 5rPl(Th02.(Plsin .82n both Tmonment, a B.A.)Tj4 0 60

#### 2.6.1 Freshman Major

## **Program Director**

Dr. David Titley-Peloquin Macdonald-Stewart Building, Room 1-022

Telephone: 514-398-7976

The Freshman Program is designed to provide a basic science foundation to students entering university for the first time from a high school system (outside of the Quebec CEGEP system). The freshman year consists of at least 30 credits in fundamental mathematics and science courses in preparation for one of the following degree programs:

B.Sc. (Agricultural & Environmental Sciences)

B.Eng. (Bioresource)

B.Sc. (Nutritional Sciences)

B.Sc. (Food Science)

Concurrent B.Sc. (Food Science) and B.Sc. (Nutritional Sciences)

Students who have completed the Diploma of Collegial Studies, Advanced Placement Exams, Advanced Levels, the International Baccalaureate, the French Baccalaureate, and/or McGill placement examinations may receive exemption and/or credit for all or part of the freshman courses (basic science courses in biology, chemistry, physics, and mathematics). Students who have completed courses at other universities or colleges may also receive exemptions and/or credits. Students should consult with the Faculty's Student Affairs Office.

## 2.6.1.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Freshman Program (30 credits)

(All majors except Agricultural Economics - see Advising Notes below\*)

If you are entering university for the first time from a high school system, outside of the Quebec CEGEP system, you will be required to complete a Freshman year of at least 30 credits as listed below.

Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or physics skills to commence the freshman year you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your freshman adviser may recommend that you register for an additional weekly Pre-Calculus Lab, of one credit, which may be applied towards the required credits of the degree program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses - Fall (14.5 credits)

(3) General Biology

## Required Courses - Fall (14.5 credits)

AEBI 120	(3)	General Biology
AECH 110	(4)	General Chemistry 1
AEMA 101	(3)	Calculus 1
AEPH 113	(4)	Physics 1
BREE 187	(.5)	Freshman Seminar 1

#### Required Courses - Winter (15.5 credits)

AECH 111	(4)	General Chemistry 2
AEMA 102	(4)	Calculus 2
AEPH 115	(4)	Physics 2
BREE 103	(3)	Linear Algebra
BREE 188	(.5)	Freshman Seminar 2

## 2.6.1.3 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Freshman Program (30 credits)

If you are entering university for the first time from a high school system (outside of the Quebec CEGEP system), you will be required to complete a freshman year of at least 30 credits as listed below.

Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or physics skills to commence the Freshman year, you may wish to take preparatory courses prior to the normal Fall semester. You are encouraged to discuss your potential need with your academic adviser. Mathematical skill level will be determined during the first week of classes. Your Freshman adviser may recommend that you register for an additional weekly Pre-calculus Lab, of one credit, which may be applied towards the required credits of the degree program.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## Required Courses - Fall (14.5 credits)

AEBI 120	(3)	General Biology
AECH 110	(4)	General Chemistry 1
AEMA 101	(3)	Calculus 1
AEPH 112	(4)	Introductory Physics 1
AGRI 195	(.5)	Freshman Seminar 1

## Required Courses - Winter (12.5 credits)

AECH 111	(4)	General Chemistry 2
AEMA 102	(4)	Calculus 2
AEPH 114	(4)	Introductory Physics 2
AGRI 196	(.5)	Freshman Seminar 2

## Elective - Winter (3 credits)

## 2.6.1.4 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Freshman Program (30 credits)

The B.Sc.(Nutr.Sc.) Freshman Program is designed to provide the required science entrance prerequisites for students entering university for the first time from a high school system (outside of the Quebec CEGEP system).

## Required Courses - Fall (14.5 credits)

AEBI 120	(3)	General Biology
AECH 110	(4)	General Chemistry 1
AEMA 101	(3)	Calculus 1
AEPH 112	(ALEO23ulus 2AL	E <b>เนลเปลอน (โกร) Phijosis 5</b> 49.121 T1(AE023ulus Tj1 0 0 1 221.949 580.561 T17.3043oductory Ph)Tj1 0 0 1 272.98 580.561
AGRI 195	(.5)	Freshman Seminar 1

## Required Courses - Winter (15.5 credits)

AEBI 122	(3)	Cell Biology
AEMA 102	(4)	Calculus 2
AEPH 114	(4)	Introductory Physics
AGRI 196	(.5)	Freshman Seminar 2
FDSC 230	(4)	Organic Chemistry

# 2.6.1.5 Concurrent Bachelor of Science Food Science (B.Sc. (F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc. (Nutr.Sc.)) - Freshman Program (Concurrent) (30 credits)

These freshman requirements apply to students in the Concurrent Bachelor of Science Food Science (B.Sc. (F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc. (Nutr.Sc.)) degree program.

If you are entering university for the first time from a high school system (outside of the Quebec CEGEP system), you will be required to complete a Freshman year of at least 30 credits as listed below.

Normally, students registered in the Faculty of Agricultural and Environmental Sciences Freshman program may take a maximum of 8 credits outside the Faculty offerings to meet the requirements of the program. Permission to exceed this limit must be received from the Associate Dean (Student Affairs) prior to registration.

Note: If you are not certain that you have adequate math and/or ph...

# 2.6.2.1.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Agricultural Economics (42 credits)

This program is currently not offered.

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or

With the approval of the Academic Adviser, one introductory course in each of the following areas:

- Accounting
- Statistics
- Written/Oral Communication

## Specialization (21 - 24 credits)

Specializations designed to be taken with the Agricultural Economics Major:

- Agribusiness (24 credits)\*
- Environmental Economics (24 credits)
- Professional Agrology (21 credits)\*
- \* Membership to the OAQ requires successful completion of these two specializations.

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units & Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar.

## **Electives**

To meet the minimum credit requirement for the degree.

# 2.6.2.1.3 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Agro-Environmental Sciences (42 credits)

This Major is focusl and En

ENVB 210	(3)	The Biophysical Environment
ENVB 301	(3)	Meteorology
LSCI 204	(3)	Genetics
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
SOIL 315	(3)	Soil Nutrient Management

## **Complementary Courses (18 credits)**

3 credits from the following:

PLNT 300	(3)	Cropping Systems
PLNT 302	(3)	Forage Crops and Pastures

3 credits from the following:

ANSC 451	(3)	Dairy and Beef Production Management
ANSC 458	(3)	Swine and Poultry Production

## **Honours Courses**

12 credits of Honours Plan A or Plan B

## **Honours Plan A**

12 credits of Honours research courses in the subject area of the student's Major, chosen in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the research project.

AGRI 401	(6)	Honours Research Project 1
AGRI 402	(6)	Honours Research Project 2

## **Honours Plan B**

6 credits of Honours project courses in the subject area of the student's Major as well as 6 credits in 400- or 500-level courses, normally selected from the Faculty of Agricultural and Environmental Sciences, in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the project.

AGRI 405	(3)	Honours Project 1
AGRI 406	(3)	Honours Project 2

## Specialization

Choose at least one specialization of 18-24 credits.

Specializations designed to be taken with the Agro-Environmental Sciences Major:

- Animal Production
- Ecological 500-le

At least one specialization of 18-24 credits.

Specializations designed to be taken with the Environmental Biology Major:

- Applied Ecology
- Plant Biology
- Wildlife Biology

Note: F

ENVB 301	(3)	Meteorology
ENVB 313	(3)	Phylogeny and Biogeography
ENVB 437	(3)	Assessing Environmental Impact
ENVB 497	(3)	Research Project 1
ENVB 498	(3)	Research Project 2
ENVB 529	(3)	GIS for Natural Resource Management
FAES 300	(3)	Internship 2
MICR 331	(3)	Microbial Ecology
PLNT 304	(3)	Biology of Fungi
PLNT 358	(3)	Flowering Plant Diversity
PLNT 460	(3)	Plant Ecology
SOIL 300	(3)	Geosystems
WILD 302	(3)	Fish Ecology
WILD 307	(3)	Natural History of Vertebrates
WOOD 441	(3)	Integrated Forest Management

#### **Honours Courses**

12 credits of Honours Plan A or Plan B:

#### Honours Plan A

12 credits of Honours research courses in the subject area of the student's Major, chosen in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the research project.

ENVB 401	(6)	Honours Research Project 1
ENVB 402	(6)	Honours Research Project 2

OR

## Honours Plan B

6 credits of Honours project courses in the subject area of the student's Major as well as 6 credits in 400- or 500-level courses, normally selected from the Faculty of Agricultural and Environmental Sciences, in consultation with the Program Director of the student's Major and the professor who has agreed to supervise the project.

ENVB 405	(3)	Honours Project 1
ENVB 406	(3)	Honours Project 2

## Specialization

At least one specialization of 18-24 credits.

Specializations designed to be taken with the Environmental Biology Major:

- Applied Ecology
- Plant Biology
- Wildlife Biology

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, refer to "Browse Academic Units & Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar. Consult the Academic Adviser for approval of specializations other than those listed above.

## **Electives**

To meet the minimum credit requirement for the degree.

has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."

A brief description of the Honours project activities involved will be documented and signed by the Program Director of the student's Major, the supervisor of the Honours project, and the student.

The program provides a global perspective on agriculture and food security, and addresses issues related to rural development, malnutrition, poverty and food safety with special emphasis on the developing world. Using a multidimensional and multidisciplinary approach, the program provides students with a comprehensive set of courses at McGill in combination with hands-on experience through structured internships and study abroad opportunities. The field experience (short courses, internships, or full semester) includes project development in local communities, observing subsistence agriculture in situ, and participating in various activities which sensitize students to the challenges that countries face to feed their people. Students will have the opportunity to develop the knowledge base needed for successful careers in government, non-government, and international institutions in the areas of international and sustainable development, international research and project management, agri-business, and food and agriculture policy analysis.

## **Program Prerequisites**

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements.

#### Required Courses (33 credits)

AEBI 210	(3)	Organisms 1
AEMA 310	(3)	Statistical Methods 1
AGEC 200	(3)	Principles of Microeconomics
AGEC 442	(3)	Economics of International Agricultural Development
AGRI 411	(3)	Global Issues on Development, Food and Agriculture
AGRI 493	(3)	International Project Management
ANSC 250	(3)	Principles of Animal Science
ENVB 210	(3)	The Biophysical Environment
INTD 200	(3)	Introduction to International Development
NUTR 207	(3)	Nutrition and Health
NUTR 341	(3)	Global Food Security

## Complementary Courses (21 credits)

9 credits from the following:

AGRI 215	(3)	Agro-Ecosystems Field Course
AGRI 340	(3)	Principles of Ecological Agriculture
AGRI 499	(3)	Agricultural Development Internship
ANSC 420	(3)	Animal Biotechnology
BREE 217	(3)	Hydrology and Water Resources
FDSC 310	(3)	Post Harvest Fruit and Vegetable Technology
NRSC 221	(3)	Environment and Health

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12 credits of Honours Plan A or Plan B:

#### **Honours Plan A**

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

FAES 401	(6)	Honours Research Project 1
FAES 402	(6)	Honours Research Project 2

OR

#### **Honours Plan B**

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

FAES 405	(3)	Honours Project 1
FAES 406	(3)	Honours Project 2

## Specialization (24 credits)

Students must also complete at least one Specialization of 24 credits.

# 2.6.2.1.9 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Major Life Sciences (Biological and Agricultural) (42 credits)

The Life Sciences (Biological and Agricultural) Major provides a strong foundation in the basic biological sciences. It will prepare graduates for careers in the agricultural, environmental, health, and biotechnological fields. Graduates with high academic achievement may go on to postgraduate studies in research, or professional programs in the biological, veterinary, medical, and health sciences fields.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

## **Program Prerequisites**

Please refer to "Faculty Information and Regulations" > "Minimum Credit Requirements", in this eCalendar for prerequisites and minimum credit requirements.

Default Specialization: Students who do not select a Specialization will automatically be assigned to the Life Sciences (Multidisciplinary) Specialization upon entering U2.

## Required Courses (33 credits)

\* Other appropriate Statistics courses may be approved as substitutes by the Program Director.

AEBI 210	(3)	Organisms 1
AEBI 211	(3)	Organisms 2
AEBI 212	(3)	Evolution and Phylogeny
AEHM 205	(3)	Science Literacy
AEMA 310*	(3)	Statistical Methods 1
ANSC 400	(3)	Eukaryotic Cells and Viruses
LSCI 202	(3)	Molecular Cell Biology
LSCI 204	(3)	Genetics
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
PARA 438	(3)	Immunology

## **Complementary Courses (9 credits)**

9 credits of the complementary courses selected from:

ANSC 234	(3)	Biochemistry 2
ANSC 250	(3)	Principles of Animal Science
ANSC 312	(3)	Animal Health and Disease
ANSC 323	(3)	Mammalian Physiology
ANSC 324	(3)	Developmental Biology and Reproduction
ANSC 326	(3)	Fundamentals of Population Genetics
ANSC 420	(3)	Animal Biotechnology
BINF 511	(3)	Bioinformatics for Genomics
BTEC 306	(3)	Experiments in Biotechnology
ENVB 210	(3)	The Biophysical Environment
ENVB 222	(3)	St. Lawrence Ecosystems
FAES 300	(3)	Internship 2
LSCI 451	(3)	Research Project 1
LSCI 452	(3)	Research Project 2
MICR 331	(3)	Microbial Ecology
MICR 338	(3)	Bacterial Molecular Genetics
MICR 341	(3)	Mechanisms of Pathogenicity
MICR 450	(3)	Environmental Microbiology
NRSC 333	(3)	Pollution and Bioremediation
PARA 410	(3)	Environment and Infection
PARA 424	(3)	Fundamental Parasitology
PLNT 304	(3)	Biology of Fungi
PLNT 353	(3)	Plant Structure and Function
PLNT 426	(3)	Plant Ecophysiology
PLNT 435	(3)	Plant Breeding

## Specialization

At least one specialization of 18-24 credits from:

Specializations designed to be taken with the Life Sciences (Biological and Agricultural) Major:

- Animal Biology
- Animal Health and Disease
- Life Sciences (Multidisciplinary)
- Microbiology and Molecular Biotechnology

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units & Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar.

## **Electives**

To meet the minimum credit requirement for the degree.

# 2.6.2.1.10 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Honours Life Sciences (Biological and Agricultural) (54 credits)

Students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain Honours.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."

A brief description of the Honours project activities involved will be document of the Honours project, and the student.	ted and signed by the Program Director of the student's Major, the supervisor
of the Honours project, and the student.	

NRSC 333	(3)	Pollution and Bioremediation
PARA 410	(3)	Environment and Infection
PARA 424	(3)	Fundamental Parasitology
PLNT 304	(3)	Biology of Fungi
PLNT 353	(3)	Plant Structure and Function
PLNT 426	(3)	Plant Ecophysiology
PLNT 435	(3)	Plant Breeding

## Specialization

At least one specialization of 18-24 credits from:

Specializations designed to be taken with the Life Sciences (Biological and Agricultural) Major:

- Animal Biology
- Animal Health and Disease
- Life Sciences (Multidisciplinary)
- Microbiology and Molecular Biotechnology
- Plant Science

Note: For a complete list of specializations offered for students in the Bachelor of Science in Agricultural and Environmental Sciences, please refer to "Browse Academic Units & Programs" > "Bachelor of Science (Agricultural and Environmental Sciences) - B.Sc.(Ag.Env.Sc.)" > "Specializations" in this eCalendar.

## **Electives**

To meet the minimum credit requirement for the degree.

## 2.6.2.2 Specialisations

The faculty offers the following specialisations, to be paired with a B.Sc.(Ag.Env.Sc.) major. Each major program description has a list of suggested specialisations. A different specialisation may be selected following a consultation with your academic adviser.

## 2.6.2.2.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Agribusiness (24 credits)

The development of commercial agriculture relies on a large supporting sector of manufacturing and service companies involved in the supply of inputs to farming and the transportation, processing, and marketing of agricultural and food products.

This 24-credit specialization includes courses in agricultural sciences, agrib

MGCR 341	(3)	Introduction to Finance
MGCR 352	(3)	Principles of Marketing
MGCR 382	(3)	International Business
ORGB 321	(3)	Leadership

3 credits of a course in Animal Production or Plant Production approv

## **Complementary Courses (6 credits)**

6 credits of complementary courses selected from:

ANSC 234 Biochemistry 2 (3) ANSC 251

(3) Comparative Anatomy

Farm Li

Bio-Environmental Engineering

study water resources, sustainable development, nutrition, planning and development, and a host of other fascinating topics, allo

ANSC 324	(3)	Developmental Biology and Reproduction
ANSC 326	(3)	Fundamentals of Population Genetics
ANSC 350	(3)	Food-Borne Pathogens
ANSC 420	(3)	Animal Biotechnology
ANSC 424	(3)	Metabolic Endocrinology
ANSC 433	(3)	Animal Nutrition and Metabolism
ANSC 560	(3)	Biology of Lactation
ANSC 565	(3)	Applied Information Systems
BINF 511	(3)	Bioinformatics for Genomics
BTEC 306	(3)	Experiments in Biotechnology
BTEC 535	(3)	Functional Genomics in Model Organisms
BTEC 555	(3)	Structural Bioinformatics
ENTO 330	630413)Ph	Insect Biology
ENTO 352	(3)	Biocontrol of Pest Insects
ENVB 301	(3)	Meteorology
ENVB 305	(3)	Population and Community Ecology
ENVB 313	(3)	Phylogeny and Biogeography
		Quantitative Methods: Ecology

For information on academic advising, see: http://www

### 2.6.2.2.12 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Plant Production (24 credits)

This specialization provides students with the knowledge and skills relating to the biology and physiology, breeding, propagation, and management of domesticated plants. The plant industry, in both rural and urban settings, is a sector of growing importance to Canadian and global economies. Graduates are prepared for employment in horticulture or in field crop development, production, and management, in government services, extension, teaching and consulting; or for graduate and postgraduate studies. When taken in conjunction with the Major Agro-Environmental Sciences and the specialization in Professional Agrology

# **Complementary Courses (9 credits)**

\* Note: Students may take BREE 529 or ENVB 529, but not both.

BREE 322	(3)	Organic Waste Management
BREE 327	(3)	Bio-Environmental Engineering
BREE 510*	(3)	Watershed Systems Management
BREE 529*	(3)	GIS for Natural Resource Management
ENVB 529*	(3)	GIS for Natural Resource Management
NRSC 333	(3)	Pollution and Bioremediation
SOIL 300	(3)	Geosystems
SOIL 510	(3)	Environmental Soil Chemistry

2.6.2.2.16 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Wildlife Biology (24 credits)

AEMA 202	(3)	Intermediate Calculus
AEMA 305	(3)	Differential Equations
BREE 205	(3)	Engineering Design 1
BREE 210	(3)	Mechanical Analysis and Design
BREE 216	(3)	Bioresource Engineering Materials
BREE 252	(3)	Computing for Engineers
BREE 301	(3)	Biothermodynamics
BREE 305	(3)	Fluid Mechanics
BREE 312	(3)	Electric Circuits and Machines
BREE 319	(3)	Engineering Mathematics
BREE 327	(3)	Bio-Environmental Engineering
BREE 341	(3)	Mechanics of Materials
BREE 415	(3)	Design of Machines and Structural Elements
BREE 420	(3)	Engineering for Sustainability
BREE 451	(1)	Undergraduate Seminar 1 - Oral Presentation
BREE 452	(1)	Undergraduate Seminar 2 Poster Presentation
BREE 453	(1)	Undergraduate Seminar 3 - Scientific Writing
BREE 485	(1)	Senior Undergraduate Seminar 1
BREE 490	(3)	Engineering Design 2
	ring Design 3	Engineering Design 3

LSCI 202	(3)	Molecular Cell Biology
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
MICR 331	(3)	Microbial Ecology
PLNT 300	(3)	Cropping Systems

With 6 credits chosen in consultation with the Academic Adviser.

#### Set C - Social Sciences

Minimum of 3 credits from the following list:

ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
SEAD 530	(3)	Economics for Sustainability in Engineering and Design
SOCI 235	(3)	Technology and Society

Note: ENVR courses have limited enrolment.

Plus 6 credits of Social Sciences, Management Studies, Humanities, or Law courses at the U1 undergraduate level or higher with approval of the Academic Adviser.

Note: these 6 credits may include one 3-credit language course other than the student's normal spoken languages.

### Set D - Engineering

27 credits from the following list, with the option (and approval of the Academic Adviser) of taking a maximum of 6 credits from other courses offered in the Faculty of Engineering:

BREE 532	(3)	Post-Harvest Storage
BREE 533	(3)	Water Quality Management
BREE 535	(3)	Food Safety Engineering

2.6.3.2 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Honours Bioresource Engineering (113 credits)

12 credits from:

FAES 401 (6) Honours Research Project 1 FAES 402 (6) Honours Research Project 2

OR

### **Honours Plan B**

A minimum of 6 credits of Honours courses and 6 credits in 500-level BREE courses, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the program Director of the student's major and the professor who has agreed to supervise the research project.

#### 6 credits from:

FAES 405	(3)	Honours Project 1
FAES 406	(3)	Honours Project 2

Plus 6 credits of BREE courses at the 500 level.

#### Set A

3 credits from the following:

AEMA 310	(3)	Statistical Methods 1
CIVE 302	(3)	Probabilistic Systems

### 3 credits from the following:

CHEE 315	(3)	Heat and Mass Transfer
MECH 346	(3)	Heat Transfer

### **Set B - Natural Sciences and Mathematics**

3 credits chosen from the list below:

AEBI 210	(3)	Organisms 1
AEBI 211	(3)	Organisms 2
ENVB 210	(3)	The Biophysical Environment
ENVB 305	(3)	Population and Community Ecology
LSCI 202	(3)	Molecular Cell Biology
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
MICR 331	(3)	Microbial Ecology
PLNT 300	(3)	Cropping Systems

Plus 6 credits chosen in consultation with the Academic Adviser.

#### Set C - Social Sciences

Minimum of 3 credits from the following list:

ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
SEAD 530	(3)	Economics for Sustainability in Engineering and Design

SOCI 235

(3)

Technology and Society

Note: ENVR courses have limited enrolment.

Plus 6 credits of social sciences, management studies, humanities, or la

AGRI 330	(1)	Agricultural Legislation
AGRI 430	(2)	Professional Practice in Agrology
BREE 205	(3)	Engineering Design 1
BREE 210	(3)	Mechanical Analysis and Design
BREE 216	(3)	Bioresource Engineering Materials
BREE 252	(3)	Computing for Engineers
BREE 301	(3)	Biothermodynamics
BREE 305	(3)	Fluid Mechanics
BREE 312	(3)	Electric Circuits and Machines
BREE 319	(3)	Engineering Mathematics
BREE 327	(3)	Bio-Environmental Engineering
BREE 341	(3)	Mechanics of Materials
BREE 415	(3)	Design of Machines and Structural Elements
BREE 420	(3)	Engineering for Sustainability
BREE 451	(1)	Undergraduate Seminar 1 - Oral Presentation
BREE 452	(1)	Undergraduate Seminar 2 Poster Presentation
BREE 453	(1)	Undergraduate Seminar 3 - Scientific Writing
BREE 485	(1)	Senior Undergraduate Seminar 1
BREE 490	(3)	Engineering Design 2
BREE 495	(3)	Engineering Design 3
BREE 504	(3)	Instrumentation and Control
FACC 250	(0)	Responsibilities of the Professional Engineer
FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
	esign Graphicsi	1 Design Graphics

esign Graphicsj1 Design Graphics

LSCI 202	(3)	Molecular Cell Biology
LSCI 204	(3)	Genetics
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
Group 2 - Agricultur	al Sciences	
6 credits from the fo	llowing list:	
ANSC 250	(3)	Principles of Animal Science
ANSC 433	(3)	Animal Nutrition and Metabolism
ANSC 451	(3)	Dairy and Beef Production Management
	(3)	Swine and Poultry Production

AGRI 510	(3)	Professional Practice
BREE 324	(3)	Elements of Food Engineering
FDSC 200	(3)	Introduction to Food Science
FDSC 213	(3)	Analytical Chemistry 1
FDSC 251	(3)	Food Chemistry 1
FDSC 300	(3)	Principles of Food Analysis 1
FDSC 310	(3)	Post Harvest Fruit and Vegetable Technology
FDSC 319	(3)	Food Commodities
FDSC 330	(3)	Food Processing
FDSC 400	(3)	Food Packaging
FDSC 442	(3)	Food Microbiology
FDSC 495D1	(1.5)	Food Science Seminar
FDSC 495D2	(1.5)	Food Science Seminar
FDSC 525	(3)	Food Quality Assurance
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
NUTR 207	(3)	Nutrition and Health

### Additional Required Courses - Food Science Option (21 credits)

FDSC 233	(3)	Physical Chemistry
FDSC 305	(3)	Food Chemistry 2
FDSC 315	(3)	Separation Techniques in Food Analysis 1
FDSC 334	(3)	Analysis of Food Toxins and Toxicants
FDSC 405	(3)	Food Product Development
FDSC 516	(3)	Flavour Chemistry
FDSC 540	(3)	Sensory Evaluation of Foods

# Elective Courses (18 credits)

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.

### 2.6.4.2 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Honours Food Science - Food Science Option (90 credits)

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

In addition to satisfying the research requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."

Graduates have the academic qualifications for membership in the Canadian Institute of Food Science and Technology (CIFST). Graduates of the Food Science Major with Food Science Option can also qualify for recognition by the Institute of Food Technologists (IFT).

The Food Science Option is completed after 90 credits with free elective courses.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this eCalendar for prerequisites and minimum credit requirements. For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

### Required Courses (51 credits)

Note: If an introductory CEGEP-level Organic Chemistry course has not been completed, then FDSC 230 (Organic Chemistry) must be completed as a replacement.

AEMA 310	(3)	Statistical Methods 1
AGRI 510	(3)	Professional Practice
BREE 324	(3)	Elements of Food Engineering
FDSC 200	(3)	Introduction to Food Science
FDSC 213	(3)	Analytical Chemistry 1
FDSC 251	(3)	Food Chemistry 1
FDSC 300	(3)	Principles of Food Analysis 1
FDSC 310	(3)	Post Harvest Fruit and Vegetable Technology
FDSC 319	(3)	Food Commodities
FDSC 330	(3)	Food Processing
FDSC 400	(3)	Food Packaging
FDSC 442	(3)	Food Microbiology
FDSC 495D1	(1.5)	Food Science Seminar
FDSC 495D2	(1.5)	Food Science Seminar
FDSC 525	(3)	Food Quality Assurance
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
NUTR 207	(3)	Nutrition and Health

## Additional Required Courses - Food Science Option (21 credits)

FDSC 233	(3)	Physical Chemistry
FDSC 305	(3)	Food Chemistry 2
FDSC 315	(3)	Separation Techniques in Food Analysis 1
FDSC 334	(3)	Analysis of Food Toxins and Toxicants
FDSC 405	(3)	Food Product Development
FDSC 516	(3)	Flavour Chemistry
FDSC 540	(3)	Sensory Evaluation of Foods

### **Honours Courses**

Students choose either Plan A or Plan B.

#### **Honours Plan A**

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

FAES 401	(6)	Honours Research Project 1		
FAES 402	(6)	Honours Research Project 2		

### **Honours Plan B**

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

FAES 405	(3)	Honours Project 1
FAES 406	(3)	Honours Project 2

### **Elective Courses (6 credits)**

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.

### 2.6.4.3 Bachelor of Science (Food Science) (B.Sc.(F.Sc.)) - Major Food Science - Food Chemistry Option (90 credits)

This program is intended for those students interested in the multidisciplinary field of food science. The courses are integrated to acquaint the student with food processing, food chemistry, quality assurance, analytical procedures, food products, standards, and regulations. The program prepares graduates for employment as scientists in industry or gov

FDSC 233	(3)	Physical Chemistry
FDSC 305	(3)	Food Chemistry 2
FDSC 315	(3)	Separation Techniques in Food Analysis 1
FDSC 334	(3)	Analysis of Food Toxins and Toxicants
FDSC 405	(3)	Food Product Development
FDSC 490	(3)	Research Project 1
FDSC 491	(3)	Research Project 2
FDSC 515	(3)	Enzymology
FDSC 516	(3)	Flavour Chemistry
FDSC 520	(3)	Biophysical Chemistry of Food

### **Electives (6 credits)**

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.

## 2.6.4.4 About the Concurrent B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.)

Unique in North America, the concurrent degree program in Food Science and Nutritional Science allows students to complete two degrees at once while offering the best education in these complementary fields. This program opens the door to a multitude of career paths in the nutrition and food industries.

The **Food Science** component of the program focuses on the chemistry of food and the scientific principles underlying food safety, preservation, processing, and packaging, to provide consumers with quality foods. The **Nutritional Science** component deals with the science of human nutrient metabolism and the nutritional aspects of food. The program has been carefully structured to ensure that students receive the training that the industry demands, including a stage placement in the Nutrition or Food Industry.

# 2.6.4.4.1 Concurrent Bachelor of Science in Food Science (B.Sc.(F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc.(Nutr.Sc.)) - Food Science/Nutritional Science Major (Concurrent) (122 credits)

The concurrent program B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.) is designed to give motivated students the opportunity to combine the two fields. The two disciplines complement each other with Food Science providing the scientific foundation in the fundamentals of food science and its application in the food system, while Nutritional Sciences brings the fundamental knowledge in the nutritional aspects of food and metabolism. The program aims to train students with the fundamental knowledge in both disciplines to promote the development of healthy food products for human consumption. The overall program is structured and closely integrated to satisfy the academic requirements of both degrees as well as the professional training or exposure to industry.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this publication for prerequisites and minimum credit requirements.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

### Required Courses (80 credits)

AEMA 310	(3)	Statistical Methods 1
ANSC 234	(3)	Biochemistry 2
ANSC 323	(3)	Mammalian Physiology
ANSC 424	(3)	Metabolic Endocrinology
FDSC 200	(3)	Introduction to Food Science
FDSC 213	(3)	Analytical Chemistry 1
FDSC 251	(3)	Food Chemistry 1
FDSC 300	(3)	Principles of Food Analysis 1
FDSC 305	(3)	Food Chemistry 2
FDSC 310	(3)	Post Harvest Fruit and Vegetable Technology
FDSC 315	(3)	Separation Techniques in Food Analysis 1
FDSC 319	(3)	Food Commodities
FDSC 330	(3)	Food Processing
FDSC 334	(3)	Analysis of Food Toxins and Toxicants
FDSC 400	(3)	Food Packaging

FDSC 442	(3)	Food Microbiology
FDSC 497	(1.5)	Professional Seminar: Food
FDSC 525	(3)	Food Quality Assurance
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
NUTR 207	(3)	Nutrition and Health
NUTR 214	(4)	Food Fundamentals
NUTR 307	(3)	Metabolism and Human Nutrition
NUTR 337	(3)	Nutrition Through Life
NUTR 344	(4)	Clinical Nutrition 1
NUTR 497	(1.5)	Professional Seminar: Nutrition
NUTR 512	(3)	Herbs, Foods and Phytochemicals

# **Complementary Courses (30 credits)**

Complementary courses are selected as follows:

* Not all courses may be offered every year		

NUTR 497	(1.5)	Professional Seminar: Nutrition
NUTR 512	(3)	Herbs, Foods and Phytochemicals

### **Honours Courses**

Students choose either Plan A or Plan B.

### **Honours Plan A**

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

FAES 401	(6)	Honours Research Project 1	
FAES 402	(6)	Honours Research Project 2	

### **Honours Plan B**

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topi81sTj/F0 .343 Tm(5Fes, st be coa343 Tmrelatho hase tire studgricent's major)Tj1 0514.62306

### 2.6.4.5 Bachelor of Science (Food Science) - B.Sc.(F.Sc.) Related Programs

### 2.6.4.5.1 Certificate in Food Science

Detailed information on this certificate program can be found under section 2.6.7.2: Certificate (Cert.) Food Science (30 credits) in this publication.

# 2.6.5 Bachelor of Science (Nutritional Sciences) – B.Sc.(Nutr.Sc.)

Please refer to section 2.5.6: Bachelor of Science in Nutritional Sciences – B.Sc.(Nutr.Sc.) (Overview) for advising and other information regarding the Dietetics and Nutrition majors.

### 2.6.5.1 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Dietetics (115 credits)

The B.Sc.(Nutr

NUTR 409*	(9)	Professional Practice Stage 3B
NUTR 438	(3)	Interviewing and Counselling
NUTR 450	(3)	Research Methods: Human Nutrition
NUTR 505	(3)	Public Health Nutrition
NUTR 508*	(7)	Professional Practice Stage 4A
NUTR 509*	(7)	Professional Practice Stage 4B
NUTR 511	(3)	Nutrition and Behaviour
NUTR 545	(4)	Clinical Nutrition 2
NUTR 546	(4)	Clinical Nutrition 3

# **Elective Courses (3 credits)**

Students who need to ids/0 Tce Col 0 9767.52 552.261vion 3ER 545

FDSC 251	(3)	Food Chemistry 1
FDSC 300	(3)	Principles of Food Analysis 1
FDSC 305	(3)	Food Chemistry 2
FDSC 525	(3)	Food Quality Assurance
LSCI 204	(3)	Genetics
LSCI 211	(3)	Biochemistry 1
LSCI 230	(3)	Introductory Microbiology
NUTR 207	(3)	Nutrition and Health
NUTR 214	(4)	Food Fundamentals
NUTR 307	(3)	Metabolism and Human Nutrition
NUTR 322	(3)	Applied Sciences Communication
NUTR 337	(3)	Nutrition Through Life
NUTR 344	(4)	Clinical Nutrition 1
NUTR 401	(1)	Emerging Issues in Nutrition
NUTR 450	(3)	Research Methods: Human Nutrition
NUTR 512	(3)	Herbs, Foods and Phytochemicals

# **Complementary Courses (12 credits)**

12 credits of complementary courses are selected as follows:

# **Common Complementary Courses**

6 credits from the following courses:

ANSC 433	(3)	Animal Nutrition and Metabolism
ANSC 560	(3)	Biology of Lactation
FDSC 537	(3)	Nutraceutical Chemistry
FDSC 545	(3)	Advances in Food Microbiology
NUTR 501	(3)	Nutrition in Developing Countries
NUTR 503	(3)	Nutrition and Exercise
NUTR 505	(3)	Public Health Nutrition
NUTR 507	(3)	Advanced Nutritional Biochemistry
NUTR 511	(3)	Nutrition and Behaviour
NUTR 537	(3)	Advanced Human Metabolism
NUTR 545	(4)	Clinical Nutrition 2
NUTR 546	(4)	Clinical Nutrition 3
NUTR 551	(3)	Analysis of Nutrition Data
PARA 438	(3)	Immunology

# 6 credits from the following courses:

AGRI 510	(3)	Professional Practice
ANSC 350	(3)	Food-Borne Pathogens
FDSC 315	(3)	Separation Techniques in Food Analysis 1
FDSC 319	(3)	Food Commodities
FDSC 330	(3)	Food Processing

FDSC 334	(3)	Analysis of Food Toxins and Toxicants
FDSC 405	(3)	Food Product Development
FDSC 442	(3)	Food Microbiology
FDSC 516	(3)	Flavour Chemistry
FDSC 520	(3)	Biophysical Chemistry of Food
FDSC 537	(3)	Nutraceutical Chemistry
FDSC 540	(3)	Sensory Evaluation of Foods
NUTR 430	(3)	Directed Studies: Dietetics and Nutrition 1

# **Elective Courses (15 credits)**

15 credits of electives are taken to meet the minimum credit requirement for the degree. Reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval students can take electives at any Canadian or international univ

**Complementary Cour** 

dietitian/nutritionist. Graduates are qualified for careers in heath research, pharmaceutical and/or food industries, government laboratories, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in research, medicine, and dentistry or as specialists in nutrition.

 $Refer\ to\ "Faculty\ Information\ and\ Regulations" > "Minimum\ Credit\ Requirements",\ in\ this\ eCalendar\ for\ prerequisites\ and\ minimum\ credit\ requirements.$ 

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

### **Required Courses (60 credits)**

All required courses must be passed with a minimum grade of C.

AEMA 310	(3)	Statistical Methods 1
ANSC 234	(3)	Biochemistry 2
ANSC 323	(3)	Mammalian Physiology
ANSC 424	(3)	Metabolic Endocrinology

# At least 9 credits from the following courses:

ANAT 214	(3)	Systemic Human Anatomy
ANAT 261	(4)	Introduction to Dynamic Histology
ANSC 312	(3)	Animal Health and Disease
ANSC 560	(3)	Biology of Lactation
MICR 341	(3)	Mechanisms of Pathogenicity
MIMM 414	(3)	Advanced Immunology
NUTR 430	(3)	Directed Studies: Dietetics and Nutrition 1
NUTR 551	(3)	Analysis of Nutrition Data
PARA 424	(3)	Fundamental Parasitology
PATH 300	(3)	Human Disease
PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHAR 303	(3)	Principles of Toxicology
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology

NUTR 307	(3)	Metabolism and Human Nutrition
NUTR 322	(3)	Applied Sciences Communication
NUTR 337	(3)	Nutrition Through Life
NUTR 344	(4)	Clinical Nutrition 1
NUTR 401	(1)	Emerging Issues in Nutrition
NUTR 450	(3)	Research Methods: Human Nutrition
		Adv

PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHAR 303	(3)	Principles of Toxicology
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology

### **Elective Courses (15 credits)**

15 credits of electives are taken to meet the minimum credit requirement for the degree. A reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval students can take electives at any Canadian or international university.

### 2.6.5.6 Bachelor of Science (Nutritional Sciences) (B.Sc.(Nutr.Sc.)) - Major Nutrition - Nutritional Biochemistry (90 credits)

This Major offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organismal level. This concentration in nutritional biochemistry links nutrigenomics, nutrigenetics, and biotechnology with human health, regulation of metabolism, and the pathophysiology of inherited and chronic disease. This degree does not lead to professional licensure as a dietitian/nutritionist. Graduates are qualified for careers in the biotechnology field, pharmaceutical and/or food industries, government laboratories, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in research, medicine, and dentistry or as specialists in nutrition.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements," in this eCalendar for prerequi.301x9mm Credit Leitian/nut6an/9s de

# **Common Complementary Courses**

At least 6 credits from the following:

ANSC 433	(3)	Animal Nutrition and Metabolism
ANSC 551	(3)	Carbohydrate and Lipid Metabolism
		Protein Metabolism and Nutrition

NUTR 511	(3)	Nutrition and Behaviour
NUTR 537	(3)	Advanced Human Metabolism
NUTR 545	(4)	Clinical Nutrition 2
NUTR 546	(4)	Clinical Nutrition 3
NUTR 551	(3)	Analysis of Nutrition Data
PARA 438	(3)	Immunology
6 credits from:		
ANAT 214	(3)	Systemic Human Anatomy
EDKP 261	(3)	Motor Development
EDKP 330	(3)	Physical Activity and Public Health
EDKP 445	(3)	Exercise Metabolism
EDKP 446	(3)	Physical Activity and Ageing
EDKP 448	(3)	Exercise and Health Psychology
EDKP 449	(3)	Neuromuscular and Inflammatory Pathophysiology
EDKP 485	(3)	Cardiopulmonary Exercise Pathophysiology
EDKP 495	(3)	Scientific Principles of Training
EDKP 542	(3)	Environmental Exercise Physiology
NUTR 430	(3)	Directed Studies: Dietetics and Nutrition 1
NUTR 551	(3)	Analysis of Nutrition Data

#### **Elective Courses (15 credits)**

15 credits of electives are taken to meet the minimum credit requirement for the degree. Reciprocal agreement allows all students to take a limited number of electives at any Quebec university. With prior approval, students can take electives at any Canadian or international university.

#### 2.6.5.8 Bachelor of Science (Nutritional Sciences) - Related Programs

#### 2.6.5.8.1 Minor in Human Nutrition

Detailed information on this Minor can be found under section 2.6.6.10: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Human Nutrition (24 credits) in this publication.

# 2.6.5.8.2 Concurrent Bachelor of Science in Food Science – B.Sc.(F.Sc.) and Bachelor of Science in Nutritional Sciences – B.Sc.(Nutr.Sc.) – Food Science/Nutritional Science Major

Detailed information on this concurrent program can be found under section 2.6.4.4.1: Concurrent Bachelor of Science in Food Science (B.Sc.(F.Sc.)) and Bachelor of Science Nutritional Sciences (B.Sc.(Nutr.Sc.)) - Food Science/Nutritional Science Major (Concurrent) (122 credits) in this publication.

#### 2.6.6 Minor Programs

The Faculty of Agricultural and Environmental Sciences offers a number of minor programs; the following are offered by the FAES Dean's Office, or in partnership with another school or faculty.

For a full list of minors offered by the Faculty of Agricultural and Environmental Sciences, refer to section 2.5.9: Minor Programs (Overview). For registration information, see section 2.4.6.8.1: Procedures for Minor Programs.

### 2.6.6.1 Minor in Environment (Bieler School of Environment)

For information about the Minor in Environment, consult *Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.7.1: Minor in Environment.* 

# 2.6.6.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Agribusiness Entrepreneurship (18 credits)

This Minor is a collaboration by the Faculty of Agricultural and Environmental Sciences and the Desautels Faculty of Management. It provides students with an understanding of how to conceptualize, develop, and manage successful ventures in the agricultural, ag-tech, bioresource engineering, environmental,

and food sectors - including for-profit private companies and social enterprises - and ho

#### 2.6.6.5 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Minor Animal Biology (24 credits)

The Minor Animal Biology is intended for students who wish to further their studies in the basic biology of large mammals and birds. Successful completion of the program should provide students with a sound background in the field of biomedical studies and the use of animal models. It should also qualify students to apply to most veterinary colleges in North America, to study in a variety of postgraduate biology programs, and to work in many laboratory settings.

This Minor is not open to students in B.Sc.(Ag.Env.Sc.) programs. These students may register for the specialization in Animal Biology.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

#### Required Courses (15 credits)

ANSC 312	(3)	Animal Health and Disease
ANSC 323	(3)	Mammalian Physiology
ANSC 324	(3)	Developmental Biology and Reproduction
ANSC 420	(3)	Animal Biotechnology
PARA 438	(3)	Immunology

#### **Complementary Courses (9 credits)**

9 credits selected from:

ANSC 234	(3)	Biochemistry 2
ANSC 251	(3)	Comparative Anatomy
ANSC 326	(3)	Fundamentals of Population Genetics
ANSC 400	(3)	Eukaryotic Cells and Viruses
ANSC 424	(3)	Metabolic Endocrinology
ANSC 433	(3)	Animal Nutrition and Metabolism
ANSC 555	(3)	The Use and Welfare of Animals
ANSC 560	(3)	Biology of Lactation
ANSC 565	(3)	Applied Information Systems
LSCI 451	(3)	Research Project 1

### 2.6.6.6 Bachelor of Engineering (Bioresource) (B.Eng.(Bioresource)) - Minor Animal Health and Disease (24 credits)

The Minor in Animal Health and Disease is offered to students wishing to understand general animal physiology and function, the susceptibility of animals to various diseases, methods for limiting and controlling potential outbreaks, and the resulting implications for the animal, the consumer, and the environment. It is an ideal choice for students who are interested in the care of animals, or in working in laboratories where diseases are being researched. It would also be useful to students who wish to apply to most veterinary colleges in North America.

 $This\ Minor\ is\ not\ open\ to\ students\ in\ B.Sc. (Ag. Env.Sc.)\ programs.\ These\ students\ may\ register\ for\ the\ specialization\ in\ Animal\ Health\ and\ Disease.$ 

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

### **Required Courses (18 credits)**

ANSC 312	(3)	Animal Health and Disease
ANSC 323	(3)	Mammalian Physiology
ANSC 350	(3)	Food-Borne Pathogens
ANSC 424	(3)	Metabolic Endocrinology
MICR 341	(3)	Mechanisms of Pathogenicity
PARA 438	(3) (3)1 08	Immunology

### **Complementary Courses (6 credits)**

# 6 credits selected from the following list:

ANSC 234	(3)	Biochemistry 2
ANSC 251	(3)	Comparative Anatomy
ANSC 303	(2)	Farm Livestock Internship
ANSC 324	(3)	Developmental Biology and Reproduction
ANSC 433	(3)	Animal Nutrition and Metabolism

### 2.6.6.8 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor Ecological Agriculture (24 credits)

The Minor Ecological Agriculture is designed to focus on the principles underlying the practice of ecological agriculture and is suitable for students wishing to farm and do extension and government work, and those intending to pursue postgraduate studies in this field.

This Minor can be associated with existing major programs in the Faculty, but in some instances it may require more than 90 credits to meet the requirements of both the Major and the Minor.

Students are advised, during the U1 year, to consult their Major program adviser and the Academic Adviser of the Minor. At the time of registration for the U2 year, students must declare their intent to obtain the Minor. With the agreement of their Major program adviser they must submit their program of courses already taken, and to be taken, to the Academic Adviser of the Minor. The Academic Adviser of the Minor will then certify which courses the student will apply toward the Minor and confirm that the student's program conforms with its requirements.

For information on academic advising, see: www.mcgill.ca/macdonald/studentinfo/advising

### **General Regulations**

To obtain a Minor in Ecological Agriculture, students must:

a) Ensure that their academic record at the University includes a C grade or higher in the courses as specified in the course requirements giv

# Courses Available in the Faculty of Agricultural and Environmental Sciences (Partial Listing)

BREE 416 Engineering for Land Development

BREE 518 Ecological Engineering
MICR 331 Microbial Ecology

For academic advising, please consult mcgill.ca/macdonald/studentinfo/advising.

Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env

NUTR 501	(3)	Nutrition in Developing Countries
NUTR 503	(3)	Nutrition and Exercise
NUTR 505	(3)	Public Health Nutrition
NUTR 512	(3)	Herbs, Foods and Phytochemicals
NUTR 551	(3)	Analysis of Nutrition Data
PARA 438	(3)	Immunology
PATH 300	(3)	Human Disease

# 2.6.6.11 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) - Minor International Agriculture (24 credits)

Students enter this minor to acquire a global and applied understanding of agriculture as a fundamental tool to help rural development, alleviate poverty and reach food security, especially in the developing world. This program provides students with a combination of coursework at McGill together with a hands-on experience in a developing country, meeting locals and attending courses with McGill professors and/or local instructors. The costs of these field experiences may vary. The field experience (semester, short course or internship) includes developing projects in local communities, observing subsistence agriculture in situ and participating in various activities which contribute to sensitizing the students to the challenges that developing countries face. Students study water resources, sustainable development, nutrition, planning and development, and a host of other fascinating topics, allowing them to sharpen their skills for future career opportunities.

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

# Required Courses (6 credits)

AGEC 442	(3)	Economics of International Agricultural Development
AGRI 411	(3)	Global Issues on Development, Food and Agriculture

# **Complementary Courses (18 credits)**

Students select 18 credits from either Option A or Option B

# Option A

18 credits from the following:

AGEC 333	(3)	Resource Economics
AGEC 430	(3)	Agriculture, Food and Resource Policy
AGRI 215	(3)	Agro-Ecosystems Field Course
AGRI 325	(3)	Sustainable Agriculture and Food Security
AGRI 499	(3)	Agricultural Development Internship
BREE 510	(3)	Watershed Systems Management
ENVB 437	(3)	Assessing Environmental Impact
FDSC 525	(3)	Food Quality Assurance
NUTR 501	(3)	Nutrition in Developing Countries
PARA 410	(3)	Environment and Infection
PARA 515	(3)	Water, Health and Sanitation
PLNT 300	(3)	Cropping Systems

# Option B

15 credits from any of the McGill Field Study Semesters:

African Field Study Semester

Barbados Field Study Semester

Barbados Interdisciplinary Tropical Studies Field Semester

Panama Field Study Semester

# 2.6.7 Post-Baccalaureate Certificate Programs

The Faculty offers the following 30-credit post-baccalaureate certificate programs.

# 2.6.7.1 Certificate (Cert.) Ecological Agriculture (30 credits)

This 30-credit certificate program is  $\boldsymbol{v}$ 



2.7.3.3 Diploma of College Studies — Farm Management Technology

FMT4 014	(2)	Marketing Strategies (152-VSP-MC)
FMT4 015	(1.33)	Forest Management (152-VSQ-MC)
FMTP 005	(1.33)	Animal Anatomy and Physiology
FMTP 008	(2.33)	Introduction to Animal Science (152-008-MC)
FMTP 075	(2)	Langue française et communication (602-101-03)
FMTP 082	(2.33)	Literary Genres (603-102-04)
FMTP 085	(2.33)	Humanities 1: Knowledge (345-103-04)

### Winter 2

Two courses selected from the Elective Production course list below.

FMT4 016	(2)	Budgeting and Administration (152-VSR-MC)
FMT4 017	(1.33)	Agricultural Systems (152-VST-MC)
FMTP 083	(2.33)	Literary Themes (603-103-04)
FMTP 091	(1)	Physical Activity and Effectiveness (109-102-MQ)
FMTP 098	(2)	Français agricole (602-VSG-MC)

### Summer 2

FMT4 018 (2.33)	Enterprise Management 1 (152-VSU-MC)
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### Fall 3

FMT4 019	(2)	Nutrient Management Plan (152-VSV-MC)
FMT4 020	(2)	Conservation of Soil and Water (152-VSW-MC)
FMT4 021	(2.67)	Enterprise Management 2 (152-VSX-MC)
FMT4 022	(1.67)	Equipment Management (152-VSY-MC)
FMTP 078	(2)	FMT English (603-VSB-MC)
FMTP 086	(2)	Humanities 2: World Views (345-102-03)
FMTP 097	(2)	Landscape Design (504-VSG-MC)

### Winter 3

winter 3		
FMT4 023	(1.33)	Building Management (152-VSZ-MC)
FMT4 024	(1.67)	Farm Building Development (152-VTA-MC)
FMT4 025	(2.33)	Enterprise Management 3 (152-VTB-MC)
FMT4 026	(1.67)	Human Resources (152-VTC-MC)
FMT4 027	(1.33)	Precision Agriculture (152-VTD-MC)
FMTP 087	(2)	Humanities 3:Env.& Org. Issues (345-VSH-MC)
FMTP 092	(1)	Physical Activity and Autonomy (109-103-MQ)

### **Elective Production Courses**

We offer four production courses in the area of Animal Science and four production courses in the area of Plant Science. Students must take a minimum of two courses in each category for a total of four courses. Students could elect to take more than four courses if they wish, after a discussion with their academic adviser. They must take a minimum of two courses per semester.

# **Animal Science Category**

FMT4 028	(2.67)	Dairy Replacement Management (152-VTE-MC)
FMT4 029	(2.67)	Dairy Performance Management (152-VTF-MC)
FMT4 030	(2.67)	Swine and Poultry Management (152-VTG-MC)
		Beef and Sheep Management (152-VTH-MC)

- Secondary IV: Mathematics
- Secondary V: Language of Instruction
- Secondary V: Second Language
- 3. The minimum entrance requirements for students from Ontario are the Ontario Secondary School Diploma (OSSD), as well as:
  - grade 10 French as a second language
  - science: SNC2P (recommended with TCJ20 or TDJ20 or TMJ20) or SNC2D (desired with TCJ20 or TDJ20 or TMJ20)
  - mathematics: MFM2P or MPM2D

For other Canadian students, the minimum French requirement is grade 10 second language. Please contact the department for more information.

For **international students**, a recognized French proficiency test may be required. An English proficiency test may also be required. For details on proof of English proficiency, visit *mcgill.ca/applying/requirements/prep*.

- 4. All candidates for admission must make arrangements to come to the Macdonald Campus for an interview prior to admission to the program.
- **5.** Admission to this program is only in the Fall semester.
- **6.** W

### 2.7.3.6 Fees and Expenses - FMT

### 2.7.3.6.1 Fees

Tuition fees are calculated separately from student fees. For eligible Quebec residents in the Farm Management and Technology Program there is no amount charged for tuition, thanks to support from the *Ministère de l'Agriculture*, des Pêcheries et de l'Alimentation du Québec. Out-of-province and international status FMT students registered for full-time studies pay a tuition fee in addition to student fees. Students considered to be studying part-time (less than 8 credits/semester) will be charged half that amount. For information about fees specific to your residency status, consult the Undergraduate fees tables on the *Student Accounts Website*. Student fees are charged to all students, regardless of residency.

\* All fees are subject to change without notice.

### 2.7.3.6.2 Textbooks and Supplies

The cost of textbooks and supplies is estimated at \$250.00 per semester.

### 2.7.3.6.3 Financial Assistance

In-Course Financial Aid (including loans and bursaries) is available to full-time students on the basis of demonstrated financial need; however, it is recommended that all applicants apply for the maximum government student assistance program for which they are eligible. Students may apply for In-Course Financial Aid through the *Financial Aid & Awards Menu* on Minerva and will then be asked to make an appointment with a Financial Aid Counsellor at Student Services. For more information, consult *University Regulations and Resources > Undergraduate > section 1.8: Scholarships and Student Aid* or contact Student Services, Macdonald Campus, at 514-398-7992.

### 2.7.3.7 Residence Accommodation - FMT

Laird Hall is a co-educational residence with a capacity of 250 students. It accommodates students in double and single rooms. Each floor includes shared washrooms, a fully-equipped kitchen, a television lounge, and a laundry room. For more information, refer to *University Regulations and Resources* > *Undergraduate* > *Residential Facilities* > *section 1.14.2: University Residences* – *Macdonald Campus*; *mcgill.ca/ students/housing/macdonald* or email *residences.macdonald@mcgill.ca.* 

### 2.7.4 Department of Food Science and Agricultural Chemistry

### 2.7.4.1 Location

Macdonald-Stewart Building, Room MS1-034 McGill University, Macdonald Campus 21,111 Lakeshore Road Sainte-Anne-de-Bellevue QC H9X 3V9 Canada

Telephone: 514-398-7773 Fax: 514-398-7990

Email: info.macdonald@mcgill.ca Website: mcgill.ca/foodscience

## 2.7.4.2 About the Department of Food Science

**Food Science** is a multidisciplinary field involving chemistry, biochemistry, nutrition, microbiology, and processing that gives students the scientific knowledge to solve real problems associated with the many facets of the food system. Food Science is still a relatively new and growing discipline, brought about mainly as a response to the social changes taking place in North America and other parts of the developed w

- The **Nutrition** Major offers five concentrations:
  - Food Function and Safety
  - Global Nutrition
  - · Health and Disease
  - Nutritional Biochemistry
  - Sports Nutrition

# M.Sc.A., M.Sc., and Ph.D.

Graduate de

### **Associate Members**

Anaesthesia: Franco Carli, Thomas Schricker

Institute for the Study of International Development (ISID): Nii Addy

Medicine and Health Sciences: Larry Lands, José Morais

Nursing: Rosetta Antonacci
Parasitology: Marilyn E. Scott

### Adjunct Professors

Kevin A. Cockell (Health Canada); Isabelle Germain (Agriculture and Agri-Food Canada); Elizabeth D. Mansfield; Hope Weiler (on leave)

### **Affiliate Members**

Kathryn Arcudi (CIUSSS du Centre-Ouest-de-l'Île-de-Montreal)

Marie-Ève Besner (Montreal Children's Hospital)

Sarah Bluden (LMC Diabetes and Endocrinology)

Sophie Brousseau (Ste-Anne's Hospital)

Catherine Delorme (Ste-Anne's Hospital)

Thea Demmers (Concordia)

Linda Falcon (Douglas Mental Health Institute)

Alexander McLean (Lakeshore General Hospital)

Monica Melcone (Ste-Anne's Hospital)

Laura Li Ching Ng (McGill University Health Centre)

Piraveena Piremathasan (CIUSSS du Centre-Ouest-de-l'Île-de-Montreal)

Marilyn Rabin (Douglas Mental Health Institute)

Donna Schafer (CIUSSS Centre-Ouest de l'Ile de Montréal)

Sondra Sherman (Jewish General Hospital)

Patricia Urrico (Jewish General Hospital)

### 2.7.5.5 Application Procedures

Entry into the Dietetics major, the Nutrition major and the Freshman Program of the BSc.(Nutr.Sc.) is only possible in September.

Application deadlines:

- Applicants studying outside of Canada: January 15
- Applicants from Canadian high schools outside of Quebec: February 1
- CEGEP applicants: March 1
- Transfer/Second degree applicants from Canadian universities: May 1
- Mature students: May 1

Applications to the School of Human Nutrition must be submitted online. Online applications and admissions information are available at mcgill.ca/applying.

### 2.7.5.6 Admission Requirements

### **Nutrition:**

- Students applying directly from high school will apply into the BSc.(Nutr.Sc.) Freshman program. Upon successful completion of this program, students will automatically progress into the Nutrition program.
- Students applying with Advanced Levels, Advanced Subsidiary, Cambridge Pre-U Examinations, CAPE, a CEGEP DEC, one year or more of university, or as a Mature student will apply into the Nutrition program.

# **Dietetics:**

Students wishing to enter the Dietetics Major who are applying from a high school either in Canada or abroad must apply into the BSc.(Nutr.Sc.)
 Freshman program and apply to transfer after their first year. Transfer to year 1 of the Dietetics program is based on CGPA. Proof of French proficiency will also be required

 Students with a French Baccalaureate or an International Baccalaureate who want to enter Dietetics must apply into the Nutrition program and apply to transfer after their first year.

Students from the following programs can apply directly into the Dietetics program:

- students with a CEGEP DEC
- · students with a minimum of one year of university studies
- Mature students with all of the math and science prerequisites

### **Proof of English proficiency:**

Some applicants to the School's programs may be asked to prove English Proficiency as part of the application process.

See the Applying to Undergraduate Studies website for information on applying to programs in the School of Human Nutrition.

### Proof of French proficiency:

Applicants will be required to prove proficiency in French.

### 2.7.5.6.1 Quebec CEGEP Students

CEGEP applicants must have obtained, prior to the start of classes, a Diplôme d'études collégiales (DEC).

### Prerequisites:

- Math NYA (00UN or 01Y1) and NYB (00UP or 01Y2)
- Biology NYA (00UK or 01Y5)and Biology II (00XU or 01YJ)
- Chemistry NYA (00UL or 01Y6) and Organic Chemistry (00XV or 01YH)
- Physics NYA (00UR or 01Y7) and NYB (00US or 01YF) and NYC (00UT 01YG)

### Dietetics:

Applicants to this program are advised to have all prerequisite courses completed prior to entry. It may be possible to be admitted missing some of the prerequisites; however, this is a highly competitive program and students with all of the prerequisites will be given priority. \* If you are admitted missing some prerequisites, you will be required to complete them in addition to your BSc.(Nutr.Sc.) program requirements. Please note that this will extend the length of your program by one year as without all prerequisite courses completed you will be unable to register for your first stage. If at all possible, students should try to complete any missing prerequisite courses in the summer before starting at McGill.

\*Students graduating with a DEC in "Sciences, lettres, et arts" (700.A0) are eligible for all programs. They will NOT be disadvantaged during the admission process if they did not complete all prerequisites. They will be required to complete any missing portion of prerequisites at McGill in addition to the B.Sc.(Nutr.Sc.) program requirements. Please note that if they are missing any of the prerequisites, this will extend their program by one year.

### **Nutrition:**

Students may be accepted with a minimum of three prerequisite courses:

• Math NYA (00UK or 01Y5)

and two of the following:

- Biology NYA (00UK or 01Y5)
- Chemistry NYA (00UL or 01Y6)
- Physics NYA (00UR or 01Y7)

If admitted, any missing prerequisites will be added to their McGill program.

More information can be found on the Applying to Undergraduate Studies website.

# 2.7.5.6.2 Transfer Students

Students wishing to transfer from other universities and colleges are considered for admission on the basis of both their university work and previous studies. Transfer credits are only determined once students have been admitted and all final official transcripts have been received.

Basic science requirements are:

- · one semester in each of differential and integral calculus
- two semesters of biology with labs (biology I and cell biology)
- · one semester of general chemistry with lab
- · one semester of organic chemistry with lab
- · two semesters of physics (including mechanics, electricity, and magnetism, and waves and optics), with labs

Please note that math and science courses completed at other institutions that are not directly equivalent to the math and science courses in the B.Sc.(Nutr.Sc.) programs, can be used for admissions purposes, but cannot be used to grant exemptions. If any of the math and science prerequisite courses completed are deemed not equivalent, they will have to be repeated at McGill. Course equivalencies can be viewed on McGill's course equivalency system.

More information can be found on the Applying to Undergraduate Studies website.

### **Dietetics:**

Applicants to the Dietetics program are recommended to have all prerequisite math and science courses completed prior to entry. It may be possible to be admitted missing some of the prerequisites; however, this is a highly competitive program and students with all the prerequisites completed will be given priority. If students are admitted missing prerequisites, they will be required to complete them in addition to their B.Sc.(Nutr.Sc.) program requirements.

If prerequisites need to be added to a student's program, this will extend the length of the program by one year, as all prerequisites must be completed to be eligible to register for the first stage.

### **Nutrition:**

Students may be accepted with a minimum of three prerequsite courses:

· one semester of calculus for science

and two of the following:

- one semester of biology with lab
- · one semester of chemistry with lab
- · one semester of physics with lab

If admitted, the remaining prerequisite courses will be added to their program at McGill.

# 2.7.5.6.3 Transfer Students - Interfaculty

Students wishing to transfer from one faculty to another must complete an interfaculty transfer form. The deadline for submitting a transfer form for admission to the School is **June 1** 

### 2.7.5.7 Academic Information and Regulations

### 2.7.5.7.1 Academic Standing

For general information, see section 2.4.6.5: Academic Standing.

Dietetics students please note:

- Undergraduate registration for all Professional Practice (Stage) courses is restricted to students in the Dietetics Major with a CGPA greater than or equal
  to 3.00. The CGPA requirement is firmly applied.
- Students in the Dietetics Major who have a CGPA below 3.0 for two consecutive years will not be permitted to continue in the program.

### 2.7.6 Department of Natural Resource Sciences

### 2.7.6.1 Location

Macdonald-Stewart Building McGill University, Macdonald Campus 21,111 Lakeshore Road Sainte-Anne-de-Bellevue QC H9X 3V9

Sainte-Anne-de-Bellevue QC H9X 3V9

Canada

Telephone: 514-398-7773 Fax: 514-398-7990

Email: info. macdonald@mcgill.ca

Website: mcgill.ca/nrs

### 2.7.6.2 About the Department of Natural Resource Sciences

As humans depend on a wide variety of ecosystem services, society is becoming increasingly aware of the need for sustainable management of natural resources. We require the natural world to provide us with necessities such as air, water, food, and energy; but we also depend on ecosystems for services such as nutrient cycling, biodiversity, recreation, and the splendour of nature. Sustainable management of natural resources via governance of human activities requires an understanding of all of these elements.

The Department of Natural Resource Sciences is a multidisciplinary group with a wide range of interests, including wildlife and fish biology, agriculture, soil science, microbiology, genomics, meteorology, forest science, landscape ecology, agricultural and resource economics, and environmental policy. We are concerned with the populations and diversity of organisms within ecosystems, the flow of energy and nutrients through ecosystems, and processes that influence human behaviour toward ecosystem services and the en

### **Graduate Program Director**

Sébastien Faucher

### **Program Director - Agricultural Economics**

Paul J. Thomassin

### **Emeritus Professors**

David M. Bird; James W. Fyles; Edmund S. Idziak; Peter H. Schuepp; Robin K. Stewart

### **Professors**

Niladri Basu; Elena Bennett; Peter Brown; Christopher Buddle; Gordon Hickey; Murray Humphries; Paul J. Thomassin; Joann Whalen; Lyle G. Whyte

### **Associate Professors**

Jeffrey Cardille; Benoît Côté; Brian T. Driscoll; Kyle Elliott; Sebastien Faucher; Jessica Head; Nicolas Kosoy

### **Assistant Professors**

Mary Doidge; Aurélie Harou; Jessica Gillung; Cynthia Kallenbach; Melissa McKinney; Denis Roy

### **Associate Members**

Christopher Barrington-Leigh; David M. Green; Jacqueline Bede; Robin Thomas Naylor

### **Adjunct Professors**

Kimberly Fernie; Charles W. Greer; Magali Houde

### **Affiliate Members**

Adrian Unc; Geoffrey Sunahara

# 2.7.7 Institute of Parasitology

### 2.7.7.1 Location

Institute of Parasitology Parasitology Building McGill University, Macdonald Campus 21,111 Lakeshore Road Sainte-Anne-de-Bellevue QC H9X 3V9

Canada
Website: mcgill.ca/parasitology

# 2.7.7.2 About the Institute of Parasitology

The Institute of Parasitology is one of the oldest recognized centres of interdisciplinary research in Canada. We focus on parasitic organisms, the relationship with their host, and the means to limit the impact of parasitic disease on health and well-being.

For more information, please visit the Institute of Parasitology website.

# 2.7.7.3 Parasitology Faculty

# Director

Reza Salavati

### **Associate Professors**

Robiis so Branitis Blias Georges; Petra Rohrbach; Jianguo (Jeff) Xia

### **Assistant Professors**

Igor Cestari; Qian (Vivian) Liu; Thavy Long

### **Associate Members**

Gregory J. Matlashewski; Momar Ndao; Martin Olivier; Mary Stevenson

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Traian Sulea; Karine Thivierge; Fernando Lopes

# 2.7.8 Department of Plant Science

### 2.7.8.1 Location

Raymond Building, Room R2-019 McGill University, Macdonald Campus 21,111 Lakeshore Road

Sainte-Anne de a Bellevue QC H9X 3V9

Canada

Telephone: 514-398-7773 Fax: 514-398-8732

Email: plant.science@mcgill.ca Website: mcgill.ca/plant

# 2.7.8.2 About the Department of Plant Science

Our understanding of biological systems has advanced e

McGill is known throughout the world as one of Canada's premier institutions of learning and as one of the leading research universities in the world. Professors at McGill are leaders in their fields and leaders in education and have been the recipients of numerous awards for both research and teaching. The Faculty of Arts prides itself on being immediately responsive to developments and changes within and outside academia and develops its curricula in response to these new realities.

# 3.2 History of the Faculty of Arts

McGill College, and with it the Faculty of Arts, officially opened on 6 September 1843. The early curriculum, heavily weighted in classical studies, also included lectures in mathematics, logic, French, history, geography, and law. There were very few students: only 15 by 1848.

Sir John William Dawson, who became principal in 1855—an office he would hold until 1893—would institute numerous reforms and lay the cornerstone for the reputation of excellence the Faculty enjoys today. In his inaugural address to the Board of Governors in November 1855, Dawson made it clear it was his intention to provide a curriculum which would range from the classics to modern languages and the professions, and from physics to engineering. Dawson worked quickly. By the late 1850s, instruction was offered in natural history, chemistry, agriculture, mathematics, natural philosophy, classics, history, English literature, logic, and mental and moral philosophy. By 1860, enrolment in the Faculty had climbed to around 50 students.

1884 mark



# 3.4.3 Faculty of Arts Office of Advising and Student Information Services (OASIS)

Arts OASIS provides ongoing advice and guidance on programs, degree requirements, academic standing, interf

# 3.6.4.1.1 Bachelor of Arts (B.A.) - Freshman Program - General (30 credits)

The Bachelor of Arts Freshman Program is designed to ensure that students gain a broad foundation for the three-year degree program. It is comprised of 24-30 credits. In the General option, students develop their own program of study using courses from the social sciences, humanities, languages, and/or math and sciences.

This 30-credit option has a core requirement of 18 credits completed by selecting 6 credits in each of three of the four Arts subject categories: social sciences,

FREN 239 (3) Stylistique comparée

Grammaire normati

- For 500-level statistics courses not listed above, students must consult a program/department adviser to ensure that no significant overlap exists. Where such overlap exists with a course for which the student has already received credit, credit for the 500-level course will not be allowed.
- PSYC 204 may not be taken if a grade of 75% was received in an equivalent course completed at CEGEP.

### 3.6.5.3 Programs Outside the Faculties of Arts or Science – For Arts Students

The following regulations apply to you if you are an Arts student:

- 1. Regardless of the minimum credit requirement towards your B.A. degree, you are allowed a maximum of 12 university level credits for the entirety of the degree in elective and/or complementary courses taken in faculties other than the Faculties of Arts or Science.
- 2. In certain designated programs that include a number of required and complementary courses in other faculties, you are permitted a maximum of 30 university level required, complementary, and elective credits outside the Faculties of Arts or Science for the entirety of the degree. These programs are as follows:

### Minor concentrations:

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• Educational Psych0 0 1 95.866 567.62 Tm(Educationsle)Tj1 0 0 y6as 1.c9 Tm 1 194.025 66n udent of /F3 8.1 Tf1 0 0 1 95.1403 75Tm 1 194.025\*/F1 8.1 Tf1

7. The ansatz of the ansatz of the ansatz of the course will be flagged for no credit after the course change period.

Minor offered by another faculty: If you wish to complete a minor that does NOT appear on the list of minors offered by other faculties available to Faculty of Arts students, you must first request Faculty Permission. Details on the process can be found on *mcgill.ca/oasis/*. Submission of a request for permission does not guarantee approval.

Inter-University Transfer Credit Policy for Courlicsity Tor Courlic

### 3.6.5.9 First-Year Seminar Courses

Registration for First-Year Seminars is limited to students in their first year of study at McGill, i.e., newly admitted students in U0 or U1. These courses are designed to provide a closer interaction with professors and better working relations with peers than are available in large introductory courses. These seminars endeavour to teach the latest scholarly developments and expose participants to advanced research methods. Registration is on a first-come, first-served basis. The maximum number of students in any seminar is 25, although some are limited to even fewer than that.

You may take only one First-Year Seminar. If you register for more than one, you will be obliged to withdraw from all but one of them.

For a complete listing, see section 3.10.1: First-Year Seminars.

The First-Year Seminars offered by the Faculty of Science are also open to Arts students. For a complete listing, see *Faculty of Science > Undergraduate > Faculty Degree Requirements > Course Requirements > section 11.6.5.5: First-Year Seminars: Registration.* 

### 3.6.5.10 Graduate-Level Courses

For enrolment of undergraduate students in 600-level courses, some conditions must be met.

An undergraduate student will be permitted to take 600-level courses subject to the following conditions:

- The student has a minimum CGPA of 3.3;
- The student is in U3 or higher;
- . The professor of the course and the program adviser or the director of the undergraduate program provide written approval supporting the request;
- A maximum of 6 credits of 600-level courses are allowed toward the degree;
- The actual course number appears on the transcript;
- · The course evaluation methods and grading standards are the same for all students, whether graduate or undergraduate; and
- The regulations and practices of the Faculty of Arts are also applied to such a course.

A copy of the application form is available on the Arts OASIS website.

# 3.7 Advising

If you need 96 or fewer credits to complete your de

The Faculties of Arts and of Science jointly offer programs leading to the degree of the Bachelor of Arts and Science (B.A. & Sc.), which is described in *Bachelor of Arts and Science* .

# 3.9.2 The Degrees Offered

The **Bachelor of Arts** (B.A.) degree integrates the Humanities, Social Sciences, Languages and Literatures, and a wide range of Interdisciplinary Studies into a coherent academic program. It is as broad and comprehensive in scope as is human behaviour and communication. Students interested in gaining insight into how society worked and how people expressed themselves in the past, how society works and how people express themselves today, and what we may look for in the future, pursue a B.A. degree.

Students interested in the traditional and the avant-garde are equally at home in the Faculty of Arts. The m

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### **Minor Concentrations**

Education for Arts Students - section 3.10.11.3: Bachelor of Arts (B.A.) - Minor Concentration Education for Arts Students (18 credits)

English - Literature - section 3.10.13.6: Bachelor of Arts (B.A.) - Minor Concentration English - Literature (18 credits)

English - Drama and Theatre – section 3.10.13.7: Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)

English - Cultural Studies - section 3.10.13.8: Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)

**Environment** – see Bieler School of Environment > Undergraduate > Browse Academic Programs > section 4.11.15: Bachelor of Arts (B.A.) - Minor Concentration Environment (18 credits)

European Literature and Culture - section 3.10.24.11: Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture (18 credits)

Finance for Non-Management Students – see Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > Minors for Non-Management Students > section 9.8.7.3: Bachelor of Commerce (B.Com.) - Minor Finance (For Non-Management Students) (18 credits)

Gender, Sexuality, Feminist, & Social Justice Studies – section 3.10.16.4: Bachelor of Arts (B.A.) - Minor Concentration Gender, Sexuality, Feminist, & Social Justice Studies (18 credits)

Geography – section 3.10.17.5: Bachelor of Arts (B.A.) - Minor Concentration Geography (18 credits)

Geography (Urban Studies) - section 3.10.17.6: Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) (18 credits)

German Language – section 3.10.24.12: Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)

German Studies - section 3.10.24.13: Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)

GIS and Remote Sensing - section 3.10.17.7: Bachelor of Arts (B.A.) - Minor Concentration GIS & Remote Sensing (18 credits)

Health Geography – section 3.10.17.8: Bachelor of Arts (B.A.) - Minor Concentration Health Geography (18 credits)

Hispanic Studies - section 3.10.24.17: Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)

**History** – section 3.10.18.4: Bachelor of Arts (B.A.) - Minor Concentration History (18 credits)

History and Philosophy of Science – section 3.10.30.8.3: Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)

Indigenous Studies – section 3.10.20.8: Bachelor of Arts (B.A.) - Minor Concentration Indigenous Studies (18 credits)

International Development Studies - section 3.10.21.5: Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)

Italian Studies - section 3.10.24.21: Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)

Jewish Studies - section 3.10.23.4: Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)

Langue et littérature françaises - Études et pratiques littéraires – section 3.10.8.6: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises - Études et pratiques littéraires (18 crédits)

Langue et littérature françaises - Langue française - section 3.10.8.5: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue & littérature françaises - Langue française (18 crédits)

Langue et littérature françaises - Traduction – section 3.10.8.7: Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises - Traduction (18 crédits)

Latin American & Caribbean Studies – section 3.10.24.30.4: Bachelor of en 0 0 1 254.5r of



# **Minor Concentrations**

**Musical Science and Technology** – see Schulich School of Music > Undergraduate > Browse Academic Units & Programs > Department of Music Research > section 10.8.1.13: Bachelor of Music (B.Mus.) - Minor Musical Science and Technology (18 credits)

### **Major Concentrations**

German Studies - section 3.10.24.14: Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)

Hispanic Studies – section 3.10.24.18: Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)

**History** – section 3.10.18.5: Bachelor of Arts (B.A.) - Major Concentration History (36 credits)

International Development Studies - section 3.10.21.6: Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)

Italian Studies – section 3.10.24.22: Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)

Jewish Studies - section 3.10.23.5: Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)

Langue et littérature françaises - Études et pratiques littéraires – section 3.10.8.9: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)

Langue et littérature françaises - Traduction – section 3.10.8.10: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)

Latin American & Caribbean Studies – section 3.10.24.30.5: Bachelor of Arts (B.A.) - Major Concentration Latin American & Caribbean Studies (36 credits)

Liberal Arts - section 3.10.24.31.3: Bachelor of Arts (B.A.) - Major Concentration Liberal Arts (36 credits)

Linguistics - American 3.10.25.7: Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)

Mathematics – section 3.10.26.8: Bachelor of Arts (B.A.) - Major Concentration Mathematics (36 credits)

Music – section 3.10.29.7: Bachelor of Arts (B.A.) - Major Concentration Music (36 credits)

Philosophy – section 3.10.30.5: Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)

Political Science – section 3.10.31.7: Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)

Psychology - section 3.10.32.6: Bachelor of Arts (B.A.) - Major Concentration Psychology 686 (B.A.) - Manour.

Religious Studies – section 3.10.33.11: Bachelor of Arts (B.A.) - Major Concentration Religious Studies (36 credits)

Russian – section 3.10.24.27: Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)

Sociology – section 3.10.38.6: Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)

Statistics – section 3.10.26.7: Bachelor of Arts (B.A.) - Major Concentration Statistics (36 credits)

World Islamic and Middle East Studies – section 3.10.22.2.9: Bachelor of Arts (B.A.) - Major Concentration World Islamic & Middle East Studies (36 credits)

### 3.9.5 Honours Programs

### **Honours Programs**

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# **Honours Programs**

**Hispanic Studies** – section 3.10.24.19: Bachelor of Arts (B.A.) - Honours Hispanic Studies (60 credits)

**History** – section 3.10.18.6: Bachelor of Arts (B.A.) - Honours History (54 credits)

**International De** 

# Joint Honours Programs

**Geography** – section 3.10.17.13: Bachelor of Arts (B.A.) - Joint Honours Component Geography (37 cr

#### 3.10.1 First-Year Seminars

The Faculty of Arts offers the following First-Year Seminars (FYS). Note that each Seminar in the list below is not necessarily offered each year. Refer to the *Class Schedule* for the specific offerings each term.

Please see section section 3.6.5.9: First-Year Seminar Courses to determine if you qualify to register for an FYS course.

ARTH 199 FYS: Themes in Art History (3 credits)

EAST 199 FYS: East Asian Culture (3 credits)

ENGL 199 FYS: Form and Representation (3 credits)

FREN 198 FYS: Introduction to French and Québec Literature (3 credits)

GERM 197 FYS: Images of Otherness (3 credits)

HISP 199 FYS: Hispanic Literature and Culture (3 credits)

HIST 194 FYS: Jewish Concepts of Others (3 credits)

HIST 195 FYS: Sources of World History (3 credits)

HIST 197 FYS: Race in Latin America (3 credits)

HIST 198 FYS: Nation Building and Nationalism (3 credits)

HIST 199 FYS: History (3 credits)

ISLA 199 FYS: Narrations of the Middle East (3 credits)

ITAL 199 FYS: Italy's Literature in Context (3 credits)

JWST 199 FYS: Images - Jewish Identities (3 credits)

LING 199 First Year Seminar: Language and Mind (3 credits)

LLCU 199 FYS: Literary Animals (3 credits)

PHIL 197 FYS: Right and Wrong (3 credits)

PHIL 198 FYS: Knowledge and Ideas in Early Modern Philosophy (3 credits)

PHIL 199 FYS: Minds, Brain, and Machines (3 credits)

## 3.10.2 Faculty of Arts Internship Program

Most departments in the Faculty of Arts offer undergraduate students the opportunity to earn university credits while gaining experience in areas relevant to their fields of study. Open to U2 and U3 students, nor 1 66minaE E E s (3 credi9.801 Tm(Animy)Tj1 0 0 1 11 0 012 5757 R6 Twn8edits)

For more Field Study information, please contact the coordinator:

Internships & Field Studies Office Faculty of Science Burnside Hall, Room 720

Email: ifso.science@mcgill.ca

Website:mcgill.ca/science/undergraduate/internships-field/field

or

Science Office for Undergraduate Student Advising (SOUSA)
Faculty of Science
Dawson Hall, Room 405

Telephone: 514-398-5442 Website: mcgill.ca/science/student

## 3.10.4 Anthropology

#### 3.10.4.1 Location

Stephen Leacock Building, Room 712 855 Sherbrooke Street West Montreal QC H3A 2T7 Telephone: 514-398-6868

Website: mcgill.ca/anthropology

Administrative and Student Affairs Coordinator: Ms. Joanne Terrasi; 514-398-6868, giovanna.terrasi@mcgill.ca

## 3.10.4.2 About Anthropology

The Honours program and Major Concentration in Anthropology emphasize the similarity and diversity of human behaviour; understanding of social and cultural systems; and the processes of socio-cultural change from human origins to the present day. Within Anthropology, the Department concentrates on the fields of Archaeology and Socio-Cultural Anthropology.

Our programs serve as a useful background for those who are planning a career in teaching and research in social sciences and humanities, or a career in law, medicine, foreign service, community organization, public administration, and journalism. The Multi-track Major and Minor Concentrations provide students with a solid grounding in anthropology as a whole, or in selected topical or sub-disciplinary areas, while allowing students to follow programs in other departments that suit their needs and interests. The Honours program provides a greater focus on Anthropology with substantial breadth and depth. The completion of an Honours program is an asset when applying to graduate or professional schools.

Students should have a GPA of at least 3.50 to register in an Honours or Joint Honours program after their first year. For information regarding CGPAs

## **Graduate Program Director**

Lisa Overholtzer

#### **Professors**

John Galaty; Ronald W. Niezen; Colin H. Scott

#### **Associate Professors**

Diana K. Allan; Nicole Couture; Sandra T. Hyde; Hillary Kaell; Eduardo O. Kohn; Katherine Lemons; Setrag Manoukian; Kristin Norget; Lisa Overholtzer; Celeste Pedri-Spade; James M. Savelle; Lisa Stevenson; Ismael Vaccaro

## **Assistant Professors**

Alyssa Bader; Samuele Collu; Peter Johansen; Leslie Sabiston

## **Associate Members**

Gabriella Coleman; Laurence J. Kirmayer; Todd Meyers; Kathleen RiceSahar Sadjadi; Samuel Veissière

#### **Adjunct Members**

André Costopoulos; Arthur Dyke; Nadia Ferrara; Tobias Rees; Viviane Weitzner

## 3.10.4.6 Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)

The Minor Concentration Anthropology permits students to explore the development and diversity of human beings and human society and culture through

# Core (350 Level)

A minimum of 9 credits of core courses at the 350 level selected from:

ANTH 352	(3)	History of Anthropological Theory
ANTH 355	(3)	Theories of Culture and Society
ANTH 357	(3)	Archaeological Methods
ANTH 358	(3)	The Process of Anthropological Research
ANTH 359	(3)	History of Archaeological Theory

# 400/500 Level

A minimum of 6 credits of Anthropology (ANTH) courses at the 400 or 500 level (maximum of one 3-credit Special Topic course at the 400 level).

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#### **Directors**

Jenny Burman - Director, Graduate Programs in Art History and Communication Studies

TBA – Director, Undergraduate Programs in Art History

Will Straw - Director, Undergraduate Programs in Communication Studies

#### **Emeritus and Retired Professors**

David Crowley; John M. Fossey; Marc Raboy; Gertrude Robinson; George Szanto

#### Professors

Christine Ross; Jonathan Sterne; Will Straw; Angela Vanhaelen

#### **Associate Professors**

Jenny Burman; Darin Barney; Chriscinda Henry; Cecily Hilsdale; Jeehee Hong; Mary Hunter; Matthew Hunter; Carrie Rentschler

#### **Assistant Professors**

Gloria Bell; Bobby Benedicto

#### **Associate Members**

Yuriko Furuhata; Thomas Lamarre; Andrew Piper

#### **Affiliate Member**

Robert Graham

## 3.10.5.5 Bachelor of Arts (B.A.) - Minor Concentration Art History (18 credits)

The Minor Concentration in Art History provides an introduction to the study of diverse artistic traditions from ancient to contemporary times. It is expandable to the Major Concentration Art History.

#### Complementary Courses (18 credits)

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline.

ARTH 302	(3)	Aspects of Canadian Art
ARTH 305	(3)	Methods in Art History
ARTH 315	(3)	Indigenous Art and Culture
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 357	(3)	Early Chinese Art

3-15 complementary courses chosen from among departmental course offerings. At least 9 of these credits must be at the 300 level or above.

Note: Courses in studio practice cannot be counted towards the Minor Concentration.

ARTH 300	(3)	Canadian Art to 1914
ARTH 302	(3)	Aspects of Canadian Art
ARTH 305	(3)	Methods in Art History
ARTH 310	(3)	Postcolonialism
ARTH 314	(3)	The Medieval City
AR	(3)	Indigenous Art and Culture

ARTH 490	(3)	Museum Internship
ARTH 501	(3)	Advanced Topics in Art History and Visual Culture
ARTH 502	(3)	Advanced Topics in Art and Architectural History

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

ARCH 250	(3)	Architectural History 1
ARCH 251	(3)	Architectural History 2
PHIL 336	(3)	Aesthetics
PHIL 436	(3)	Aesthetics 2

## 3.10.5.6 Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)

The Minor Concentration Communication Studies provides undergraduate students with a critical understanding of the role that communications media and communication technologies play in a society. It offers students intellectually challenging and innovative instruction in key traditions of Communications and Media Studies and new theoretical and methodological practices being developed in the field. The courses included in the program focus on issues of the relationship between communication, democracy and urban life, the social life of communication technologies, the historical development and transformation of media and communication forms, institutions, practices and technologies, and the mass media representation and mobilization of social difference.

## Required Course (3 credits)

COMS 210 (3) Introduction to Communication Studies

## **Complementary Courses (15 credits)**

Five courses in Communication Studies selected from:

COMS 200	(3)	History of Communication
COMS 230	(3)	Communication and Democracy
COMS 300	(3)	Media and Modernity in the 20th Century
COMS 301	(3)	Core Concepts in Critical Theory
COMS 310	(3)	Media and Feminist Studies
COMS 320	(3)	Media and Empire
COMS 330	(3)	Media in Cultural Life
COMS 340	(3)	New Media
COMS 350	(3)	Sound Culture
COMS 354	(3)	Media Studies of Crime
COMS 355	(3)	Media Governance
COMS 361	(3)	Selected Topics Communication Studies 1
COMS 362	(3)	Selected Topics Communication Studies 2
COMS 400	(3)	Critical Theory Seminar
COMS 410	(3)	Cultures in Visualization
COMS 411	(3)	Disability, Technology and Communication
COMS 425	(3)	Urban Culture and Everyday Life
COMS 435	(3)	Advanced Issues in Media Governance
COMS 490	(3)	Special Topics in History and Theory of Media
COMS 491	(3)	Special Topics in Communications Studies
COMS 492	(3)	Power, Difference and Justice

COMS 495	(3)	Directed Reading
COMS 497	(3)	Independent Study
COMS 510	(3)	Canadian Broadcasting Policy

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ARTH 336	(3)	Art Now
ARTH 337	(3)	Modern Art and Theory to WWI
ARTH 338	(3)	Modern Art and Theory: WWI - WWII
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 340	(3)	The Gothic Cathedral
ARTH 351	(3)	Vision and Visuality in Art History
ARTH 352	(3)	Feminism in Art and Art History
ARTH 353	(3)	Selected Topics in Art History 1
ARTH 354	(3)	Selected Topics Art History 2
ARTH 356	(3)	Modern and Contemporary Chinese Art
ARTH 357	(3)	Early Chinese Art
ARTH 358	(3)	Later Chinese Art (960-1911)
ARTH 360	(3)	Studies in the Photographic
ARTH 366	(3)	Italian Renaissance Art 1
ARTH 367	(3)	Italian Renaissance Art 2
ARTH 368	(3)	Studies in Northern Renaissance Art 01
ARTH 411	(3)	Canadian Art and Race
ARTH 420	(3)	Selected Topics in Art and Architecture 1
ARTH 421	(3)	Selected Topics in Art and Architecture 2
ARTH 422	(3)	Selected Topics in Art and Architecture 3
ARTH 425	(3)	Arts of Medieval Spain
ARTH 430	(3)	Concepts - Discipline Art History
ARTH 435	(3)	Early Modern Visual Culture
ARTH 440	(3)	The Body and Visual Culture
ARTH 447	(3)	Independent Research Course
ARTH 457	(3)	Brushwork in Chinese Painting
ARTH 466	(3)	Studies in Italian Renaissance Art 01
ARTH 473	(3)	Studies in 17th and Early 18th Century Art 04
ARTH 474	(3)	Studies in Later 18th and 19th Century Art 03
ARTH 479	(3)	Studies: Modern Art and Theoretical Problems 04
ARTH 490	(3)	Museum Internship
ARTH 501	(3)	Advanced Topics in Art History and Visual Culture
ARTH 502	(3)	Advanced Topics in Art and Architectural History

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

ARCH 250	(3)	Architectural History 1
ARCH 251	(3)	Architectural History 2
PHIL 336	(3)	Aesthetics
PHIL 436	(3)	Aesthetics 2

# 3.10.5.8 Bachelor of Arts (B.A.) - Honours Art History (54 credits)

The Honours Art History program pro

PHIL 436 (3) Aesthetics 2

#### 3.10.5.9 Bachelor of Arts (B.A.) - Joint Honours Component Art History (36 credits)

The Joint Honours Component Art History is a flexible program that emphasizes breadth, depth as well as art historical methods and research. It is designed especially for students who anticipate pursuing graduate studies and careers in art history or related disciplines.

Students are encouraged to apply for admission to the Joint Honours program after their first year of study at the University and after completion of no less than 12 credits in Art History. Admission is on a competitive basis. While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, the Department requires in addition a program GPA of 3.50 for admission into the program and the aw

ARTH 326	(3)	Studies in Manuscript and Print Culture
ARTH 334	(3)	Eighteenth Century European Art
ARTH 335	(3)	Art in the Age of Revolution
ARTH 336	(3)	Art Now
ARTH 337	(3)	Modern Art and Theory to WWI
ARTH 338	(3)	Modern Art and Theory: WWI - WWII
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 340	(3)	The Gothic Cathedral
ARTH 351	(3)	Vision and Visuality in Art History
ARTH 352	(3)	Feminism in Art and Art History
ARTH 353	(3)	Selected Topics in Art History 1
ARTH 354	(3)	Selected Topics Art History 2
ARTH 356	(3)	Modern and Contemporary Chinese Art
ARTH 357	(3)	Early Chinese Art
ARTH 358	(3)	Later Chinese Art (960-1911)
ARTH 360	(3)	Studies in the Photographic
ARTH 366	(3)	Italian Renaissance Art 1
ARTH 367	(3)	Italian Renaissance Art 2
ARTH 368	(3)	Studies in Northern Renaissance Art 01
ARTH 411	(3)	Canadian Art and Race
ARTH 420	(3)	Selected Topics in Art and Architecture 1
ARTH 421	(3)	Selected Topics in Art and Architecture 2
ARTH 422	(3)	Selected Topics in Art and Architecture 3
ARTH 425	(3)	Arts of Medieval Spain
ARTH 430	(3)	Concepts - Discipline Art History
ARTH 435	(3)	Early Modern Visual Culture

## 3.10.6 Cognitive Science

Students with an interest in cognition may want to consider the Minor in Cognitive Science. For more information, see *Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.8: Cognitive Science.* 

## 3.10.7 Computer Science

#### 3.10.7.1 Location

#### **Main Office**

McConnell Engineering Building, Room 318 3480 University Street

Montreal QC H3A 0E9 Telephone: 514-398-7071

#### **Undergraduate Student Affairs Office**

McConnell Engineering Building, Room 320

3480 University Street Montreal QC H3A 0E9

Telephone: 514-398-7071, ext. 00739

Email: ugrad-sec@cs.mcgill.ca

Website: cs.mcgill.ca

## 3.10.7.2 About Computer Science

For a list of teaching staff, an outline of the nature of computer science, and the opportunities for study in this discipline, refer to Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.9: Computer Science (COMP). The School also offers a program in the Faculty of Engineering and major concentrations for the Bachelor of Arts and Science.

Students must have completed MATH 133, MATH 140, MATH 141, or equivalents in order to begin taking courses in computer science programs.



Note: At the time of registration in the penultimate year, students must declare their intent to receive the Minor Concentration in Computer Science.

## 3.10.7.3 Bachelor of Arts (B.A.) - Minor Concentration Computer Science (18 credits)

The Minor Concentration Computer Science is designed for students who want to gain a basic understanding of computer science principles and may be taken in conjunction with any program in the Faculty of Arts.

Students are strongly encouraged to talk to an adviser of the School before choosing their complementary courses to ensure they follow an approved course sequence.

MATH 133, MATH 140, and MATH 141 (or their equivalents) should be completed prior to taking courses in this program.

#### Required Courses (9 credits)

\* Students who have sufficient knowledge of programming should not take COMP 202, and instead should replace it with an additional Computer Science complementary course.

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science

#### **Complementary Courses (9 credits)**

9 credits selected from the following list or from Computer Science (COMP) courses at the 300 level or above excluding COMP 364 and COMP 396.

COMP 230	(3)	Logic and Computability
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 280	(3)	History and Philosophy of Computing

MATH 240 (3) Discrete Structures

#### 3.10.7.4 Bachelor of Arts (B.A.) - Supplementary Minor Concentration in Computer Science (18 credits)

The Supplementary Minor Concentration may be taken only by students registered in the Major Concentration Computer Science or the Major Concentration Software Engineering. There may be no overlap in credits taken for this Supplementary Minor Concentration and the Major Concentration Computer Science/Software Engineering. Taken together, these constitute a program very close to the Major Computer Science offered by the Faculty of Science. Students must get their selection of courses approved by an Academic Adviser in the School of Computer Science.

Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements", "About Program Requirements" and "Departmental Programs" for the Multi-track System options.

## **Complementary Courses (18 credits)**

18 credits selected from Computer Science (COMP) courses at the 300 level or above excluding COMP 364 and COMP 396.

Students may also select a maximum of 3 credits of MATH courses from the list below.

MATH 223	(3)	Linear Algebra
MATH 318	(3)	Mathematical Logic
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
MATH 340	(3)	Discrete Mathematics

## 3.10.7.5 Bachelor of Arts (B.A.) - Major Concentration Computer Science (36 credits)

This Major concentration represents an in-depth introduction to computer science and its sub-areas. Students that are interested in further study in Computer Science can combine the Major Concentration Computer Science with the Supplementary Minor in Computer Science to constitute a program very close to the Major Computer Science offered by the Faculty of Science. For further information, please consult the Program Adviser.

Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements," "About Program Requirements," and "Departmental Programs" for the Multi-track System options.

## Required Courses (18 credits)

MATH 133, MATH 140, and MATH 141 (or their equivalents) should be completed prior to taking courses in this program.

Notes for the list below:

\* Students who have sufficient knowledge in programming do not need to take COMP 202 and should replace it with an additional computer science complementary course.

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
MATH 240	(3)	Discrete Structures

# Complementary Courses (18 credits)

18 credits selected as follows:

3 credits from each of the groups A, B, C, and D:

#### Group A:

MATH 222	(3)	Calculus 3
MATH 323	(3)	Probability
MATH 324	(3)	Statistics

Group B:		
MATH 223	(3)	Linear Algebra
MATH 318	(3)	Mathematical Logic
MATH 340	(3)	Discrete Mathematics
Group C:		
COMP 330	(3)	Theory of Computation
COMP 350	(3)	Numerical Computing
COMP 360	(3)	Algorithm Design
Group D:		
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design

An additional 3 credits may be selected from Group A or B.

The remaining complementary credits must be selected from COMP 230 and COMP courses at the 300 level or above (except COMP 364, COMP 396).

#### 3.10.7.6 Bachelor of Arts (B.A.) - Major Concentration Software Engineering (36 credits)

The Major Concentration Software Engineering focuses on the techniques and methodology required to design and develop complex software systems and covers the subject commonly known as "Software Engineering". Arts students that are interested in further study in Computer Science can combine the Major Concentration in Software Engineering with the Supplementary Minor Concentration in Computer Science. For further information, please consult the Program Adviser.

Students with two programs in the same department/unit must have a third program in a different department/unit to be eligible to graduate. Please refer to the Faculty of Arts regulations for "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs" for the Multi-track System options.

MATH 133, MATH 140, and MATH 141 (or their equivalents) must be completed prior to taking courses in this program.

Note: This program does not lead to certification as a Professional Engineer.

#### Required Courses (30 credits)

\* Note: Students who have sufficient knowledge in a programming language do not need to take COMP 202 but can replace it with an additional Computer Science complementary course.

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
COMP 421	(3)	Database Systems
MATH 223	(3)	Linear Algebra
MATH 240	(3)	Discrete Structures

#### **Complementary Courses (6 credits)**

#### At least 6 credits from:

ECSE 326	(3)	Software Requirements Engineering
ECSE 437	(3)	Software Delivery
ECSE 539	(4)	Advanced Software Language Engineering

or any COMP courses at the 300 level or above, excluding COMP 364 and COMP 396.

## Suggested COMP courses are:

COMP 361D1 (3) Software Engineering Project COMP 361D2 (3) Software Engineering Project COMP 529 (4) Software Architecture COMP 533 (3) Model-Driven Software Development	COMP 322	(1)	Introduction to C++
COMP 529 (4) Software Architecture	COMP 361D1	(3)	Software Engineering Project
()	COMP 361D2	(3)	Software Engineering Project
COMP 533 (3) Model-Driven Software Development	COMP 529	(4)	Software Architecture
	COMP 533	(3)	Model-Driven Software Development

## 3.10.7.7 Computer Science Related Programs

# 3.10.7.7.1 Joint Honours in Mathematics and Computer Science

For more information, see *Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.22: Mathematics and Statistics (MATH)*. Admission to the program is based on a strong performance in CEGEP-level mathematics courses. Students must consult an Honours adviser in both departments.

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and a minimum program GPA of 3.00.

## 3.10.8 Le Département des littératures de langue française, de traduction et de création

#### 3.10.8.1 Coordonnées

McCall MacBain Arts, bureau 155

3.10.8.4 Professeurs du Département des littératures de langue française, de traduction et de création

De 3 à 12 crédits choisis parmi les cours ci-dessous :

FRSL 445	(3)	Français fonctionnel, écrit 1
FRSL 446	(3)	Français fonctionnel, écrit 2
FRSL 449	(3)	Le français des médias
FRSL 455	(3)	Grammaire et création

<sup>+</sup> Le cours QCST 336 (« Quebec Studies Summer Seminar ») (6 cr.) peut être suivi en remplacement de 6 crédits de cours FRSL. La substitutio cependant l'autorisation préalable du conseiller ou de la conseillère académique du Centre d'enseignement du français.

De 3 à 15 crédits choisis parmi les cours FREN suivants (ou leurs équivalents) ++ :

CCTR 219 *1	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *2	(3)	Introduction to Translation (English to French)
CCTR 325 *3	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *4	(3)	Semi-Specialized Translation (French to English)
FREN 201	(3)	Le français littéraire (français langue seconde)
FREN 203	(3)	Analyse de textes (français langue seconde)
FREN 231	(3)	Linguistique française
FREN 239 *1	(3)	Stylistique comparée
FREN 244 *2	(3)	Traduction générale
FREN 245	(3)	Grammaire normative
FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 346 *3	(3)	Traduction avancée
FREN 441 *5	(3)	Traduction français-anglais

Pour s'inscrire aux cours FREN 201 ou FREN 203, l'étudiant(e) s'assurera d'avoir réussi le FRSL 431 ou d'avoir réussi ou être j'ours suivants : FRSL 445, FRSL 446, FRSL 449 ou FRSL 455.

udiant(e) peut suivre le FREN 239 ou le CCTR 219.

unt(e) peut suivre le FREN 244 ou le CCTR 225.

peut suivre le FREN 346 ou le CCTR 325.

ut suivre le FREN 441 ou le CCTR 326.

Arts (B.A.) - Concentration mineure Langue et littérature francier le la concentration mineure Langue et littérature françaises (18

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15 crédits répartis de la façon suivante, selon l'orientation choisie (« A : Études littéraires » ou « B : Pratiques littéraires ») :

## ORIENTATION A : « Études littéraires »

12 crédits choisis parmi les cours du bloc « Études » (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800);

3 crédits choisis parmi les cours du bloc « Pratiques ».

## ORIENTATION B : « Pratiques littéraires »

12 crédits choisis parmi les cours d'au moins deux séries différentes du bloc « Pratiques » ;

3 crédits choisis parmi les cours du bloc « Études ».

## I) BLOC: ÉTUDES

Liste de cours

(a) Série « Œuvres et couran
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FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
FREN 472	(3)	Enjeux littéraires et culturels 2
FREN 480	(3)	Littérature québécoise contemporaine
FREN 482	(3)	La littérature du 19e siècle 2
FREN 485	(3)	Littérature française contemporaine
FREN 498	(3)	Questions de littérature 3
FREN 499	(3)	Questions de littérature 4

(b) Série « Langue fran	içaise »	
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
(c) Série « Théorie »		
CCTR 331 *1	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1

Textes, imaginaires, sociétés

FREN 337ories littéraires 1 (3)

CCTR 325 *4	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *5	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *6	(3)	Traduction Littéraire-Français
CCTR 453 *7	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *7	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *7	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *7	(1.5)	Transcreation (English to French)
CCTR 507 *8	(3)	Editing and Revising (French)
CCTR 535 *9	(3)	Introduction to Language Technologies
FREN 239 *2	(3)	Stylistique comparée
FREN 244 *3	(3)	Traduction générale
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *6	(3)	Traduction littéraire 1
	n et recherche 1	Traduction et recherche 1

# **COURS COMPLÉMENTAIRES (12 crédits)**

6 à 9 crédits choisis parmi les cours suivants :

CCTR 219 *3	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 326 *4	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *5	(3)	Traduction Littéraire-Français
CCTR 453 *6	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *6	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *6	(1.5)	Financial Translation: Investments (English to French)
CCTR 459* 6	(1.5)	Transcreation (English to French)
CCTR 507 *7	(3)	Editing and Revising (French)
CCTR 535 *8	(3)	Introduction to Language Technologies
FREN 239 *3	(3)	Stylistique comparée
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *5	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 347 *8	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2
FREN 431 *7	(3)	Traduction et révision
FREN 441 *4	(3)	Traduction français-anglais
FREN 443 *5	(3)	Traduction littéraire 2
FREN 494 *6	(3)	Traduction spécialisée

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

# 3 à 6 crédits choisis parmi les cours suivants :

CCTR 331 *9	(3)	Current Trends in Translation Studies
FREN 201	(3)	Le français littéraire (français langue seconde)
FREN 203	(3)	Analyse de textes (français langue seconde)
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire

<sup>\*1</sup> L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.

<sup>\*2</sup> L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

<sup>\*8</sup> L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.

FREN 394 *9	(3)	Théories de la traduction
FREN 425 *9	(3)	Traduction et culture
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
FREN 492	(3)	Histoire de la traduction

<sup>\*9</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

NOTE: les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

# 3.10.8.8 Baccalauréat ès Arts (B.A.) - Spécialisation enrichie Langue & littérature françaises - Études et pratiques littéraires (72 crédits)

Ce programme, qui prépare aux études supé

de 0 à 12 crédits choisis parmi les cours du bloc « Cours hors département » ;

les crédits restants (de 3 à 18) seront choisis parmi les blocs « Études » ou « Pratiques ».

#### **ORIENTATION B - Création littéraire**

au moins 3 crédits choisis parmi tous les cours de la série « Langue française » ;

au moins 6 crédits choisis parmi les cours de la série « Œuvres et courants » portant sur la littérature d'avant 1800 ;

au moins 6 crédits choisis parmi les cours de la série « Œuvres et courants » portant sur la littérature depuis 1800 ;

de 3 à 6 crédits choisis parmi les cours suivants :

FREN 420 (3) Enjeux de l'écriture littéraire

FREN 422 (3) Le métier d'écrivain-e

au moins 3 crédits choisis parmi tous les cours de la série « Théorie » ;

au moins 12 crédits choisis parmi les cours de la série « Création » ;

au moins 3 crédits choisis parmi les cours des séries « Édition » et « Traduction » ;

0 à 12 crédits choisis parmi les cours du bloc « Cours hors département » ;

les crédits restants (de 0 à 12) seront choisis parmi les blocs « Études » ou « Pratiques ».

#### **ORIENTATION C - Traduction littéraire**

au moins 3 crédits choisis parmi tous les cours de la série « Langue française » ;

au moins 3 crédits choisis parmi les cours de la série « Œuvres et courants » portant sur la littérature d'avant 1800 ;

au moins 3 crédits choisis parmi les cours de la série « Œuvres et courants » portant sur la littérature depuis 1800 ;

de 3 à 6 crédits choisis parmi les cours suivants :

CCTR 331 \*1 (3) Current Trends in Translation Studies

FREN 394 \*1 (3) Théories de la traduction

FREN 425 \*1 (3) Traduction et culture

au moins 3 crédits choisis parmi tous les cours de la série « Théorie » ;

au moins 6 crédits choisis parmi les cours suivants :

CCTR 219 *2	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *3	(3)	Introduction to Translation (English to French)
CCTR 325 *4	(3)	Semi-Specialized Translation (English to French)
FREN 239 *2	(3)	Stylistique comparée
FREN 244 *3	(3)	Traduction générale
FREN 346 *4	(3)	Traduction avancée

<sup>\*2</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

au moins 6 crédits choisis parmi les cours suivants :

CCTR 326 *5	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *6	(3)	Traduction Littéraire-Français
CCTR 507 *7	(3)	Editing and Revising (French)
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *6	(3)	Traduction littéraire 1

<sup>\*1</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.

FREN 341	(3)	Traduction et recherche 1
FREN 349	(3)	Traduction et recherche 2
FREN 431 *7	(3)	Traduction et révision
FREN 441* 5	(3)	Traduction français-anglais
FREN 443 *6	(3)	Traduction littéraire 2

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

au moins 3 crédits choisis parmi les cours des séries « Création » et « Édition » ;

de 0 à 12 crédits choisis parmi les cours du bloc « Cours hors département » ;

les crédits restants (de 3 à 18) seront choisis parmi les cours des blocs « Études » ou « Pratiques » ou encore parmi les autres cours pratiques de traduction de l'ÉÉP.

Liste de cours

## I) BLOC: ÉTUDES

## (a) Série « Œuvres et courants »

FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 253	(3)	Oeuvres culture occidentale
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

FREN 485	(3)	Littérature française contemporaine
FREN 498	(3)	Questions de littérature 3
FREN 499	(3)	Questions de littérature 4
b) Série « Langue fran	çaise »	
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
(c) Série « Théorie »		
CCTR 331 *1	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1
FREN 337	(3)	Textes, imaginaires, sociétés
FREN 375	(3)	Théories littéraires 2
FREN 391	(3)	Savoirs de la littérature 1
FREN 394 *1	(3)	Théories de la traduction
FREN 420	(3)	Enjeux de l'écriture littéraire

(3)

(3)

(3)

Le métier d'écrivain-e

Traduction et culture

Savoirs de la littérature 2

# II) BLOC: PRATIQUES

FREN 422

FREN 496

FREN 425 \*1

## (a) Série « Création »

FREN 240	(3)	Atelier d'écriture poétique
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 340	(3)	Atelier d'écriture narrative
FREN 440	(3)	Atelier d'écriture dramatique
FREN 460	(3)	Atelier d'écriture

# (b) Série « Édition »

FREN 376	(3)	Correction et révision
FREN 377	(3)	Pratiques de l'édition littéraire
FREN 476	(3)	Le livre

# (c) Série « Traduction »

<sup>\*1</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

CCTR 219 *2	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *3	(3)	Introduction to Translation (English to French)
CCTR 325 *4	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *5	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *6	(3)	Traduction Littéraire-Français
CCTR 453 *8	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *8	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *8	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *8	(1.5)	Transcreation (English to French)
		Ed*6

de 3 à 6 crédits choisis parmi les cours suivants :

FREN 420 (3) Enjeux de l'écriture littéraire FREN 422 (3) Le métier d'écrivain-e

au moins 6 crédits choisis parmi les cours de la série « Création » ;

0 à 6 crédits choisis parmi les cours du bloc « Pratiques ».

# I) BLOC : ÉTUDES

Liste de cours

## (a) Série « Œuvres et courants »

FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 253	(3)	Oeuvres culture occidentale
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
FREN 472	(3)	Enjeux littéraires et culturels 2
FREN 480	(3)	Littérature québécoise contemporaine
FREN 482	(3)	La littérature du 19e siècle 2
FREN 485	(3)	Littérature française contemporaine
FREN 498	(3)	Questions de littérature 3
FREN 499	(3)	Questions de littérature 4

# (b) Série « Langue française »

FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
(c) Série « Théorie »		
CCTR 331 *1	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1

Textes, imaginaires, sociétés

Théories littéraires 2

Savoirs de la littérature 1

Théories de la traduction

Le métier d'écrivain-e

Traduction et culture

Savoirs de la littérature 2

Enjeux de l'écriture littéraire

\*1 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

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II) BLOC: PRATIQ

FREN 337

**FREN 375** 

FREN 391

FREN 420

FREN 422

FREN 496

FREN 425 \*1

FREN 394 \*1

CCTR 455 *7	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *7	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *7	(1.5)	Transcreation (English to French)
CCTR 507 *8	(3)	Editing and Revising (French)
CCTR 535 *9	(3)	Introduction to Language Technologies
FREN 239 *2	(3)	Stylistique comparée
FREN 244 *3	(3)	Traduction générale
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *6	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 346 *4	(3)	Traduction avancée
FREN 347 *9	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2
FREN 431 *8	(3)	Traduction et révision
FREN 441 *5	(3)	Traduction français-anglais
FREN 443 *6	(3)	Traduction littéraire 2
FREN 492	(3)	Histoire de la traduction
FREN 494 *7	(3)	Traduction spécialisée

<sup>\*2</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

NOTE: Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu variable.

# 3.10.8.10 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)

Le programme de « Concentration majeure en Langue et littérature françaises (option « Traduction ») » offre une formation générale en traduction de l'anglais vers le français. D'abord pratique, cette formation fournit également des assises théoriques sur le fonctionnement de la langue ou les enjeux de la traduction. Elle favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français, compétences que l'étude de la littérature de langue française viendra renforcer. L'admission au programme nécessite une bonne connaissance du français et de l'anglais lus et écrits, de même que du français parlé ; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 (« Stylistique comparée ») ou son équivalent, le CCTR 310 (« Comparative Stylistics 2 ») à la session d'automne de U1.

## COURS OBLIGATOIRES (12 crédits)

CCTR 225 *1	(3)	Introduction to Translation (English to French)
CCTR 325 *2	(3)	Semi-Specialized Translation (English to French)
FREN 222	(3)	Introduction aux études littéraires
FREN 244 *1	(3)	Traduction générale
FREN 245	(3)	Grammaire normative
FREN 346 *2	(3)	Traduction avancée

<sup>\*1</sup> L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.

<sup>\*8</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

<sup>\*9</sup> L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.

<sup>\*2</sup> L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

# I) BLOC: ÉTUDES

Liste de cours

(	a)	Série	«Œ	uvres	et	courants	>>
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(a) Serie « Œuvies et courair	13 //	
FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 253	(3)	Oeuvres culture occidentale
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
REN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
FREN 472	(3)	Enjeux littéraires et culturels 2
		Littérature québécoise contemporain

CCTR 326 *3	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *5	(3)	Traduction Littéraire-Français
CCTR 507 *4	(3)	Editing and Revising (French)
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *5	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 349	(3)	Traduction et recherche 2
FREN 431 *4	(3)	Traduction et révision
FREN 441 *3	(3)	Traduction français-anglais
FREN 443 *5	(3)	Traduction littéraire 2

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

# De 3 à 6 crédits choisis parmi les cours suivants :

CCTR 331 *6	(3)	Current Trends in Translation Studies
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 394 *6	(3)	Théories de la traduction
FREN 425 *6	(3)	Traduction et culture
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

# I) BLOC : ÉTUDES

Liste de cours

	(a)	Série .	« Œuvres	et courants	
ı	a	Selle.	« Œuvies	et courants	<i>&gt;&gt;</i>

FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 253	(3)	Oeuvres culture occidentale
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
FREN 472	(3)	Enjeux littéraires et culturels 2
FREN 480	(3)	Littérature québécoise contemporaine
FREN 482	(3)	La littérature du 19e siècle 2
FREN 485	(3)	Littérature française contemporaine
FREN 498	(3)	Questions de littérature 3
FREN 499	(3)	Questions de littérature 4
(b) Série « Langue fran	ıçaise »	
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
(c) Série « Théorie »		
CCTR 331 *6	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1
FREN 337	(3)	Textes, imaginaires, sociétés
FREN 375	(3)	Théories littéraires 2
FREN 391	(3)	Savoirs de la littérature 1
FREN 394 *6	(3)	Théories de la traduction
FREN 420	(3)	Enjeux de l'écriture littéraire
FREN 422	(3)	Le métier d'écrivain-e
FREN 425 *6	(3)	Traduction et culture
	. ,	
FREN 496	(3)	Savoirs de la littérature 2

\*6 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

# II) BLOC: PRATIQUES

•		
(a) Série « Création	ı »	
FREN 240	(3)	Atelier d'écriture poétique
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 340	(3)	Atelier d'écriture narrative
FREN 440	(3)	Atelier d'écriture dramatique
FREN 460	(3)	Atelier d'écriture
(b) Série « Édition	»	
FREN 376	(3)	Correction et révision
FREN 377	(3)	Pratiques de l'édition littéraire
FREN 476	(3)	Le livre
(c) Série « Traducti	on »	
CCTR 219 *7	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *1	(3)	Introduction to Translation (English to French)
CCTR 325 *2	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *3	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *5	(3)	Traduction Littéraire-Français
CCTR 453 *8	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *8	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *8	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *8	(1.5)	Transcreation (English to French)
CCTR 507 *4	(3)	Editing and Revising (French)
CCTR 535 *9	(3)	Introduction to Language Technologies
FREN 239 *7	(3)	Stylistique comparée
FREN 244 *1	(3)	Traduction générale
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *5	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 346 *2	(3)	Traduction avancée
FREN 347 *9	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2
FREN 431 *4	(3)	Traduction et révision
FREN 441 *3	(3)	Traduction français-anglais
FREN 443 *5	(3)	Traduction littéraire 2

Histoire de la traduction

Traduction spécialisée

(3)

(3)

FREN 492

FREN 494 \*8

<sup>\*1</sup> L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.

<sup>\*2</sup> L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.

- \*3 L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.
- \*4 L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.
- \*5 L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.
- \*7 L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.
- \*8 L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.
- \*9 L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.

NOTE: Les chiffres 1 et 2 n'indiquent pas des séquences ; ils servent à désigner des cours à contenu variable.

#### 3.10.9 East Asian Studies

#### 3.10.9.1 Location

Department of East Asian Studies 680 Sherbrooke Street West, Room 425 Montreal QC H3A 2M7

Telephone: 514-398-3650 Email: asian.studies@mcgill.ca Website: mcgill.ca/eas

#### 3.10.9.2 About East Asian Studies

Welcome to East Asian Studies! If you want to understand the challenges our world is facing today—from climate change to population flows—you owe it to yourself to learn about the cultures and histories of Asia. At McGill, you can study the languages and cultures of China, Japan, and Korea with renowned faculty whose research extends across regions and disciplines, from Buddhist art to Japanese Anime, from Korean cinema to Chinese sci-fi. We offer general survey courses on Korea, China, and Japan as well as upper level lectures and seminars on questions of media, gender, religion, archaeology, and critical theory.

At East Asian Studies, we believe that the first step towards gaining knowledge of the history, literature, philosophy, or film of any culture begins with a deep learning of languages. We offer small, hands-on, intensive language classes led by excellent teachers who are committed to every student's progress as well as to facilitating a vibrant community of collaborative learning.

# **Assistant Professors**

Kimberly Chung; Xinyu Dong; Gal Gvili; Maria Cecilia Hwang; Lei Kwan (Rongdao) Lai; Marianne Tarcov

EAST 530D1	(3)	Fourth Level Chinese
EAST 530D2	(3)	Fourth Level Chinese
EAST 533	(3)	Classical Chinese 1
EAST 534	(3)	Classical Chinese 2
EAST 535	(3)	Chinese for Business 1
EAST 536	(3)	Chinese for Business 2
EAST 540D1	(3)	Fourth Level Japanese
EAST 540D2	(3)	Fourth Level Japanese
EAST 543	(3)	Classical Japanese 1
EAST 544	(3)	Classical Japanese 2

# East Asian Studies (EAST)

6 credits at the 300 level or above in East Asian Studies (EAST) courses selected from:

EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture
EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 462	(3)	Japan in Asia

EAST 464	(3)	Image, Text, Performance
EAST 467	(3)	Topics: Japanese Cinema
EAST 468	(3)	Science and Technology: Asia
EAST 477	(3)	Media and Environment in Asia
		Topics: K

Topics: K

EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture
EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 462	(3)	Japan in Asia
EAST 464	(3)	Image, Text, Performance
EAST 467	(3)	Topics: Japanese Cinema
EAST 468	(3)	Science and Technology: Asia
EAST 477	(3)	Media and Environment in Asia
EAST 478	(3)	Topics: Korean Film and Media
EAST 491	(3)	Tutorial: East Asian Languages and Literatures 1
EAST 492	(3)	Tutorial: East Asian Languages and Literatures 2
EAST 493	(3)	Special Topics: East Asian Studies 1
EAST 494	(3)	Special Topics: East Asian Studies 2
EAST 501	(3)	Advanced Topics in Japanese Studies 1
EAST 502	(3)	Advanced Topics in Japanese Studies 2
EAST 503	(3)	Advanced Topics in Chinese Studies 1
EAST 504	(3)	Advanced Topics in Chinese Studies 2
EAST 505	(3)	Advanced Topics in Korean Studies

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EAST 515	(3)	Seminar: Beyond Orientalism
EAST 525	(3)	Critical Area Studies in Asia
EAST 527	(3)	Culture and Capital in Asia
EAST 550	(3)	Classical Chinese Poetry Themes and Genres
EAST 551	(3)	Technologies of Self in Early China
EAST 559	(3)	Advanced Topics: Chinese Literature
EAST 562	(3)	Japanese Literary Theory and Practice
EAST 564	(3)	Structures of Modernity: Asia
EAST 569	(3)	Advanced Topics: Japanese Literature
LLCU 279	(3)	Introduction to Film History
Anthropology / ANTL	ı\	

# Anthropology (ANTH)

ANTH 331	(3)	Prehistory of East Asia
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ANTH 500 (3) Chinese Diversity and Diaspora

# **Economics (ECON)**

ECON 335 (3) The Japanese Economy

Economic Development: A WA CriTuctures of Modr52 T 500

#### **Religious Studies (RELG)**

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RELG 253	(3)	Religions of East Asia
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 344	(3)	Mahayana Buddhism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 354	(3)	Chinese Religions
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 442	(3)	Pure Land Buddhism
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 549	(3)	Japanese Buddhism in Historical Context

#### 3.10.9.6 Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language (18 credits)

This program may not be expanded to the Major Concentration East Asian Studies.

The program offers students who have a background in an East Asian language the opportunity to study this language at the advanced level (300 level and above), including the classical language.

# **Complementary Courses (18 credits)**

There are two options.

18 credits in second, third, or fourth level language courses in a single East Asian language, or a combination of an advanced language and other courses in East Asian culture, literature, or society at the 300 level or above, chosen in consultation with the Departmental Program Adviser.

## 3.10.9.7 Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)

# Complementary Courses (36 credits)

### Introduction to East Asian Culture

3-6 credits from the following courses:

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: Fast Asian Culture: Korea

### 0-3 credits from the following:

EAST 215	(3)	Introduction to East Asian Art
EAST 250	(3)	Introduction to Asian Media Studies

#### East Asian Language

6-9 credits of East Asian language courses selected from the list below.

Note: Admission to language courses is subject to placement tests.

EAST 220D1	(4.5)	First Level Korean
EAST 220D2	(4.5)	First Level Korean
EAST 230D1	(4.5)	First Level Chinese

EAST 230D2	(4.5)	First Level Chinese
EAST 240D1	(4.5)	First Level Japanese
EAST 240D2	(4.5)	First Level Japanese
EAST 241	(3)	Japanese Writing Beginners 1
EAST 242	(3)	Japanese Writing Beginners 2
EAST 320D1	(4.5)	Second Level Korean
EAST 320D2	(4.5)	Second Level Korean
EAST 330D1	(4.5)	Second Level Chinese
EAST 330D2	(4.5)	Second Level Chinese
EAST 340D1	(4.5)	Second Level Japanese
EAST 340D2	(4.5)	Second Level Japanese
EAST 341	(3)	Japanese Writing Intermediate 1
EAST 342	(3)	Japanese Writing Intermediate 2
EAST 420	(3)	Third Level Korean 1
EAST 421	(3)	Third Level Korean 2
EAST 430D1	(3)	Third Level Chinese
EAST 430D2	(3)	Third Level Chinese
EAST 440D1	(3)	Third Level Japanese
EAST 440D2	(3)	Third Level Japanese
EAST 530D1	(3)	Fourth Level Chinese
EAST 530D2	(3)	Fourth Level Chinese
EAST 533	(3)	Classical Chinese 1
EAST 534	(3)	Classical Chinese 2

EAST 314	(3)	Current Topics: Korean Studies 2
EAST 328	(3)	Archaeology East Asian Empires
		Gender and Se

EAST 559	(3)	Advanced Topics: Chinese Literature
EAST 562	(3)	Japanese Literary Theory and Practice
EAST 564	(3)	Structures of Modernity: Asia
EAST 569	(3)	Advanced Topics: Japanese Literature
LLCU 279	(3)	Introduction to Film History
Anthropology (ANTH)		
ANTH 331	(3)	Prehistory of East Asia
ANTH 500	(3)	Chinese Diversity and Diaspora
Economics (ECON)		
ECON 335	(3)	The Japanese Economy
ECON 411	(3)	Economic Development: A World Area
Geography (GEOG)		
GEOG 408	(3)	Geography of Development
History (HIST)		
HIST 208	(3)	Introduction to East Asian History
HIST 218	(3)	Modern East Asian History
HIST 308	(3)	Formation of Chinese Tradition
HIST 338	(3)	Twentieth-Century China
HIST 358	(3)	China's Middle Empires
HIST 439	(3)	History of Women in China
HIST 441	(3)	Topics: Culture and Ritual in China
HIST 442	(3)	Asian Diaspora: Chinese Overseas
HIST 443	(3)	Topics: Modern Japan
HIST 445	(3)	Late Imperial China
HIST 508	(3)	The Art of War in China
HIST 568D1	(3)	Topics in Chinese History
HIST 568D2	(3)	Topics in Chinese History
HIST 578D1	(3)	Seminar in Japanese History
HIST 578D2	(3)	Seminar in Japanese History
Management (ORGB)		
ORGB 380	(3)	Cross Cultural Management
Political Science (POLI)		
POLI 349	(3)	Foreign Policy: Asia

# Religious Studies (RELG)

RELG 253	(3)	Religions of East Asia
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 344	(3)	Mahayana Buddhism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 354	(3)	Chinese Religions
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 442	(3)	Pure Land Buddhism
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 464	(3)	Advanced Tibetan 1
		Advanced Tibetan 2

First Level Japanese

EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture
EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 462	(3)	Japan in Asia
EAST 464	(3)	Image, Text, Performance
EAST 467	(3)	Topics: Japanese Cinema
EAST 468	(3)	Science and Technology: Asia
EAST 477	(3)	Media and Environment in Asia
EAST 478	(3)	Topics: Korean Film and Media
EAST 491	(3)	Tutorial: East Asian Languages and Literatures 1
EAST 492	(3)	Tutorial: East Asian Languages and Literatures 2
EAST 493	(3)	Special Topics: East Asian Studies 1
EAST 494	(3)	Special Topics: East Asian Studies 2
EAST 501	(3)	Advanced Topics in Japanese Studies 1
EAST 502	(3)	Advanced Topics in Japanese Studies 2
EAST 503	(3)	Advanced Topics in Chinese Studies 1
EAST 504	(3)	Advanced Topics in Chinese Studies 2
EAST 505	(3)	Advanced Topics in Korean Studies
EAST 515	(3)	Seminar: Beyond Orientalism
EAST 525	(3)	Critical Area Studies in Asia
EAST 527	(3)	Culture and Capital in Asia
EAST 550	(3)	Classical Chinese Poetry Themes and Genres
EAST 551	(3)	Technologies of Self in Early China
EAST 559	(3)	Advanced Topics: Chinese Literature
EAST 562	(3)	Japanese Literary Theory and Practice
EAST 564	(3)	Structures of Modernity: Asia
EAST 569	(3)	Advanced Topics: Japanese Literature

# Anthropology (ANTH)

ANTH 331	(3)	Prehistory of East Asia
ANTH 500	(3)	Chinese Diversity and Diaspora
Economics (ECON)		
ECON 335	(3)	The Japanese Economy
ECON 411	(3)	Economic Development: A World Area
Geography (GEOG)		
GEOG 408	(3)	Geography of Development

RELG 365	(3)	Intermediate Tibetan 2
RELG 442	(3)	Pure Land Buddhism
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 549	(3)	Japanese Buddhism in Historical Context

# 3.10.9.9 Bachelor of Arts (B.A.) - Joint Honours Component East Asian Studies (36 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00. In addition, Joint Honours students must maintain a minimum GPA of 3.30 in program courses.

# Required Course (3 credits)

EAST 495D1	(1.5)	Joint Honours Thesis: East Asian Studies
EAST 495D2	(1.5)	Joint Honours Thesis: East Asian Studies

### **Complementary Courses (33 credits)**

## Introduction to East Asian Culture

_		_
26	credits	from

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: East Asian Culture: Korea

## 0-3 credits selected from:

EAST 215	(3)	Introduction to East Asian Art
EAST 250	(3)	Introduction to Asian Media Studies

# East Asian Language

18 credits in an East Asian language above the introductory level selected from the following courses:

EAST 320D1	(4.5)	Second Level Korean
EAST 320D2	(4.5)	Second Level Korean
EAST 330D1	(4.5)	Second Level Chinese
EAST 330D2	(4.5)	Second Level Chinese
EAST 340D1	(4.5)	Second Level Japanese
EAST 340D2	(4.5)	Second Level Japanese
EAST 341	(3)	Japanese Writing Intermediate 1
EAST 342	(3)	Japanese Writing Intermediate 2
EAST 420	(3)	Third Level Korean 1
EAST 421	(3)	Third Level Korean 2
EAST 430D1	(3)	Third Level Chinese
EAST 430D2	(3)	Third Level Chinese
EAST 440D1	(3)	Third Level Japanese

EAST 440D2	(3)	Third Level Japanese
EAST 530D1	(3)	Fourth Level Chinese
EAST 530D2	(3)	Fourth Level Chinese
EAST 533	(3)	Classical Chinese 1
EAST 534	(3)	Classical Chinese 2
EAST 540D1	(3)	Fourth Level Japanese
EAST 540D2	(3)	Fourth Level Japanese
EAST 544	(3)	Classical Japanese 2

# East Asian Studies (EAST)

9 credits chosen from the following East Asian Studies courses, at least 3 credits must be at the 400-level or above.

EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 358	(3)	Later Chinese Art (960-1911)
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture
EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 462	(3)	Japan in Asia

Image, Te

EAST 467

Topics: Japanese Cinema

(3)

#### 3.10.10.3 Economics Faculty

#### Chair

Francisco Ruge-Murcia

#### **Emeritus Professors**

Antal Deutsch; George Grantham; Christopher Green; Joseph Greenberg; Jagdish Handa; Kari Polanyi Levitt; John C. Rowley; Victoria Zinde-Walsh

#### Professors

Hassan Benchekroun; Robert D. Cairns; Rui Castro; Russell Davidson; Jean-Marie Dufour; Larry Epstein; John W. Galbraith; Sílvia Gonçalves; Fabian Lange; Robin Thomas Naylor; Francisco Ruge-Murcia

#### **Associate Professors**

Francisco Alvarez-Cuadrado; Francesco Amodio; Daniel Barczyk; Saraswata Chaudhuri; Matthieu Chemin; Rohan Dutta; James Engle-Warnick; Franque Grimard; Sonia Laszlo; Markus Poschke; Erin Strumpf; Licun Xue

#### **Assistant Professors**

Nicolas Ajzenman; Leonie Baumann; Nicolas Gendron-Carrier; Fernando Saltiel

#### **Faculty Lecturers**

Paul Dickinson; Mayssun El-Attar Vilalta; Ling Ling Zhang

### 3.10.10.4 Bachelor of Arts (B.A.) - Minor Concentration Economics (18 credits)

The Minor Concentration in Economics provides a moderate level of specialization in Economics for students who usually are pursuing Major Concentrations or Honours Programs in other fields of study. It does, however, provide an option to switch to or add a Major Concentration in Economics. There is a special Minor for Management students.

#### **Program Requirements**

#### **Complementary Courses (18 credits)**

18 credits, of which 6 credits must be from Group A and 12 credits from Group B.

# **Group A**

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 209	(3)	Macroeconomic Analysis and Applications
ECON 230D1	(3)	Microeconomic Theory
ECON 230D2	(3)	Microeconomic Theory

#### Group B

Economics courses with course numbers above ECON 208 (excluding ECON 295), at least 6 of which must be at the 300, 400 or 500 level.

## Program Notes:

Only one of ECON 208 or ECON 230D1/D2 or ECON 250D1/D2 can be credited to the Economics Minor. Only one of ECON 209 or ECON 330D1/D2 or ECON 352D1/D2 can be credited to the Economics Minor. The combination of ECON 230D1/D2 and ECON 209 is allowedconomic

All students who wish to begin (or continue) the Major Concentration Economics should see a majors adviser in the Department of Economics in each of their university years. Further information may be obtained from the Department's website, or from any majors adviser; consult the Departmental office for a list of advisers and their advising times.

Students who are registering for the first time with the Department should attend the orientation meeting in August (check the website for details) before seeing an adviser.

A student choosing the Major Concentration Economics must take 36 credits in Economics. The Economics courses will normally be taken at McGill and will be selected from the courses shown below. Major Concentration in Economics students entering University at the U1 year in September should directly proceed to ECON 230D1/ECON 230D2 without taking ECON 208 and ECON 209.

Note: Students who wish to switch from the Major Concentration to Honours Economics must complete all the requirements of the Honours program.

Mathematics: Mastery of high school mathematics is required for all economics courses.

Prerequisites: In general, 200-level courses have no prerequisites and 300-level and 400-level courses have ECON 230D1/ECON 230D2 or ECON 250D1/ECON 250D2 (or ECON 208 and ECON 209, or MGCR 293 and ECON 295) as prerequisites. In addition, 400-level courses have Calculus 1 (or its equivalent) or a course in mathematical techniques for economic analysis (or its equivalent) as a prerequisite.

### **Required Courses (18 credits)**

All students must take 6 credits of approved statistics courses. Students should refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/.

ECON 227D1	(3)	Economic Statistics
ECON 227D2	(3)	<b>Economic Statistics</b>
ECON 230D1	(3)	Microeconomic Theory
ECON 230D2	(3)	Microeconomic Theory
ECON 330D1	(3)	Macroeconomic Theory
ECON 330D2	(3)	Macroeconomic Theory

#### **Complementary Courses (18 credits)**

18 credits in Economics selected from other 200- (with numbers abdviser

#### Required Courses (27 credits)

Please refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.

ECON 250D1	(3)	Introduction to Economic Theory: Honours
ECON 250D2	(3)	Introduction to Economic Theory: Honours
ECON 257D1	(3)	Economic Statistics - Honours
ECON 257D2	(3)	Economic Statistics - Honours
ECON 352D1	(3)	Macroeconomics - Honours
ECON 352D2	(3)	Macroeconomics - Honours
ECON 450	(3)	Advanced Economic Theory 1 - Honours
ECON 452	(3)	Advanced Economic Theory 2 - Honours
ECON 468	(3)	Econometrics 1 - Honours

#### **Complementary Course (3 credits)**

3 credits from:

ECON 460	(3)	History of Thought 1 - Honours
ECON 461	(3)	History of Thought 2 - Honours
ECON 469	(3)	Econometrics 2 - Honours

### 3.10.10.8 Bachelor of Arts (B.A.) - Joint Honours Component Economics / Joint Honours Component Accounting (60 credits)

The B.A. Joint Honours in Economics and Accounting is offered jointly by the Economics Department and the Desautels Faculty of Management. Students in this program should see an Economics adviser and a Management adviser. For the economics part, they should consult: <a href="http://www.mcgill.ca/economics/undergraduates/honours">http://www.mcgill.ca/economics/undergraduates/honours</a>. For the current list of advisers in Economics and their advising times, see the website of the

Department of Economics. For the Management component of this Joint Honours program, students should see the Honours program adviser in the Desautels Faculty of Management.

 $All\ Joint\ Honours\ students\ should\ consult\ the\ Economics\ Honours\ and\ Joint\ Honours\ programs\ at\ http://www.mcgill.ca/economics/undergraduates/honours.$ 

The B.A. Joint Honours in Economics and Accounting requires the completion of 30 specified credits of Honours economics courses and 30 specified credits for Accounting.

Continuation from one year to the next in the Economics part of this Joint Honours program requires a minimum grade of B- in ECON 250, and a minimum B- average in the required and complementary Honours Economics courses. Note that graduation with Honours has more stringent requirements than these (see below).

For graduation with Honours in the Economics component, a student must obtain a 3.00 GPA in the required courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00. For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the

### **Economics - Required Courses (27 credits)**

For the regulations governing courses in statistics, please refer to the Department's document "Rules on Stats Courses for Economics Students" available on the following website: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.

ECON 250D1	(3)	Introduction to Economic Theory: Honours
ECON 250D2	(3)	Introduction to Economic Theory: Honours
ECON 257D1	(3)	Economic Statistics - Honours
ECON 257D2	(3)	Economic Statistics - Honours
ECON 352D1	(3)	Macroeconomics - Honours
ECON 352D2	(3)	Macroeconomics - Honours
ECON 450	(3)	Advanced Economic Theory 1 - Honours
ECON 452	(3)	Advanced Economic Theory 2 - Honours
ECON 468	(3)	Econometrics 1 - Honours

#### Notes:

- $1.\ Three\ of\ the\ 6\ credits\ for\ ECON\ 250\ are\ counted\ in\ the\ Management\ Core,\ where\ it\ replaces\ MGCR\ 293.$
- 2. Three of the 6 credits for ECON 257 are counted in the Core, where it replaces MGCR 271.
- 3. Three of the 6 credits for ECON 352 are counted in the Core, where it replaces ECON 295.

## **Economics - Complementary Courses (3 credits)**

3 credits selected from the following Economics courses:

ECON 460	(3)	History of Thought 1 - Honours
ECON 461	(3)	History of Thought 2 - Honours
ECON 469	(3)	Econometrics 2 - Honours

# **Accounting - Required Courses (18 credits)**

ACCT 351	(3)	Intermediate Financial Accounting 1
ACCT 352	(3)	Intermediate Financial Accounting 2
ACCT 361	(3)	Management Accounting
ACCT 455	(3)	Development of Accounting Thought
MGCR 211	(3)	Introduction to Financial Accounting
MGCR 341	(3)	Introduction to Finance

### **Accounting - Complementary Courses (12 credits)**

12 credits of Accounting courses selected from:

ACCT 354	(3)	Financial Statement Analysis
ACCT 362	(3)	Cost Accounting
ACCT 385	(3)	Principles of Taxation
ACCT 452	(3)	Financial Reporting Valuation
ACCT 453	(3)	Advanced Financial Accounting
ACCT 463	(3)	Management Control
ACCT 475	(3)	Principles of Auditing
ACCT 486	(3)	Business Taxation 2

### 3.10.10.9 Bachelor of Arts (B.A.) - Joint Honours Component Economics / Joint Honours Component Finance (60 credits)

The B.A. Joint Honours in Economics and Finance is offered jointly by the Economics Department and the Desautels Faculty of Management. Students in this program should see an Economics adviser and a Management adviser. For the economics part, they should consult: <a href="http://www.mcgill.ca/economics/undergraduates/honours">http://www.mcgill.ca/economics/undergraduates/honours</a>. For the current list of advisers in Economics and their advising times, see the website of the Department of Economics. For the Management component of this Joint Honours program, students should see the Honours program adviser in the Desautels Faculty of Management.

All Joint Honours students should consult the Economics Honours and Joint Honours programs at http://www.mcgill.ca/economics/undergraduates/honours.

The B.A. Joint Honours in Economics and Finance requires the completion of 30 specified credits of Honours Economics courses listed in the Economics

MGCR 211 (3) Introduction to Financial Accounting

MGCR 341 (3) Introduction to Finance

Notes:

1.

#### 3.10.11 Education for Arts Students

#### 3.10.11.1 Location

Internships & Student Affairs Office Faculty of Education 3700 McTavish Street Montreal QC H3A 1Y2 Telephone: 514-398-7042

Email: isa.education@mcgill.ca
Website: mcgill.ca/isa/student/minor

#### 3.10.11.2 About Education for Arts Students

This **Minor Concentration** allows Arts students to develop and explore an interest in education. It gives students a solid footing in the basics of pedagogy and may provide a starting point towards a B.Ed., B.A.(Education), or MATL degree. Students who wish to apply for the minor must first review important information and procedures at *mcgill.ca/isa/student/minor*.

Completion of the Minor concentration does not qualify a student for certification to teach in the province of Quebec. Students interested in a teaching career should consult Faculty of Education > Undergraduate > section 5.5: Overview of Faculty Programs for undergraduate program information, and Faculty of Education > Graduate > Browse Academic Units & Programs > : Integrated Studies in Education for graduate program information.

## 3.10.11.3 Bachelor of Arts (B.A.) - Minor Concentration Education for Arts Students (18 credits)

This Minor concentration allows Arts students to develop and explore an interest in education. It will give students a solid footing in the basics of pedagogy and may provide a starting point towards a B.Ed. degree.

Completion of this Minor concentration DOES NOT qualify a student to enter the teaching profession. Students interested in a teaching career should consult the Faculty of Education section of the eCalendar for information about Bachelor of Education programs that lead to teacher certification. See Faculty of Education programs offered by the Department of Integrated Studies in Education.

Students should consult the Faculty of Arts section on "Faculty Degree Requirements", and "Course Requirements" for information on "Courses Outside the Faculties of Arts and of Science" and other topics such as course restrictions, credit counting, etc.

This minor program requires an application due to limited enrolment space. Please see http://www.mcgill.ca/isa/faculty-advising/minor-programs for procedures and deadlines.

## Required Course (6 credits)

EDEC 260	(3)	Philosophical Foundations
EDPE 300	(3)	Educational Psychology

#### **Complementary Courses (12 credits)**

#### Group A

6 credits selected as follows:

3 credits, one of

EDEC 222

EDEC 233	(3)	Indigenous Education
EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice
3 credits, one of:		

(3)

(3)

# Group B

**EDEC 247** 

**EDEM 220** 

Contemporary Issues in Education

Policy Issues in Quebec and Indigenous Education

6 credits to be chosen from the following list:

\* Note: Either EDES 335 or EDES 353 may be taken but not both.

EDEC 262	(3)	Media, Technology and Education
EDES 335*	(3)	Teaching Secondary Science 1
EDES 353*	(3)	Teaching Secondary Mathematics 1
EDPE 304	(3)	Measurement and Evaluation
EDPI 341	(3)	Instruction in Inclusive Schools

### 3.10.12 Educational Psychology

#### 3.10.12.1 Location

Department of Educational and Counselling Psychology

Faculty of Education 3700 McTavish Street Montreal QC H3A 1Y2 Telephone: 514-398-4242

 ${\bf Email:}~ ecpin fo. education @mcgill.ca$ 

Website: mcgill.ca/edu-ecp

#### **Program Director**

Professor Alenoush Saroyan Department of Educational and Counselling Psychology Faculty of Education

3700 McTavish Street, Room 614 Telephone: 514-398-4248

# Program Coordinators

Department of Educational and Counselling Psychology

Faculty of Education

3700 McTavish Street, Room 614 Telephone: 514-398-4248

Email: ecpundergrad.education@mcgill.ca

# 3.10.12.2 About Educational Psychology

Educational Psychology encompasses:

- a. the theoretical and applied study of learning, cognition, and instruction in a variety of educational settings across ages and domains;
- b. instructional technology and computers as cognitive tools in learning;
- c. cognitive and social processes in learning;
- d. evaluation and enhancement of learning and teaching;
- e. methods of fostering inclusive education;
- f. relationships of phenomena related to teaching, learning, and assessment in human development; and
- $\boldsymbol{g}_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$  the impact of family and community on children's learning and development.

For further information, please refer to Faculty of Education > Undergraduate > Browse Academic Units & Programs > section 5.8.1: Educational and Counselling Psychology.

#### 3.10.12.3 Bachelor of Arts (B.A.) - Minor Concentration Educational Psychology (18 credits)

Completion of this Minor concentration DOES NOT qualify a student to enter the teaching profession. Students interested in a teaching career should consult the Faculty of Education section of this eCalendar for information about Bachelor of Education programs that lead to teacher certification. See Faculty of Education programs offered by the Department of Integrated Studies in Education.

Respecting Faculty of Arts Multi-track System regulations, students registering for the Major Concentration Psychology and the Minor Concentration Educational Psychology must complete an additional minor concentration in Arts in a unit other than Psychology.

Students should consult the Faculty of Arts sections on "Faculty Degree Requirements," "Program Requirements," and "Departmental Programs" for information on the "Multi-track System" and "Course Requirements" for information on "Courses Outside the Faculties of Arts and of Science" and other topics such as course restrictions, credit counting, etc.

#### Required Course (3 credits)

This required course has a prerequisite of an introductory course in psychology taken at either CEGEP or university level (e.g., PSYC 100 or EDPE 300). Students who do not have this prerequisite prior to entry into the program may take either PSYC 100 or EDPE 300. EDPE 300 may count as one of the complementary courses for the Minor concentration.

EDPE 335 (3) Instructional Psychology

### Complementary Courses (15 credits)

15 credits to be selected as follows:

3 credits to be taken near the end of program completion, one of:

Note: Students with a background in psychology should normally select EDPE 355. EDPE 355 has a prerequisite, either PSYC 231 or permission of the instructor.

EDPE 355	(3)	Cognition and Education
EDPE 555	(3)	Socio-Cultural Foundations of Learning Sciences

12 credits selected from the following list:

<sup>\*</sup> Note: Students may not receive credit for both EDPE 208 and PSYC 304. EDPE 208 is not open to students registered in a major or minor concentration in Psychology.

EDPE 208*	(3)	Personality and Social Development
EDPE 304	(3)	Measurement and Evaluation
EDPE 355	(3)	Cognition and Education
EDPE 377	(3)	Adolescence and Education
EDPE 515	(3)	Gender Identity Development
EDPE 535	(3)	Instructional Design
EDPE 555	(3)	Socio-Cultural Foundations of Learning Sciences
EDPI 341	(3)	Instruction in Inclusive Schools
EDPI 526	(3)	Supporting Students' Strengths and Talents
EDPI 527	(3)	Creativity and its Cultivation
EDPI 543	(3)	Family, School and Community

# 3.10.13 English

# 3.10.13.1 Location

McCall MacBain Arts Building, Room 155 853 Sherbrooke Street West Montreal QC H3A 0G5

Telephone: 514-398-5196 Website: mcgill.ca/english

#### 3.10.13.2 About English

The Department of English offers a wide variety of courses covering three linked and overlapping areas: literature written in English; drama, including courses in dramatic literature and courses that introduce the student to the basic elements of theatrical pe5e b rg 1 Tfc elemes that 52 559.3i2esingEDPI71.9rts Buif courses that introduce the student to the basic elements of theatrical pe5e b rg 1 Tfc elemes that 52 559.3i2esingEDPI71.9rts Buif courses that introduce the student to the basic elements of theatrical pe5e b rg 1 Tfc elemes that 52 559.3i2esingEDPI71.9rts Buif courses that introduce the student to the basic elements of theatrical pe5e b rg 1 Tfc elemes that 52 559.3i2esingEDPI71.9rts Buif courses that introduce the student to the basic elements of theatrical pe5e b rg 1 Tfc elemes that 52 559.3i2esingEDPI71.9rts Buif courses that introduce the student to the basic elements of theatrical pe5e b rg 1 Tfc elemes that 52 559.3i2esingEDPI71.9rts Buif courses that the student to the basic elements of the student to the student to the basic elements of the student to the stu



**Note:** Students intending to apply for Honours, or who have already been accepted, should consult an Honours adviser regarding their course selections throughout their program.

3.10.13.3 Department Handbook on the Web

ENGL 417	(3)	A Major English Poet
ENGL 418	(3)	A Major Modernist Writer

# Pre-1800

3 credits from a list of pre-1800 literature courses:

ENGL 300	(3)	The Seventeenth Century
ENGL 301	(3)	Earlier 18th Century Novel
ENGL 302	(3)	Restoration and 18th C. English Literature 1
ENGL 303	(3)	Restoration and 18th C. English Literature 2
ENGL 304	(3)	Later Eighteenth Century Novel
ENGL 305	(3)	Renaissance English Literature 1
ENGL 307	(3)	Renaissance English Literature 2
ENGL 308	(3)	English Renaissance Drama 1
ENGL 309	(3)	English Renaissance Drama 2
ENGL 315	(3)	Shakespeare
ENGL 316	(3)	Milton
ENGL 342	(3)	Introduction to Old English
ENGL 347	(3)	Great Writings of Europe 1
ENGL 348	(3)	Great Writings of Europe 2
ENGL 349	(3)	English Literature and Folklore 1
		Middle English

ENGL 369	(3)	Creative Writing: Playwriting
ENGL 385	(3)	Topics in Literature and Film
ENGL 394	(3)	Popular Literary Forms
ENGL 421	(3)	African Literature
ENGL 424	(3)	Irish Literature
ENGL 437	(3)	Studies in Literary Form
ENGL 438	(3)	Studies in Literary Form
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 447	(3)	Crosscurrents/English Literature and European Literature 1 $$
ENGL 460	(3)	Studies in Literary Theory
ENGL 461	(3)	Studies in Literary Theory 2
ENGL 464	(3)	Creative Writing: Poetry

# 3.10.13.7 Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)

The Minor Concentration English - Drama and Theatre may be expanded to the Major Concentration English - Drama and Theatre.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

### Required Courses (3 credits)

ENGL 230	(3)	Introduction to Theatre Studies
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# **Complementary Courses (15 credits)**

15 credits selected as described below.

### **Theatre History Courses**

3 credits from a list of courses in Theatre History:

ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 309	(3)	English Renaissance Drama 2
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 371	(3)	Theatre History: 19th to 21st Centuries
ENGL 467	(3)	Advanced Studies in Theatre History
ENGL 485	(3)	Special Topics in Theatre History 1700-1900
ENGL 486	(3)	Special Topics in Theatre History After 1900

## **Drama and Theatre Courses Before 1900**

3 credits from a list of courses in Drama and Theatre before 1900:

ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 308	(3)	English Renaissance Drama 1
ENGL 309	(3)	English Renaissance Drama 2
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 315	(3)	Shakespeare

ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 416	(3)	Studies in Shakespeare
ENGL 485	(3)	Special Topics in Theatre History 1700-1900

### Drama and Theatre Courses at the 400 level

3 credits from a list of Drama and Theatre courses:

E	NGL 407	(3)	The 20th Century
E	NGL 413	(3)	Special Topics in Canadian Drama and Theatre
E	NGL 430	(3)	Studies in Drama
E	NGL 431	(3)	Studies in Drama
E	NGL 458	(3)	Theories of Text and Performance 1
E	NGL 459	(3)	Theories of Text and Performance 2
E	NGL 467	(3)	Advanced Studies in Theatre History
E	NGL 485	(3)	Special Topics in Theatre History 1700-1900
E	NGL 486	(3)	Special Topics in Theatre History After 1900

# Drama and Theatre Option's Offerings - Additional Courses

6 additional credits from the option's offerings.

This category includes all the courses listed above except required courses, as well as the courses listed below.

Note: Any English course not on the lists specifically for the Drama and Theatre option—such as unlisted courses in Cultural Studies—may not count toward the Drama and Theatre program. Please consult a departmental adviser for guidance on course choices.

ENGL 314	(3)	20th Century Drama
ENGL 369	(3)	Creative Writing: Playwriting
ENGL 375	(3)	Interpretation Dramatic Text
ENGL 434	(3)	Independent Theatre Project

#### Drama and Theatre - Courses of Interest - Other Departments

Permission to count extra-departmental credits must be obtained in advance of taking any course from outside the Department of English. Students are normally permitted to count 3 credits from other departments towards their Drama and Theatre Minor. Permission is obtained with the signature of a Department of English program adviser on the student's program audit sheet.

This list comprises courses in other departments that might be accepted by an adviser for credit tow

ENGL 388	(3)	Studies in Popular Culture
ENGL 389	(3)	Studies in Popular Culture
ENGL 390	(3)	Political and Cultural Theory
ENGL 391	(3)	Special Topics: Cultural Studies 1
ENGL 395	(3)	Cultural and Theatre Studies
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 476	(3)	Alternative Approaches to Media 1
ENGL 482	(3)	International Cinema 2

### 3.10.13.9 Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)

The Literature option provides a grounding in the basic texts and methods of the discipline as well as wide acquaintance with substantial areas of the field.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

### Required Courses (9 credits)

These courses should be taken in the first two terms of the program.

ENGL 202	(3)	Departmental Survey of English Literature 1
ENGL 203	(3)	Departmental Survey of English Literature 2
ENGL 311	(3)	Poetics

### **Complementary Courses (27 credits)**

27 credits selected as described below.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

### Canadian Literature

3 credits from a list of Canadian Literature courses:

ENGL 228	(3)	Canadian Literature 1
ENGL 229	(3)	Canadian Literature 2
ENGL 327	(3)	Canadian Prose Fiction 1
ENGL 328	(3)	Development of Canadian Poetry 1
ENGL 333	(3)	Development of Canadian Poetry 2
ENGL 339	(3)	Canadian Prose Fiction 2
ENGL 409	(3)	Studies in a Canadian Author
ENGL 410	(3)	Theme or Movement Canadian Literature
ENGL 411	(3)	Studies in Canadian Fiction

### **Theory or Criticism**

3 credits from a list of courses on Theory or Criticism:

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text

ENGL 352 (3) Theories of Difference

### Areas of English Literature

6 credits, 3 credits each from two of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance:

### **Backgrounds of English Literature**

ENGL 347	(3)	Great Writings of Europe 1
ENGL 348	(3)	Great Writings of Europe 2
ENGL 349	(3)	English Literature and Folklore 1

### **Old English**

ENGL 342	(3)	Introduction to Old English
ENGL 349	(3)	English Literature and Folklore 1
ENGL 452	(3)	Studies in Old English

#### Medieval

ENGL 337	(3)	Theme or Genre in Medieval Literature	
ENGL 349	(3)	English Literature and Folklore 1	
ENGL 356	(3)	Middle English	
ENGL 357	(3)	Chaucer - Canterbury Tales	
ENGL 358	(3)	Chaucer - Troilus and Criseyde	
ENGL 456	(3)	Middle English	

#### Renaissance

ENGL 300	(3)	The Seventeenth Century
ENGL 305	(3)	Renaissance English Literature 1
ENGL 307	(3)	Renaissance English Literature 2
ENGL 308	(3)	English Renaissance Drama 1
ENGL 309	(3)	English Renaissance Drama 2
ENGL 315	(3)	Shakespeare
ENGL 316	(3)	Milton
ENGL 349	(3)	English Literature and Folklore 1
ENGL 400	(3)	Earlier English Renaissance
ENGL 401	(3)	Studies in the 17th Century
ENGL 416	(3)	Studies in Shakespeare

## Areas of English Literature

6 credits, 3 credits each from two of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American:

#### Restoration

ENGL 302	(3)	Restoration and 18th C. English Literature 1
ENGL 303	(3)	Restoration and 18th C. English Literature 2

18 Century		
ENGL 301	(3)	Earlier 18th Century Novel
ENGL 302	(3)	Restoration and 18th C. English Literature 1
ENGL 303	(3)	Restoration and 18th C. English Literature 2
ENGL 304	(3)	Later Eighteenth Century Novel
ENGL 403	(3)	Studies in the 18th Century
Romantic		
ENGL 331	(3)	Literature Romantic Period 1
ENGL 332	(3)	Literature Romantic Period 2
ENGL 405	(3)	Studies in 19th Century Literature 2
Victorian		
ENGL 329	(3)	English Novel: 19th Century 1
ENGL 330	(3)	English Novel: 19th Century 2
ENGL 334	(3)	Victorian Poetry
ENGL 404	(3)	Studies in 19th Century Literature 1
ENGL 405	(3)	Studies in 19th Century Literature 2
19th Century American		
ENGL 326	(3)	19th Century American Prose
ENGL 422	(3)	Studies in 19th Century American Literature

# Areas of English Literature

3 credits from one of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary:

## Early 20th Centur

### Contemporary

ENGL 320	(3)	Postcolonial Literature
ENGL 333	(3)	Development of Canadian Poetry 2
ENGL 336	(3)	The 20th Century Novel 2
ENGL 339	(3)	Canadian Prose Fiction 2
ENGL 362	(3)	Poetry of the 20th Century 2
ENGL 407	(3)	The 20th Century
ENGL 408	(3)	The 20th Century
ENGL 419	(3)	Studies in 20th Century Literature
ENGL 443	(3)	Contemporary Women's Fiction

### **Additional Literature**

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories above and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count toward the Major Concentration in English - Literature.

ENGL 199	(3)	FYS: Form and Representation
ENGL 204	(3)	English Literature and the Bible
ENGL 237	(3)	Introduction to Study of a Literary Form
ENGL 297	(3)	Special Topics of Literary Study
ENGL 338	(3)	Short Story
ENGL 343	(3)	Literature and Science 1
ENGL 345	(3)	Literature and Society
ENGL 354	(3)	Sexuality and Representation
ENGL 364	(3)	Creative Writing: Fiction 2
ENGL 369	(3)	Creative Writing: Playwriting
ENGL 385	(3)	Topics in Literature and Film
ENGL 394	(3)	Popular Literary Forms
ENGL 421	(3)	African Literature
ENGL 424	(3)	Irish Literature
ENGL 437	(3)	Studies in Literary Form
ENGL 438	(3)	Studies in Literary Form
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 447	(3)	Crosscurrents/English Literature and European Literature 1
ENGL 460	(3)	Studies in Literary Theory
ENGL 461	(3)	Studies in Literary Theory 2
ENGL 464	(3)	Creative Writing: Poetry

#### **Major Author**

3 credits on a Major Author must be included in the 27 complementary course credits.

ENGL 315	(3)	Shakespeare
ENGL 316	(3)	Milton
ENGL 357	(3)	Chaucer - Canterbury Tales
ENGL 409	(3)	Studies in a Canadian Author

ENGL 416	(3)	Studies in Shakespeare
ENGL 417	(3)	A Major English Poet
ENGL 418	(3)	A Major Modernist Writer

### 3.10.13.10 Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre (36 credits)

The Drama and Theatre option tries to place its subject in as broad a social and philosophical context as possible. The Drama and Theatre program is not designed to provide professional theatre training. The aim is rather to encourage students to explore the subject as a liberal arts discipline.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

### **Required Courses (6 credits)**

6 credits to be taken in the first two terms of the program

ENGL 230	(3)	Introduction to Theatre Studies
ENGL 355	(3)	The \$55\tiles to f R2rf8rman29.941 Tm1 165.864 399.083 Tm((3))T3((3))Tj1 0 0 1 vM6i2from the follo

### **Complementary Courses (30 credits)**

30 credits selected as described below.

3 credits from the following practice-based courses:

ENGL 269	(3)	Introduction to Performance
ENGL 365	(3)	Costuming for the Theatre 1
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 377	(3)	Costuming for the Theatre 2

### **Performance-Oriented Courses**

3 credits from the list of Performance-Oriented Courses:

ENGL 365	(3)	Costuming for the Theatre 1
ENGL 367	(3)	Acting 2
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 376ENGL 230	(3)	Scene Study

## **Theory or Criticism Courses**

3 credits from the list of Theory or Criticism courses:

(3)

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text
ENGL 352	(3)	Theories of Difference

### **Theatre History Courses**

3 credits from the list of Theatre History courses:

ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 371	(3)	Theatre History: 19th to 21st Centuries
ENGL 467	(3)	Advanced Studies in Theatre History
ENGL 486	(3)	Special Topics in Theatre History After 1900

### Drama and Theatre Before 1900 Courses

3 credits from the list of courses in Drama and Theatre before 1900:

ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 308	(3)	English Renaissance Drama 1
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 315	(3)	Shakespeare
ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 416	(3)	Studies in Shakespeare

### Drama and Theatre Option's Offerings - Additional Courses

12 additional credits from the option's offerings.

This category includes all the courses listed above except required courses, as well as the courses listed below.

Note: Any English course not on the lists specifically for the Drama and ferin20ntury Dramaferinferin315

ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 441	(3)	Special Topics in Canadian Cultural Studies

### **Theory or Criticism**

3 credits from a list of courses on Theory or Criticism:

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text
ENGL 352	(3)	Theories of Difference

### 400-Level Theory

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component.

#### **Historical Dimension**

6 credits from a list of courses in Cultural Studies with an historical dimension:

ENGL 350	(3)	Studies in the History of Film 1
ENGL 351	(3)	Studies in the History of Film 2
ENGL 363	(3)	Studies in the History of Film 3
ENGL 374	(3)	Film Movement or Period
ENGL 451	(3)	A Period in Cinema
ENGL 480	(3)	Studies in History of Film 1

### **Additional Cultural Studies**

9 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Major Concentration English - Cultural Studies.

ENGL 280	(3)	Introduction to Film as Mass Medium
ENGL 354	(3)	Sexuality and Representation
ENGL 366	(3)	Film Genre
ENGL 378	(3)	Media and Culture
ENGL 379	(3)	Film Theory
ENGL 380	(3)	Non-Fiction Media: Cinema, Television, Radio
ENGL 382	(3)	International Cinema 1
ENGL 383	(3)	Studies in Communications 1
ENGL 385	(3)	Topics in Literature and Film
ENGL 386	(3)	Fans, Celebrities, Audiences
ENGL 388	(3)	Studies in Popular Culture
ENGL 389	(3)	Studies in Popular Culture
ENGL 390	(3)	Political and Cultural Theory
ENGL 391	(3)	Special Topics: Cultural Studies 1
ENGL 395	(3)	Cultural and Theatre Studies
ENGL 476	(3)	Alternative Approaches to Media 1

### **Other Departments**

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser who is approached by a student with strong academic grounds for including a third such course may grant permission (to a maximum of 9 extra-departmental credits) and must so indicate in advance by signing the departmental program audit sheet.

## 3.10.13.12 Bachelor of Arts (B.A.) - Honours English - Literature (54 credits)

Entry to Honours is by application, normally after two terms in a Departmental program, including at least 18 credits of English. The Faculty of Arts requires that all students admitted to Honours programs complete a second program minor in addition to their Honours program.

Admission to the Honours program is limited to a small number of students with excellent records. The minimum CGP

# Areas of English Literature

6 credits, 3 credits each from two of the following areas: Backgrounds of English Literature, Old English, Mediev

ENGL 303	(3)	Restoration and 18th C. English Literature 2
ENGL 310	(3)	Restoration and 18th Century Drama
18th Century		
ENGL 301	(3)	Earlier 18th Century Novel
ENGL 302	(3)	Restoration and 18th C. English Literature 1
ENGL 303	(3)	Restoration and 18th C. English Literature 2
ENGL 304	(3)	Later Eighteenth Century Novel
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 403	(3)	Studies in the 18th Century
ENGL 503	(3)	18th Century
Romantic		
ENGL 331	(3)	Literature Romantic Period 1
ENGL 332	(3)	Literature Romantic Period 2
Victorian		
ENGL 329	(3)	English Novel: 19th Century 1
ENGL 330	(3)	English Novel: 19th Century 2
ENGL 334	(3)	Victorian Poetry
ENGL 404	(3)	Studies in 19th Century Literature 1
ENGL 405	(3)	Studies in 19th Century Literature 2
ENGL 423	(3)	Studies in 19th Century Literature
ENGL 504	(3)	19th Century
19th Century American		
ENGL 326	(3)	19th Century American Prose
ENGL 422	(3)	Studies in 19th Century American Literature

# Areas of English Literature

6 credits, 3 credits each from two of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary.

## Early 20th Century

ENGL 327	(3)	Canadian Prose Fiction 1
ENGL 328	(3)	Development of Canadian Poetry 1
ENGL 361	(3)	Poetry of the 20th Century 1
ENGL 414	(3)	Studies in 20th Century Literature 1
Modernist		
ENGL 327	(3)	Canadian Prose Fiction 1
ENGL 328	(3)	Development of Canadian Poetry 1
ENGL 335		

ENGL 361	(3)	Poetry of the 20th Century 1
ENGL 414	(3)	Studies in 20th Century Literature 1
ENGL 418	(3)	A Major Modernist Writer
Post-modernist		
ENGL 320	(3)	Postcolonial Literature
ENGL 333	(3)	Development of Canadian Poetry 2
ENGL 339	(3)	Canadian Prose Fiction 2
	(3)	Contemporary Women's Fiction

ENGL 355	(3)	The Poetics of Performance
ENGL 491D1	(3)	Honours Essay
ENGL 491D2	(3)	Honours Essay

## **Complementary Courses (42 credits)**

42 credits selected as described below. At least 6 of the 42 credits must be at the 500 level. A maximum of 9 credits may be from another department with the signed permission of the Program Adviser. A maximum of 9 of the 42 credits are allowed at the 200 level, none in the final year of the program.

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ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 308	(3)	English Renaissance Drama 1
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 315	(3)	Shakespeare
ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 416	(3)	Studies in Shakespeare
ENGL 516	(3)	Shakespeare

### **Theory Courses**

3 credits from the list of courses in Theory:

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text
ENGL 352	(3)	Theories of Difference

### **400-Level Theory Courses**

3 credits from a list of courses with a theoretical component, from the option's offerings at the 400 level or above:

ENGL 458	(3)	Theories of Text and Performance 1
ENGL 459	(3)	Theories of Text and Performance 2
ENGL 467	(3)	Advanced Studies in Theatre History

### **Performance-Oriented Courses**

9 credits from the list of Performance-Oriented courses:

ENGL 365	(3)	Costuming for the Theatre 1
ENGL 367	(3)	Acting 2
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 376	(3)	Scene Study
ENGL 377	(3)	Costuming for the Theatre 2
ENGL 396	(3)	Theatre Practicum 1
ENGL 397	(3)	Theatre Practicum 2
ENGL 465D1	(4.5)	Theatre Laboratory
ENGL 465D2	(4.5)	Theatre Laboratory
ENGL 466D1	(3)	Directing for the Theatre
ENGL 466D2	(3)	Directing for the Theatre
ENGL 469	(3)	Acting 3
ENGL 565	(3)	Drama Workshop

## **English Courses**

12 credits in English selected in consultation with an academic adviser.

3 credits from a list of courses on Major Figures in Cultural Studies:

ENGL 315	(3)	Shakespeare
ENGL 381	(3)	A Film-Maker 1
ENGL 409	(3)	Studies in a Canadian Author
ENGL 416	(3)	Studies in Shakespeare
ENGL 417	(3)	A Major English Poet
ENGL 418	(3)	A Major Modernist Writer
ENGL 481	(3)	A Film-Maker 2
ENGL 516	(3)	Shakespeare

### **Canadian Component**

3 credits from a list of courses with a Canadian component:

ENGL 393	(3)	Canadian Cinema
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 441	(3)	Special Topics in Canadian Cultural Studies

### **Theory or Criticism**

3 credits from a list of courses on Theory or Criticism:

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text
ENGL 352	(3)	Theories of Difference

#### **Historical Dimension**

6 credits from a list of courses in Cultural Studies with an historical dimension:

ENGL 350	(3)	Studies in the History of Film 1
ENGL 351	(3)	Studies in the History of Film 2
ENGL 363	(3)	Studies in the History of Film 3
ENGL 374	(3)	Film Movement or Period
ENGL 451	(3)	A Period in Cinema
ENGL 480	(3)	Studies in History of Film 1

### 400-Level Theory

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component:

ENGL 454	(3)	Topics in Cultural Studies and Gender
ENGL 479	(3)	Philosophy of Film
ENGL 483	(3)	Seminar in the Film
ENGL 484	(3)	Seminar in the Film
ENGL 488	(3)	Special Topics / Communications and Mass Media 2
ENGL 489	(3)	Culture and Critical Theory 1

ENGL 490	(3)	Culture and Critical Theory 2
ENGL 492	(3)	Image and Text

## **Departmental Offerings**

6 credits from among other Departmental offerings (ENGL courses).

### **Additional Cultural Studies**

15 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Honours English - Cultural Studies.

ENGL 280	(3)	Introduction to Film as Mass Medium
ENGL 354	(3)	Sexuality and Representation
ENGL 366	(3)	Film Genre
ENGL 378	(3)	Media and Culture
ENGL 379	(3)	Film Theory
ENGL 380	(3)	Non-Fiction Media: Cinema, Television, Radio
ENGL 382	(3)	International Cinema 1
ENGL 383	(3)	Studies in Communications 1
ENGL 385	(3)	Topics in Literature and Film
ENGL 386	(3)	Fans, Celebrities, Audiences
ENGL 388	(3)	Studies in Popular Culture
ENGL 389	(3)	Studies in Popular Culture
ENGL 390	(3)	Political and Cultural Theory
ENGL 391	(3)	Special Topics: Cultural Studies 1
ENGL 395	(3)	Cultural and Theatre Studies
	(3)	Special Topics: Cultural Studies 2

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

### **Required Courses (6 credits)**

ENGL 230	(3)	Introduction to Theatre Studies
ENGL 355	(3)	The Poetics of Performance

### Complementary Courses (30 credits)

30 credits selected as described below. In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. In addition to the Advanced Study requirement, 3 of the remaining 24 Complementary Course credits must be completed at the 500 level. A maximum of 9 of the 30 credits are allowed at the 200 level, none in the final year of the program.

### **Advanced Study**

6 credits of advanced study, in one of the following two forms A or B, in order of preference:

A) 6 credits of honours essay:

(3) Honours Essay

### **History of the Theatre**

3 credits in History of the Theatre:

ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 308	(3)	English Renaissance Drama 1
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 314	(3)	20th Century Drama
ENGL 315	(3)	Shakespeare
ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 371	(3)	Theatre History: 19th to 21st Centuries
ENGL 416	(3)	Studies in Shakespeare
ENGL 467	(3)	Advanced Studies in Theatre History
ENGL 486	(3)	Special Topics in Theatre History After 1900
ENGL 516	(3)	Shakespeare
ENGL 566	(3)	Special Studies in Drama 1

#### **Performance-Oriented Courses**

3 credits from the list of Performance-Oriented courses:

ENGL 365	(3)	Costuming for the Theatre 1
ENGL 367	(3)	Acting 2
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 376	(3)	Scene Study
ENGL 377	(3)	Costuming for the Theatre 2
ENGL 396	(3)	Theatre Practicum 1
ENGL 397	(3)	Theatre Practicum 2
ENGL 465D1*	(4.5)	Theatre Laboratory
ENGL 465D2*	(4.5)	Theatre Laboratory
ENGL 466D1**	(3)	Directing for the Theatre
ENGL 466D2**	(3)	Directing for the Theatre
ENGL 469	(3)	Acting 3
ENGL 565	(3)	Drama Workshop

<sup>\*, \*\*</sup> Note: Spanned credits. The amount over 3 credits can be attributed to Departmental Offerings credits.

#### **Departmental Offerings**

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

### 3.10.13.16 Bachelor of Arts (B.A.) - Joint Honours Component English - Literature (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) The minimum CGP

consult the Director of the Honours program for special permission to apply. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00, a minimum program GPA of 3.50, and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50, a minimum program GPA of 3.70, and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

#### Required Courses (12 credits)

ENGL 202	(3)	Departmental Survey of English Literature 1
ENGL 203	(3)	Departmental Survey of English Literature 2
ENGL 311	(3)	Poetics
ENGL 360	(3)	Literary Criticism

### **Complementary Courses (24 credits)**

24 credits selected as described below.

In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. Students are encouraged to take courses at the 300 level and above. At least 3 of the 24 credits must be devoted to a course on a Major Author as indicated under the rubrics dedicated to these offerings in each year's list of Complementary Courses on the Department of English website (http://www.mcgill.ca/english). In addition to the Advanced Study requirement, 3 of the remaining 18 Complementary Courses credits must be completed at the 500 level. A maximum of 9 of the 24 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

#### **Advanced Study**

6 credits of advanced study, in one of the following two forms A or B, in order of preference:

A) 6-credits of honours essay:

ENGL 491D1	(3)	Honours Essay	
ENGL 491D2	(3)	Honours Essay	

B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).

(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formallrs E9 1 01 0nV(, the)Tj1 0 541 0 027 2

(3) 1S70.524csh Studies in Old English

ENGL 503	(3)	18th Century
Romantic		
ENGL 331	(3)	Literature Romantic Period 1
ENGL 332	(3)	Literature Romantic Period 2
Victorian		
ENGL 329	(3)	English Novel: 19th Century 1
ENGL 330	(3)	English Novel: 19th Century 2
ENGL 334	(3)	Victorian Poetry
ENGL 404	(3)	Studies in 19th Century Literature 1
ENGL 405	(3)	Studies in 19th Century Literature 2
ENGL 423	(3)	Studies in 19th Century Literature
ENGL 504	(3)	19th Century
19th Century American		
ENGL 326	(3)	19th Century American Prose
ENGL 422	(3)	Studies in 19th Century American Literature

# Areas of English Literature

3 credits from one of the following areas: Early 20th Century

(3) Postcolonial Literature

In addition to the 6-credit requirement for Advarat the 400 level or above. Students are encourage	nced Study described belowed to take courses at the 300	, all Joint Honours students' pro	grams of study shall include 6 credits of the Advanced Study requirement, 3 of th	study

ENGL 374	(3)	Film Movement or Period
ENGL 451	(3)	A Period in Cinema
ENGL 480	(3)	Studies in History of Film 1

#### 400-Level Theory

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component:

ENGL 454	(3)	Topics in Cultural Studies and Gender
ENGL 479	(3)	Philosophy of Film
ENGL 483	(3)	Seminar in the Film
ENGL 484	(3)	Seminar in the Film
ENGL 488	(3)	Special Topics / Communications and Mass Media 2 $$
ENGL 489	(3)	Culture and Critical Theory 1
ENGL 490	(3)	Culture and Critical Theory 2
ENGL 492	(3)	Image and Text

### **Departmental Offerings**

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

#### 3.10.13.18 Medieval Studies

#### 3.10.13.18.1 About the Medieval Studies Program

The minor concentration in Medieval Studies facilitates undergraduate training in the interrelated branches of the discipline (e.g., history, literature, art history, languages, religion, philosophy), providing them with experience working in a field that is inherently interdisciplinary and a valuable credential should they choose to pursue graduate study in the field (in any area).

Further information for new and returning students is available at mcgill.ca/medieval and from the Program Director:

Prof. Cecily Hilsdale; 514-398-3651; cecily.hilsdale@mcgill.ca

## 3.10.13.182 Medieval Studies Faculty

### **Program Committee Chair**

Cecily Hilsdale

#### **Program Committee**

T.C. Bruce.; M. Van Dussen

#### 3.10.13.18.3 Bachelor of Arts (B.A.) - Minor Concentration Medieval Studies (18 credits)

The Minor Concentration in Medieval Studies facilitates undergraduate training in the interrelated branches of the discipline (e.g., history, literature, art history, languages, religion, philosophy), providing students with experience working in an inherently interdisciplinary filed and a valuable credential to pursue graduate study in the field (in any area).

### Required Course (3 credits)

MDST 400 (3) Interdisciplinary Seminar in Medieval Studies

### Complementary Courses (15 credits)

15 credits from the following list, of which only 9 credits may be taken in any one department. No more than 6 credits may be taken below the 300 level.

### **Art History and Communication Studies**

ARTH 204	(3)	Introduction to Medieval Art and Architecture
ARTH 314	(3)	The Medieval City

ITAL 356	(3)	Medieval Discourses on Love
ITAL 465	(3)	Religious Identities in Italy

# Langue et littérature françaises

FREN 455*	(3)	La littérature médiévale 1
FREN 456*	(3)	La littérature médiévale 2

<sup>\*\*</sup> Note: Course taught and all coursework done in French.

# Philosophy

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EAST 353	(3)	Approaches to Chinese Cinema
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 368	(3)	Asian Genre Cinemas
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 454	(3)	Topics: Chinese Cinema
EAST 467	(3)	Topics: Japanese Cinema
EAST 564	(3)	Structures of Modernity: Asia
ENGL 279	(3)	Introduction to Film as Art
ENGL 280	(3)	Introduction to Film as Mass Medium
ENGL 350	(3)	Studies in the History of Film 1
ENGL 351	(3)	Studies in the History of Film 2
ENGL 354	(3)	Sexuality and Representation
ENGL 363	(3)	Studies in the History of Film 3
ENGL 366	(3)	Film Genre
ENGL 374	(3)	Film Movement or Period
ENGL 379	(3)	Film Theory
ENGL 381	(3)	A Film-Maker 1
ENGL 382	(3)	International Cinema 1
ENGL 385	(3)	Topics in Literature and Film
		Special T

HIST 435	(3)	Topics in South Asian History
ITAL 329	(3)	Italian Cinematic Tradition
ITAL 374	(3)	Classics of Italian Cinema
ITAL 375	(3)	Cinema and Society in Modern Italy
	(3)	Italian Cinema and Video

### 3.10.15.3 Admission and Registration

A Placement Test is required before admission to any FRSL course, including Beginners' French. All students should be ready to provide a copy of their transcript from high school or CEGEP. Departmental permission will be given after the student's level has been determined by a placement test. Where students' levels in French make admission to this Department inappropriate, they will be directed to  $Le \ Delle$ 

## Administrative Officer

A. Folco

# Administrative and Student Affairs Coordinator (Student Adviser)

S.Y. Li

# **Faculty of Arts Representatives**

Art History106.7 0 iepr

GSFS 405	(3)	Social Justice and Activism
GSFS 406	(3)	Trans*Feminisms
GSFS 407	(3)	Sexuality and Gender: New Directions

Any credits taken above the 3 credits of complementary GSFS courses may count as credit in the following Complementary Course List.

#### 12 credits from the following:

Minimum of 6 credits must be at the 300 level or higher. Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 3 transfer credits may be accepted from approved exchange programs subject to University approval.

Additions may be made during a particular calendar year depending on the central focus of the courses. For final updates, see: http://www.mcgill.ca/igsf.

ANTH 227	(3)	Medical Anthropology
ANTH 327	(3)	Anthropology of South Asia
ANTH 381*	(3)	Special Topic 2
ANTH 407	(3)	Anthropology of the Body
ANTH 413	(3)	Gender in Archaeology
ANTH 480*	(3)	Special Topic 5
ANTH 555*	(3)	Advanced Topics in Ethnology
ARCH 533*	(3)	New Approaches to Architectural History
ARTH 205*	(3)	Introduction to Modern Art
ARTH 353*	(3)	Selected Topics in Art History 1
ARTH 354*	(3)	Selected Topics Art History 2
ARTH 421*	(3)	Selected Topics in Art and Architecture 2
ARTH 440*	(3)	The Body and Visual Culture
CANS 405*	(3)	Canadian Studies Seminar 5
CLAS 308	(3)	Gender in the Ancient World
COMS 310	(3)	Media and Feminist Studies
COMS 400*	(3)	Critical Theory Seminar
COMS 490*	(3)	Special Topics in History and Theory of Media
COMS 492	(3)	Power, Difference and Justice
COMS 541*	(3)	Cultural Industries
EAST 313*	(3)	Current Topics: Korean Studies 1
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 370	(3)	History of Sexuality in Japan
EAST 390	(3)	The Chinese Family in History
EAST 453*	(3)	Topics: Chinese Literature
ENGL 275	(3)	Introduction to Cultural Studies
ENGL 320	(3)	Postcolonial Literature
ENGL 371*	(3)	Theatre History: 19th to 21st Centuries
ENGL 388*	(3)	Studies in Popular Culture
ENGL 413*	(3)	Special Topics in Canadian Drama and Theatre
ENGL 418*	(3)	A Major Modernist Writer
ENGL 440*	(3)	First Nations and Inuit Literature and Media

ENGL 443	(3)	Contemporary Women's Fiction
ENGL 444	(3)	Studies: Women's Writing and Feminist Theory
ENGL 489*	(3)	Culture and Critical Theory 1
ENGL 516*	(3)	Shakespeare
GEOG 331*	(3)	Urban Social Geography
GEOG 507*	(3)	Advanced Social Geography
GERM 364	(3)	Gender and Society in German Literature and Culture
GSFS 200	(3)	Feminist and Social Justice Studies
GSFS 250	(3)	Sexual and Gender Diversity Studies
GSFS 300	(3)	Research Inquiry in GSFS
GSFS 301	(3)	Current Topics 1
GSFS 302	(3)	Current Topics 2
GSFS 303	(3)	Gender and Disability
GSFS 304	(3)	Postcolonial Feminist Theories
GSFS 305	(3)	Critical Race and Social Justice Theories
GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures
GSFS 400	(3)	Capstone: Engaging Fields of GSFS
GSFS 401	(3)	Special Topics 1
GSFS 402	(3)	Special Topics 2
GSFS 403	(3)	Feminisms and the Law
GSFS 404	(3)	Politics of Identity
GSFS 405	(3)	Social Justice and Activism
GSFS 406	(3)	Trans*Feminisms
GSFS 407	(3)	Sexuality and Gender: New Directions
GSFS 450	(3)	Independent Reading and Research
GSFS 499	(3)	GSFS Internship
HISP 340*	(3)	Latin American Cinema
HISP 358	(3)	Gender and Textualities
HIST 201*	(3)	Modern African History
HIST 323	(3)	History and Sexuality 1
HIST 343	(3)	Women in Post-Confederation Canada
HIST 344	(3)	The Chinese Family in History
HIST 347	(3)	History and Sexuality 2
HIST 354	(3)	Women in Europe 1700-2000
HIST 380	(3)	The Medieval Mediterranean
HIST 382*	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 412	(3)	Women and Gender in Modern Britain
HIST 424	(3)	Gender, Sexuality and Medicine
HIST 433	(3)	British Queer History
HIST 525	(3)	Women, Work and Family in Global History

HIST 526	(3)	Women and War
HSEL 308	(3)	Issues in Women's Health
HSEL 309	(3)	Women's Reproductive Health
INDG 401*	(3)	Interdisciplinary Seminar in Indigenous Studies
ISLA 310	(3)	Women in Islam
ISLA 585	(3)	Arab Women's Literature
ITAL 375*	(3)	Cinema and Society in Modern Italy
ITAL 383	(3)	Women's Writing since 1880
ITAL 477*	(3)	Italian Cinema and Video
MUAR 250	(3)	Women Making Music
MUAR 399	(3)	Music and Queer Identity
PHILTjInt64 i3W	(3)	Introduction to Feminist Theory

into this area of study, and complementary courses from a range of departments, disciplines, and faculties. Students must see and adviser in Gender, Sexuality, Feminist, and Social Justice Studies at a minimum upon declaring the GSFS Major Concentration and prior to selecting courses for the final year of study.

Students are advised to take GSFS 200 and 250 in their first year in the program, GSFS 300 in their second year of the program, and GSFS 400 in their final year of the program.

Students must see an adviser in Women's Studies at a minimum upon registering in GSFS and prior to selecting courses for the final year of study.

### Required Courses (12 credits)

GSFS 200	(3)	Feminist and Social Justice Studies
GSFS 250	(3)	Sexual and Gender Diversity Studies
GSFS 300	(3)	Research Inquiry in GSFS
GSFS 400	(3)	Capstone: Engaging Fields of GSFS

### **Complementary Courses (24 credits)**

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.

15 credits selected from the Complementary Course List. Three credits minimum must be at the 400 or 500 level and 9 credits maximum may be at the 200 level

Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.

### Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)

9 credits from the following:

GSFS 301	(3)	Current Topics 1
GSFS 302	(3)	Current Topics 2
GSFS 303	(3)	Gender and Disability
GSFS 304	(3)	Postcolonial Feminist Theories
GSFS 305	(3)	Critical Race and Social Justice Theories
GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures
GSFS 401	(3)	Special Topics 1
GSFS 402	(3)	Special Topics 2
GSFS 403	(3)	Feminisms and the Law
GSFS 404	(3)	Politics of Identity
GSFS 405	(3)	Social Justice and Activism
GSFS 406	(3)	Trans*Feminisms
GSFS 407	(3)	Sexuality and Gender: New Directions

Any credits taken above the 9 credits of complementary GSFS courses may count as credit in the following Complementary Course List.

#### 15 credits from the following:

Additions may be made during a particular calendar year depending on the central focus of the courses. For final updates, see: http://www.mcgill.ca/igsf.

ANTH 227	(3)	Medical Anthropology
ANTH 327	(3)	Anthropology of South Asia
ANTH 381*	(3)	Special Topic 2
ANTH 407	(3)	Anthropology of the Body
ANTH 413	(3)	Gender in Archaeology

ANTH 480*	(3)	Special Topic 5
ANTH 555*	(3)	Advanced Topics in Ethnology
ARCH 533*	(3)	New Approaches to Architectural History
ARTH 205*	(3)	Introduction to Modern Art
ARTH 353*	(3)	Selected Topics in Art History 1
ARTH 354*	(3)	Selected Topics Art History 2
ARTH 421*	(3)	Selected Topics in Art and Architecture 2
ARTH 440*	(3)	The Body and Visual Culture
CANS 405*	(3)	Canadian Studies Seminar 5
CLAS 308	(3)	Gender in the Ancient World
COMS 310	(3)	Media and Feminist Studies
COMS 400*	(3)	Critical Theory Seminar
COMS 490*	(SRC)	Special Topics in History and Theory of Media
	PARC)	operation in thistory and theory of the
COMS 492	(3)	Power, Difference and Justice
	,	
COMS 492	(3)	Power, Difference and Justice
COMS 492 COMS 541*	(3)	Power, Difference and Justice Cultural Industries
COMS 492 COMS 541* EAST 313*	(3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1
COMS 492 COMS 541* EAST 313* EAST 350	(3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature
COMS 492 COMS 541* EAST 313* EAST 350 EAST 351	(3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature Women Writers of China
COMS 492 COMS 541* EAST 313* EAST 350 EAST 351 EAST 370	(3) (3) (3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature Women Writers of China History of Sexuality in Japan
COMS 492 COMS 541* EAST 313* EAST 350 EAST 351 EAST 370 EAST 390	(3) (3) (3) (3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature Women Writers of China History of Sexuality in Japan The Chinese Family in History
COMS 492 COMS 541* EAST 313* EAST 350 EAST 351 EAST 370 EAST 390 EAST 453*	(3) (3) (3) (3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature Women Writers of China History of Sexuality in Japan The Chinese Family in History Topics: Chinese Literature
COMS 492 COMS 541* EAST 313* EAST 350 EAST 351 EAST 370 EAST 390 EAST 453* ENGL 275	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature Women Writers of China History of Sexuality in Japan The Chinese Family in History Topics: Chinese Literature Introduction to Cultural Studies
COMS 492 COMS 541* EAST 313* EAST 350 EAST 351 EAST 370 EAST 390 EAST 453* ENGL 275 ENGL 320	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	Power, Difference and Justice Cultural Industries Current Topics: Korean Studies 1 Gender and Sexuality in Chinese Literature Women Writers of China History of Sexuality in Japan The Chinese Family in History Topics: Chinese Literature Introduction to Cultural Studies Postcolonial Literature

GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures
GSFS 400	(3)	Capstone: Engaging Fields of GSFS
GSFS 401	(3)	Special Topics 1
GSFS 402	(3)	Special Topics 2
GSFS 403	(3)	Feminisms and the Law
GSFS 404	(3)	Politics of Identity
GSFS 405	(3)	Social Justice and Activism
GSFS 406	(3)	Trans*Feminisms
GSFS 407	(3)	Sexuality and Gender: New Directions
GSFS 450	(3)	Independent Reading and Research
GSFS 499	(3)	GSFS Internship
HISP 340*	(3)	Latin American Cinema
HISP 358	(3)	Gender and Textualities
HIST 201*	(3)	Modern African History
HIST 323	(3)	History and Sexuality 1
HIST 343	(3)	Women in Post-Confederation Canada
HIST 344	(3)	The Chinese Family in History
HIST 347	(3)	History and Sexuality 2
HIST 354	(3)	Women in Europe 1700-2000
HIST 380	(3)	The Medieval Mediterranean
HIST 382*	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 412	(3)	Women and Gender in Modern Britain
HIST 424	(3)	Gender, Sexuality and Medicine
HIST 433	(3)	British Queer History
HIST 525	(3)	Women, Work and Family in Global History
HIST 526	(3)	Women and War
HSEL 308	(3)	Issues in Women's Health
HSEL 309	(3)	Women's Reproductive Health
INDG 401*	(3)	Interdisciplinary Seminar in Indigenous Studies
ISLA 310	(3)	Women in Islam
ISLA 585	(3)	Arab Women's Literature
ITAL 375*	(3)	Cinema and Society in Modern Italy
ITAL 3 alth	(3)	Women's Writing since 1880

POLI 422*	(3)	Developing Areas/Topics 2
POLI 423*	(3)	Politics of Ethno-Nationalism
POLI 432*	(3)	Selected Topics: Comparative Politics
POLI 444*	(3)	Topics in International Politics 2
PSYC 436	(3)	Human Sexuality and Its Problems
RELG 313*	(3)	Topics in Biblical Studies 1
RELG 336*	(3)	Contemporary Theological Issues
RELG 338	(3)	Women and the Christian Tradition
RELG 372	(3)	Hindu Goddesses
RELG 399*	(3)	Christian Spirituality
SOCI 247	(3)	Family and Modern Society
SOCI 270	(3)	Sociology of Gender
SOCI 321	(3)	Gender and Work
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 489	(3)	Gender, Deviance and Social Control
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 530	(3)	Sex and Gender
SOCI 535	(3)	Sociology of the Family

Note: Courses marked with and asterisk (\*) count toward Gender, Sexuality, Feminist, and Social Justice Studies when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

## 3.10.16.6 Bachelor of Arts (B.A.) - Honours Gender, Sexuality, Feminist, & Social Justice Studies (57 credits)

The Honours program offers a significant degree of analysis and depth of study into contemporary and historical critical issues centered on gender, sexuality, feminism, and social justice beyond the Major through required and complementary course work, intensive research, and seminars. The program enables students to explore the meanings and intersections of such categories as gender, race, class, sexual identification, age, ability, citizenship, and national identity, for example, and to examine ho

COMS 490*	(3)	Special Topics in History and Theory of Media
COMS 492	(3)	Power, Difference and Justice
COMS 541*	(3)	Cultural Industries
EAST 313*	(3)	Current Topics: Korean Studies 1
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 370	(3)	History of Sexuality in Japan
EAST 390	(3)	The Chinese Family in History
EAST 453*	(3)	Topics: Chinese Literature
ENGL 275	(3)	Introduction to Cultural Studies
ENGL 320	(3)	Postcolonial Literature
ENGL 371*	(3)	Theatre History: 19th to 21st Centuries
ENGL 388*	(3)	Studies in Popular Culture
ENGL 413*	(3)	Special Topics in Canadian Drama and Theatre
ENGL 418*	(3)	A Major Modernist Writer
ENGL 440*	(3)	First Nations and Inuit Literature and Media
ENGL 443	(3)	Contemporary Women's Fiction
ENGL 444	(3)	Studies: Women's Writing and Feminist Theory
ENGL 489*	(3)	Culture and Critical Theory 1
ENGL 516*	(3)	Shakespeare
GEOG 331*	(3)	Urban Social Geography
GEOG 507*	(3)	Advanced Social Geography
GERM 364	(3)	Gender and Society in German Literature and Culture
GSFS 200	(3)	Feminist and Social Justice Studies
GSFS 250	(3)	Sexual and Gender Diversity Studies
GSFS 300	(3)	Research Inquiry in GSFS
GSFS 301	(3)	Current Topics 1
GSFS 302	(3)	Current Topics 2
GSFS 303	(3)	Gender and Disability
GSFS 304	(3)	Postcolonial Feminist Theories
GSFS 305	(3)	Critical Race and Social Justice Theories
GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures
		Capstone: Eng

GSFS 499	(3)	GSFS Internship
HISP 340*	(3)	Latin American Cinema
HISP 358	(3)	Gender and Textualities
HIST 201*	(3)	Modern African History
HIST 323	(3)	History and Sexuality 1
HIST 343	(3)	Women in Post-Confederation Canada
HIST 344	(3)	The Chinese Family in History
HIST 347	(3)	History and Sexuality 2
HIST 354	(3)	Women in Europe 1700-2000
HIST 380	(3)	The Medieval Mediterranean
HIST 382*	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 412	(3)	Women and Gender in Modern Britain
HIST 424	(3)	Gender, Sexuality and Medicine
HIST 433	(3)	British Queer History
HIST 525	(3)	Women, Work and Family in Global History
HIST 526	(3)	Women and War
HSEL 308	(3)	Issues in Women's Health

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SOCI 321	(3)	Gender and Work
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 489	(3)	Gender, Deviance and Social Control
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 530	(3)	Sex and Gender
SOCI 535	(3)	Sociology of the Family

Note: Courses marked with and asterisk (\*) are acceptable ONLY when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

## 3.10.16.7 Bachelor of Arts (B.A.) - Jt Honours Component Gender, Sexuality, Feminist, & Social Justice Studies (36 credits)

The Joint Honours program offers a significant degree of analysis and depth of study into contemporary and historical critical issues centered on gender, sexuality, feminism, and social justice be

GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures
GSFS 401	(3)	Special Topics 1
GSFS 402	(3)	Special Topics 2
GSFS 403	(3)	Feminisms and the Law
GSFS 404	(3)	Politics of Identity
GSFS 405	(3)	Social Justice and Activism
GSFS 406GSFS 404	(3)	Trans*Feminisms

ENGL 388*	(3)	Studies in Popular Culture
ENGL 413*	(3)	Special Topics in Canadian Drama and Theatre
ENGL 418*	(3)	A Major Modernist Writer
ENGL 440*	(3)	First Nations and Inuit Literature and Media
ENGL 443	(3)	Contemporary Women's Fiction
ENGL 444	(3)	Studies: Women's Writing and Feminist Theory
ENGL 489*	(3)	Culture and Critical Theory 1
ENGL 516*	(3)	Shakespeare
	(3)	Urban Social Geography

HI <b>ST</b> 424	(3)	Gender, Sexuality and Medicine
HI <b>ST</b> 433	(3)	British Queer History
н <b>ізт</b> 525	(3)	Women, Work and Family in Global History
HIST 526	(3)	Women and War
HSEL 308	(3)	Issues in Women's Health
HSEL 309	(3)	Women's Reproductive Health
INI G 401*	(3)	Interdisciplinary Seminar in Indigenous Studies
ISLA 310	(3)	Women in Islam
ISLA 585	(3)	Arab Women's Literature
ITAL 375*	(3)	Cinema and Society in Modern Italy
ITAL 383	(3)	Women's Writing since 1880
ITAL 477*	(3)	Italian Cinema and Video
MUAR 250	(3)	Women Making Music
MUAR 399	(3)	Music and Queer Identity
PHIL 242	(3)	Introduction to Feminist Theory
PHIL 442	(3)	Topics in Feminist Theory
PHIL 446*	(3)	Current Issues in Political Philosophy
POLI 366*	(3)	Topics in Political Theory 1
POLI 422*	(3)	Developing Areas/Topics 2
POLI 423*	(3)	Politics of Ethno-Nationalism
POLI 432*	(3)	Selected Topics: Comparative Politics
POLI 444*	(3)	Topics in International Politics 2
PSYC 436	(3)	Human Sexuality and Its Problems
RELG 313*	(3)	Topics in Biblical Studies 1
RELG 336*	(3)	Contemporary Theological Issues
RELG 338	(3)	Women and the Christian Tradition
RELG 372	(3)	Hindu Goddesses
RELG 399*	(3)	Christian Spirituality
SOCI 247	(3)	Family and Modern Society
SOCI 270	(3)	Sociology of Gender
SOCI 321	(3)	Gender and Work
SOCI 370	(3)	Sociology: Gender and Development

Women and Gender in Modern Britain

(3)

## 3.10.17 Geography

#### 3.10.17.1 Location

Burnside Hall, Room 305 805 Sherbrooke Street West Montreal QC H3A 0B9 Telephone: 514-398-4951

Email: undergrad.geog@mcgill.ca
Website: mcgill.ca/geography

#### 3.10.17.2 About Geography

The Geography Department offers programs in both Arts and Science.

Refer to Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.17: Geography (GEOG) for B.Sc. programs in Geography.

Refer to Bachelor of Arts & Science > Undergraduate > Browse Academic Units & Programs > section 4.11.18: Geography (GEOG) for B.A. & Sc. programs in Geography.

Geography also administers the B.A. & Sc. interfacutly programs in Sustainability, Science and Society in partnership with the Bieler School of Environment. These programs are described in *Bachelor of Arts & Science > Undergraduate > Browse Academic Units & Programs > section 4.11.35: Sustainability, Science, and Society.* 

Geography is a broad, holistic discipline; both a natural and a social science because it examines people and their environment and serves as a bridge between physical and cultural processes.

**Human Geography** is concerned especially with the political, economic, social, and cultural processes and resource practices that create spatial patterns and define particular places.

Physical Geography integrates disciplines such as climatology, geomorphology, geology, biology, hydrology, ecology, soil science, and even marine science.

Whether considering greenhouse gas emissions, the spread of disease, or threats to biodiversity, in all cases geographers are interested in where things happen, why, and with what consequences. Our graduates go on to careers in environmental consulting, social agencies, or non-governmental organizations. Skills in Geographic Information Science (GIS) are very marketable. Students are well prepared for graduate work in social sciences, urban planning, and environmental studies at leading schools.

### 3.10.17.3 Prerequisites

There are no departmental prerequisites for entrance to the B.A. Geography programs. Students who have completed college or pre-university geography courses fully equivalent to those of first year university may, with the adviser's approval, substitute other courses as part of their program.

#### 3.10.17.4 Geography Faculty

See Faculty of Science > Undergraduate > Browse Academic Units & Programs > Geography (GEOG) > section 11.13.17.4: Geography Faculty.

#### 3.10.17.5 Bachelor of Arts (B.A.) - Minor Concentration Geography (18 credits)

The B.A.; Minor Concentration in Geography focuses on the interactions among people, places, and the environment, and is an excellent complement to many majors. It includes coursework in methodological techniques, human, and/or physical Geography. This Minor Concentration may be expanded into the Major Concentration Geography, but not into the Major Concentration Geography (Urban Studies).

### Required (3 credits)

GEOG 216 (3) Geography of the World Economy

#### **Complementary Courses (15 credits)**

6 credits selected from:

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 203	(3)	Environmental Systems
GEOG 210	(3)	Global Places and Peoples
GEOG 217	(3)	Cities in the Modern World
GEOG 221	(3)	Environment and Health

Earth's Changing Surface

COMS 425	(3)	Urban Culture and Everyday Life		
Civil Engineering				
CIVE 540	(3)	Urban Transportation Planning		
History				
HIST 353	(3)	History of Montreal		
HIST 397	(3)	Canada: Ethnicity, Migration		
Management				
FINE 445	(3)	Real Estate Finance		
Political Science				
POLI 318	(3)	Comparative Local Government		
POLI 321	(3)	Issues: Canadian Public Policy		
Quebec Studies				
QCST 200	(3)	Introduction to the Study of Quebec		
Sociology				
SOCI 222	(3)	Urban Sociology		
SOCI 230	(3)	Sociology of Ethnic Relations		
SOCI 333	(3)	Social Stratification		
SOCI 366	(3)	Neighborhoods and Inequality		
SOCI 388	(3)	Crime		
Urban Planning				
URBP 201	(3)	Planning the 21st Century City		
URBP 501	(2)	Principles and Practice 1		
URBP 504	(3)	Planning for Active Transportation		
URBP 506	(3)	Environmental Policy and Planning		
URBP 530	(3)	Urban Infrastructure and Services in International Context		
URBP 536	(2)	Current Issues in Transportation 1		
URBP 537	(2)	Current Issues in Transportation 2		
URBP 551	(3)	Urban Design and Planning		
URBP 556	(3)	Urban Economy: A Spatial Perspective		

# 3.10.17.7 Bachelor of Arts (B.A.) - Minor Concentration GIS & Remote Sensing (18 credits)

 $The \ Minor \ Concentration \ in \ GIS \ \& \ Remote \ Sensing \ program \ provides \ B.A. \ rnd 1 ee \ Minor \ Concentration \ LcTj1 \ 0 \ 0249 \ 116.91 \ Tm (helor \ 7Sy5nm (hee M.ad \ Plans - Mgeorgian \ Plans - Mgeorgian$ 

GEOG 201 (3) Introductory Geo-Information Science GEOG 314 (3) Geospatial Analysis

# **Complementary Courses (12 credits)**

3 credits selected from:

F

GEOG 425	(3)	Southeast Asia Urban Field Studies

GEOG 494 (3) Urban Field Studies

## **Remaining Courses**

21 credits selected from the course lists below. Of these 21 credits, at least 15 credits must be at the 300-level or above. At least 6 credits must also be taken outside of Geography.

GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 311	(3)	Economic Geography
GEOG 314	(3)	Geospatial Analysis
GEOG 315	(3)	Urban Transportation Geography
GEOG 316	(3)	Political Geography
GEOG 325	(3)	New Master-Planned Cities
GEOG 331	(3)	Urban Social Geography
GEOG 333	(3)	Introduction to Programming for Spatial Sciences
GEOG 408	(3)	Geography of Development
GEOG 409	(3)	Geographies of Developing Asia
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 417	(3)	Urban Geography
GEOG 418	(3)	Geographies of Race
GEOG 420	(3)	Memory, Place, and Power
GEOG 503	(3)	Advanced Topics in Health Geography
GEOG 504	(3)	Advanced Economic Geography
GEOG 507	(3)	Advanced Social Geography
GEOG 511	(3)	Advanced Political Geography
GEOG 525	(3)	Asian Cities in the 21st Century

## Architecture

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but 500-level courses may not be taken before the U3.

ARCH 517	(3)	Sustainable Residential Development
ARCH 528	(3)	History of Housing

## **Art History and Communication Studies**

ARTH 204	(3)	Introduction to Medieval Art and Architecture
COMS 425	(3)	Urban Culture and Everyday Life

## **Civil Engineering**

CIVE 540 (3) Urban Transportation Planning

History		
HIST 353	(3)	History of Montreal
HIST 397	(3)	Canada: Ethnicity, Migration
Management		
FINE 445	(3)	Real Estate Finance
Political Science		
POLI 318	(3)	Comparative Local Government
POLI 321	(3)	Issues: Canadian Public Policy
Quebec Studies		
QCST 200	(3)	Introduction to the Study of Quebec
Sociology		
SOCI 222	(3)	Urban Sociology
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 333	(3)	Social Stratification
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 388	(3)	Crime
Urban Planning		
URBP 201	(3)	Planning the 21st Century City
URBP 501	(2)	Principles and Practice 1
URBP 501 URBP 504	(2) (3)	Principles and Practice 1 Planning for Active Transportation

GEOG 290	(1)	Local Geographical Excursion
GEOG 351	(3)	Quantitative Methods
GEOG 381	(3)	Geographic Thought and Practice
GEOG 491D1	(3)	Honours Research
GEOG 491D2	(3)	Honours Research

# **Complementary Courses (42 credits)**

Intr

For students in the Honours Urban Studies, the total number of credits permitted outside Arts and Science is 30 credits. Faculty of Arts regulations about "Courses Outside the Faculties of Arts and of Science" may be found in the Arts guidelines for "Course Requirements".

Introductory Geo-Information Science

## Required Courses (18 credits)

GEOG 201 (3)

GEOG 409	(3)	Geographies of Developing Asia
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 417	(3)	Urban Geography
GEOG 418	(3)	Geographies of Race
GEOG 420	(3)	Memory, Place, and Power

## **Remaining Courses**

18 credits selected from the course lists below. Of these 18 credits, at least 12 credits must be at the 300-level or above. At least 6 credits must also be taken outside of Geography.

## Architecture

Although Architecture courses have prerequisites, they are waived for Urban Studies students, but the course may not be taken before the U3.

Sustainable Residential De

QCST 200	(3)	Introduction to the Study of Quebec
Sociology		
SOCI 222	(3)	Urban Sociology
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 333	(3)	Social Stratification
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 388	(3)	Crime
Urban Planning		
URBP 201	(3)	Planning the 21st Century City
URBP 501	(2)	Principles and Practice 1
URBP 504	(3)	Planning for Active Transportation
URBP 506	(3)	Environmental Policy and Planning
URBP 530	(3)	Urban Infrastructure and Services in International Context
URBP 536	(2)	Current Issues in Transportation 1
URBP 537	(2)	Current Issues in Transportation 2
URBP 551	(3)	Urban Design and Planning
URBP 556	(3)	Urban Economy: A Spatial Perspective

## **Additional Courses**

6 credits to be taken at the 300-level or above. Courses may be selected from the lists above or from outside the program in consultation with the student's adviser.

## 3.10.17.13 Bachelor of Arts (B.A.) - Joint Honours Component Geography (37 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components of Geography and another Arts discipline. As with the regular Honours program, the Geograph

GEOG 272 (3)	Earth's Changing Surface
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## Statistics

3 credits from:

Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

BIOL 373	(3)	Biometry
GEOG 202	(3)	Statistics and Spatial Analysis
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics
SOCI 350	(3)	Statistics in Social Research

## Research

3-6 credits of research courses.

Michelle Maillet

Email: advisor.geog@mcgill.ca

For more information about these programs, see *Bachelor of Arts & Science > Undergraduate > Browse Academic Units & Programs > section 4.11.35: Sustainability, Science, and Society.* 

## 3.10.18 History and Classical Studies

#### 3.10.18.1 Location

3.10.18

Administrative Service Centre II Stephen Leacock Building, Room 712 855 Sherbrooke Street West Montreal QC H3A 2T7 T

#### 3.10.18.2.4 About South Asian Studies

The **Minor Concentration in South Asian Studies** – collaboratively offered by the Departments of Anthropology, English, History and Classical Studies, Political Science, and Sociology, as well as the Institute of Islamic Studies and the School of Religious Studies – offers breadth and depth on the history, literature, languages, politics, religions, and cultures of South Asia.

The minor concentration offers two streams:

- Culture and Civilization; or
- Languages (e.g., Persian, Sanskrit, Tibetan, and Urdu-Hindi).

The Culture and Civilization stream allows students to explore their interests in Southern Asia (India, Pakistan, Nepal, Bangladesh, Sri Lanka, Bhutan), through humanities and social science classes while the Languages stream permits combined study of two South Asian languages (at introductory and intermediate levels) or one South Asian language in depth.

For further details, please contact the adviser for the Minor Concentration in South Asian Studies, Prof. Andrea Farran (andrea.farran@mcgill.ca).

#### 3.10.18.3 History and Classical Studies Faculty

#### Chair

Catherine Desbarats

#### Directors

Heidi Wendt – Undergraduate Program Director (History & Classical Studies)

Judith Szapor - Graduate Program Director

#### **Emeritus Professors**

Paula Clark; Alan Greer; John W. Hellman; Andrée Lévesque; Carman I. Miller; Yuzo Ota; Nancy Partner; Faith Wallis

#### **Professors**

Gwyn Campbell; Elsbeth Heaman; Gershon D. Hundert; Brian Lewis; Lorenz Lüthi; Suzanne Morton; Jason Opal; Laila Parsons; Andrea Tone; David J. Wright; Robin D.S. Yates; John E. Zucchi

### Associate Professors

Noelani Arista; Malek Abisaab; Anastassios (Tassos) Anastassiadis; Subho Basu; Brian Cowan; Catherine Desbarats; Nicholas Dew; Elizabeth Elbourne; Michael P. Fronda; Charles W. Gladhill; Lynn Kozak; James Krapfl; Pedro Monaville; Leonard Moore; Don Nerbas; Daviken Studnicki-Gizbert; Judith Szapor; Griet Vankeerberghen; Gavin Walker; Heidi Wendt

#### **Assistant Pr**

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

(3) Ancient Greek Democracy

HIST 212	(3)	Medieval Europe
HIST 214	(3)	Early Modern Europe
HIST 215	(3)	Modern Europe
HIST 216	(3)	Introduction to Russian History
HIST 221	(3)	United States since 1865
HIST 226	(3)	East Central and Southeastern Europe in 20th Century
HIST 250	(3)	Making Great Britain and Ireland
Group B:		
HIST 200	(3)	Introduction to African History
WAST 2001	(Sn3)	Modern African History
		Ancient Mediast1 t9c History

ISLA 305 (3) Topics in Islamic History

ISLA 315 (3) Ottoman State and Society to 1839

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Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 and HIST 399 may not be used to satisfy Temporal Breadth requirements.

#### Level requirement:

- Minimum 6 credits honours seminar (500-level D1/D2 courses)
- Minimum 6 additional credits 400-level or higher HIST courses. A second honours seminar may be used to fulfill this requirement.
- Maximum 18 credits complementary courses at 200-level

GPA requirements - 3.30 in program courses, 3.0 (B) or higher in each program course, CGPA 3.0 or higher.

Group A:		
HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 211	(3)	American History to 1865
HIST 212	(3)	Medieval Europe
HIST 214	(3)	Early Modern Europe
HIST 215	(3)	Modern Europe
HIST 216	(3)	Introduction to Russian History
HIST 221	(3)	United States since 1865
HIST 226	(3)	East Central and Southeastern Europe in 20th Century
HIST 250	(3)	Making Great Britain and Ireland
Group B:		
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 205	(3)	Ancient Mediterranean History
HIST 206	(3)	Indian Ocean World History
HIST 208	(3)	Introduction to East Asian History
HIST 209	(3)	Introduction to South Asian History
HIST 210	(3)	Introduction to Latin American History
HIST 218	(3)	Modern East Asian History
HIST 275	(3)	Ancient Roman History
Group C:		
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 213	(3)	World History, 600-2000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 222	(3)	History of Pandemics
HIST 223	(3)	Indigenous Peoples and Empires
HIST 224	(3)	Introduction to the African Diaspora
HIST 238	(3)	Histories of Science
HIST 240	(3)	Modern History of Islamic Movements
HIST 249	(3)	Health and the Healer in Western History
HIST 262	(3)	Mediterranean and European Interconnections
HIST 292	(3)	History and the Environment
HIST 298	(3)	Topics in History

HIST 299 (3) The Historian's Craft

## **Courses Offered by Other Units**

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

CLAS 303	(3)	Ancient Greek Religion
CLAS 304	(3)	Ancient Greek Democracy
CLAS 305	(3)	Roman Religion
CLAS 345	(3)	Study Tour: Greece
CLAS 406	(3)	Greek and Roman Historiography
ISLA 305	(3)	Topics in Islamic History
ISLA 315	(3)	Ottoman State and Society to 1839
ISLA 350	(3)	From Tribe to Dynasty
ISLA 355	(3)	Modern History of the Middle East
ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 511	(3)	Medieval Islam, 10th-12th Century
ISLA 515	(3)	The Medieval School in Islam
ISLA 516	(3)	Medieval Islam, 13th-15th Century
JWST 240	(3)	The Holocaust
JWST 245	(3)	Jewish Life in the Islamic World
JWST 303	(3)	The Soviet Jewish Experience
JWST 311	(3)	Gender in Jewish History
JWST 312	(3)	Modern Jewish History
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 348	(3)	Modern Jewish Studies
JWST 365	(3)	Modern Jewish Ideologies

CLAS 301	(3)	Ancient Greek Literature and Society
CLAS 302	(3)	Roman Literature and Society

27 credits of classics (CLAS) or related courses according to the following stipulations:

Minimum 6 credits intermediate Ancient Greek and/or Latin.

CLAS 310	(3)	Intermediate Latin 1
CLAS 312	(3)	Intermediate Latin 2
CLAS 315	(3)	Intermediate Latin 2: Selections
CLAS 320	(3)	Intermediate Ancient Greek 1
CLAS 322	(3)	Intermediate Ancient Greek 2
CLAS 326	(3)	Intermediate Ancient Greek 2: Selections

NOTE: Minimum 6 credits 400-level CLAS courses.

NOTE: Maximum 12 credits of complementary courses at the 200 level.

NOTE: 9 credits maximum of non-CLAS courses may be counted toward the program.

Note: For either stream students may count a maximum total of 12 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) toward the program.

#### 3.10.18.10 Bachelor of Arts (B.A.) - Honours Classics (54 credits)

The Honours Classics program is designed for students who plan to pursue graduate studies in Classics or related discipline. The program is highly interdisciplinary. It emphasizes the study of ancient Greek and Latin, requiring proficiency in both languages and advanced coursework in at least one, combined with a strong foundation in ancient history, literature and material cultural studies. Honours students are encouraged to begin coursework in both Greek and Latin as soon as possible, and to meet with the classics program adviser to map out their courses and program.

According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00.

### Required Courses (24 credits)

CLAS 201	(3)	Greece and Rome
CLAS 301	(3)	Ancient Greek Literature and Society
CLAS 302	(3)	Roman Literature and Society
CLAS 310	(3)	Intermediate Latin 1
CLAS 312	(3)	Intermediate Latin 2
CLAS 320	(3)	Intermediate Ancient Greek 1
CLAS 322	(3)	Intermediate Ancient Greek 2
CLAS 500	(3)	Classics Seminar

## **Complementary Courses (30 credits)**

30 credits classics (CLAS) or related courses according to the following stipulations:

Minimum 6 credits advanced ancient Greek and/or Latin.

CLAS 410	(3)	Advanced Latin: Authors
CLAS 412	(3)	Advanced Latin: Themes
CLAS 419	(3)	Advanced Latin: Post-Classical
CLAS 420	(3)	Advanced Ancient Greek: Authors
CLAS 422	(3)	Advanced Ancient Greek: Themes
CLAS 429	(3)	Medieval Greek

#### Minimum 3 credits advanced classical literature courses:

CLAS 400	(3)	Ancient Drama and Theatre
CLAS 401	(3)	Ancient Comedy
CLAS 402	(3)	Hellenistic Literature and Society
CLAS 403	(3)	The Greek and Roman Novel
CLAS 405	(3)	The Epic Tradition
CLAS 406	(3)	Greek and Roman Historiography
CLAS 407	(3)	Ancient Lyric and Elegy
CLAS 408	(3)	Greek and Roman Oratory
CLAS 409	(3)	Ancient Didactic Poetry
CLAS 461	(3)	Greco-Roman Religious Literature

## Minimum 3 credits courses in ancient history or classical civilization:

CLAS 303	(3)	Ancient Greek Religion
CLAS 304	(3)	Ancient Greek Democracy
CLAS 305	(3)	Roman Religion
CLAS 306	(3)	Classics in Modern Media
CLAS 308	(3)	Gender in the Ancient World
CLAS 404	(3)	Classical Tradition
HIST 205	(3)	Ancient Mediterranean History
HIST 275	(3)	Ancient Roman History
HIST 368	(3)	Greek History: Classical Period
HIST 369	(3)	Greek History: Early Greece
HIST 375	(3)	Rome: Republic to Empire
HIST 376	(3)	Fall of the Roman Empire
HIST 391	(3)	Rise of Rome
HIST 400	(3)	Ancient Greece, Rome and China
HIST 407	(3)	Topics in Ancient History
HIST 450	(3)	Ancient History Methods
HIST 469	(3)	Alexander and Hellenistic World
HIST 475	(3)	Topics: Roman History
PHIL 345	(3)	Greek Political Theory

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## 3.10.18.12 Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)

The B.A.: Minor Concentration in South Asian Studies offers breadth and depth on the history, literature, languages, politics, religions, cultures, and societies of South Asia. The minor concentration is divided into two streams, "Culture and Civilization" and "Languages." An interdisciplinary curriculum is collaboratively offered by the Department of Anthropology, English, History and Classical Studies, Political Science, and Sociology, the Institute of Islamic Studies, and the School of Religious Studies, and is complemented by language instruction in Persian, Sanskrit, Tibetan, and Urdu-Hindi.

#### **Complementary Courses (18 credits)**

18 credits from one of the following streams:

#### Stream 1: Culture and Civilization

Note: As course content may change according to the offering unit's yearly curriculum, all classes listed must be approved in consultation with the South Asian Studies adviser as relevant to the Minor Concentration. Students should refer to the eCalendar to confirm any prerequisites for the following courses.

#### **Introductory Curriculum**

6 credits from the following:

ANTH 327	(3)	Anthropology of South Asia
ANTH 361	(3)	Archaeology of South Asia
ENGL 297	(3)	Special Topics of Literary Study
HIST 209	(3)	Introduction to South Asian History
ISLA 330	(3)	Islamic Mysticism: Sufism
POLI 322	(3)	Political Change in South Asia

Hinduism and Buddhis Mysticism: Sufism

RELG 353	(3)	Gandhi: His Life and Thought
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 369	(3)	Tibetan Buddhism
RELG 372	(3)	Hindu Goddesses
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
RELG 388	(3)	Introduction to Sikhism
RELG 444	(3)	Indian Ocean Religious Networks
RELG 453	(3)	Vajrayana Buddhism
RELG 454	(3)	Modern Hindu Thought
RELG 544	(3)	Ethnography as Method in Religious Studies
RELG 545	(3)	Ramayana: Multiple Lives
RELG 546	(3)	Indian Philosophy
RELG 547	(3)	Special Topics in Hinduism
RELG 548	(3)	Indian Buddhist Philosophy
RELG 551	(3)	Special Topics in Buddhism
RELG 552	(3)	Advaita Vedanta
RELG 556	(3)	Issues in Buddhist Studies
RELG 558	(3)	Indian Tantric Traditions
RELG 559	(3)	Caste and Dalits: Historical and Political Perspectives
RELG 560	(3)	Buddhist Poetry
SOCI 370	(3)	Sociology: Gender and Development
SOCI 550	(3)	Developing Societies

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.

Maximum of 6 relevant transfer credits may be accepted from approved exchange programs subject to adviser and University approval.

Students may apply up to 6 credits in South Asian language study, with approval from the adviser.

## Stream 2: Language

Either 18 credits in one of the following languages: Persian, Sanskrit, Tibetan, or Urdu-Hindi, from the courses listed below.

	` '	•
RELG 357D1	(3)	Sanskrit 2
RELG 357D2	(3)	Sanskrit 2
RELG 457D1	(3)	Advanced Sanskrit
RELG 457D2	(3)	Advanced Sanskrit
TIBETAN		
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
URDU-HINDI		
ISLA 251D1	(3)	Introductory Urdu-Hindi
ISLA 251D2	(3)	Introductory Urdu-Hindi
ISLA 352D1	(3)	Intermediate Urdu-Hindi
ISLA 352D2	(3)	Intermediate Urdu-Hindi
ISLA 553	(3)	Advanced Urdu-Hindi 1
ISLA 554	(3)	Advanced Urdu-Hindi 2

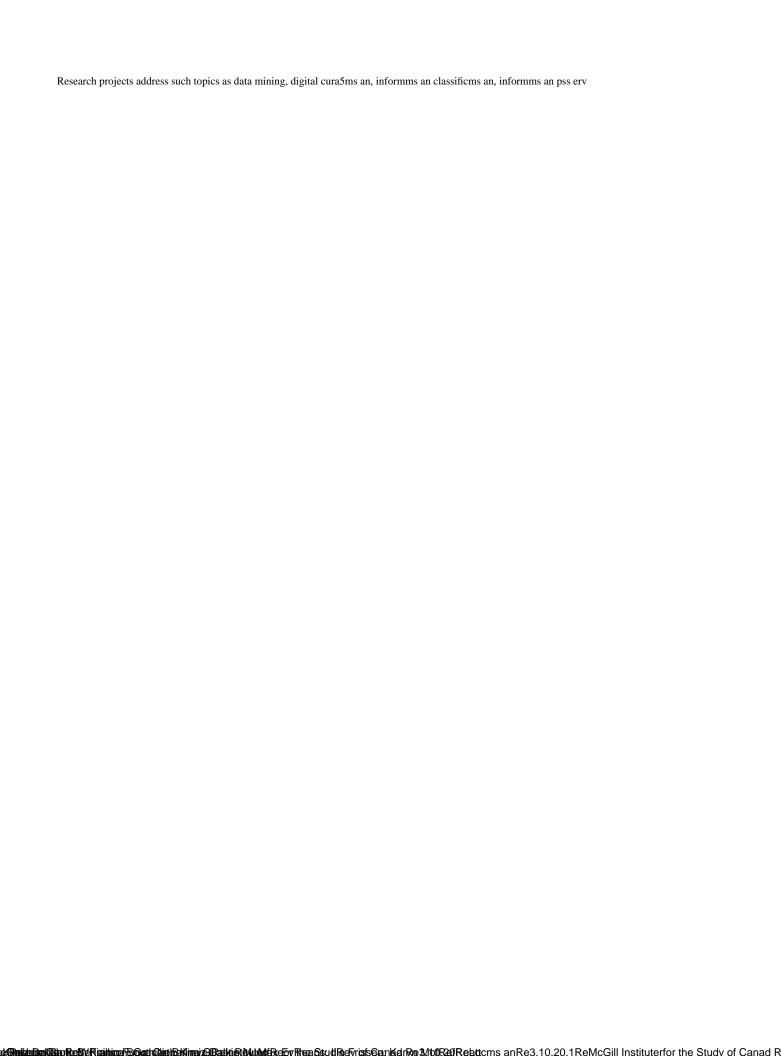
(3)

Introductory Sanskrit

RELG 257D2

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.

Maximum of 6 relevant transfer credits may be accepted from approved exchange programs subject to adviser and Univ



in Canada, aboriginal art and culture, the experience of indigeneity and gender, and legacies of Indigenous resistance to the Canadian state. The Minor in Indigenous Studies draws on expertise and experience in Indigenous affairs located at McGill University and within the broader community. For more information, please see <a href="mailto:mcgill.ca/indigenous-studies/">mcgill.ca/indigenous-studies/</a>.

#### 3.10.20.5 Quebec Studies

The McGill Institute for the Study of Canada offer the following program in Quebec Studies:

The goal of the Minor in Quebec Studies and Community-Engaged Learning is to offer an interdisciplinary overview of Quebec's historical and contemporary realities, as well as a community-engaged learning experience in a Montreal organization. Students are offered the possibility of linking academic course content with hands-on experience within a Montreal-based community organization. For more information, please see <code>mcgill.ca/qcst/</code>.

#### 3.10.20.6 McGill Institute for the Study of Canada Faculty

#### Director

Daniel Béland

#### **Program Director**

Canadian Studies: Jennifer Elrick

Indigenous Studies: Noelani M. Arista

Quebec Studies: Pascal Brissette

## 3.10.20.7 Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies (18 credits)

This interdisciplinary program focuses on different aspects of Canada and its key institutions, with an emphasis on public affairs. The Minor Concentration enables students to take courses about Canada outside the areas of their other major or minor concentrations.

#### Required Courses (6 credits)

CANS 200	(3)	Understanding Canada
CANS 420	(3)	Shaping Public Affairs in Canada

#### **Complementary Courses (12 credits)**

3 credits chosen from:

ECON 219	(3)	Current Economic Problems: Topics
ENGL 228	(3)	Canadian Literature 1
ENGL 229	(3)	Canadian Literature 2
FREN 252	(3)	Littérature québécoise
HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
INDG 200	(3)	Introduction to Indigenous Studies
POLI 221	(3)	Government of Canada
POLI 222	(3)	Political Process and Behaviour in Canada
QCST 200	(3)	Introduction to the Study of Quebec
SOCI 230	(3)	Sociology of Ethnic Relations

CANS 308	(3)	Sex and Gender in Canada
CANS 310	(3)	Canadian Cultures: Context and Issues
CANS 311	(3)	Topics in Canadian Public Affairs 1
CANS 312	(3)	Topics in Canadian Public Affairs 2
CANS 315	(3)	Indigenous Art and Culture
CANS 401	(3)	Canadian Studies Seminar 1
CANS 402	(3)	Canadian Studies Seminar 2
CANS 404	(3)	Canadian Studies Seminar 4
CANS 405	(3)	Canadian Studies Seminar 5
CANS 406	(3)	Canadian Studies Seminar 6
CANS 412	(3)	Canada and Americas Seminar
CANS 413	(3)	Canada and Quebec Seminar
CANS 499	(3)	Internship - Canadian Studies
0-6 credits chosen from:		
ANTH 338	(3)	Indigenous Studies of Anthropology
ARTH 302	(3)	Aspects of Canadian Art
ECON 303	(3)	Canadian Economic Policy
ECON 305	(3)	Industrial Organization
ECON 308	(3)	Governmental Policy Towards Business
ENGL 313	(3)	Canadian Drama and Theatre
ENGL 393	(3)	Canadian Cinema
FREN 315	(3)	Cinéma québécois
HIST 303	(3)	History of Quebec
HIST 342	(3)	Canada and the World
HIST 343	(3)	Women in Post-Confederation Canada
HIST 357	(3)	Cultural Diversity in Canada
HIST 363	(3)	Canada 1870-1914
HIST 364	(3)	Canada 1914-1945
HIST 367	(3)	Canada since 1945
LING 325	(3)	Canadian English
POLI 336	(3)	Le Québec et le Canada
POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 417	(3)	Health Care in Canada
POLI 426	(3)	Partis politiques et comportements électoraux au Québec
POLI 478	(3)	The Canadian Constitution
QCST 300	(3)	Quebec Culture and Society
SOCI 375	(3)	Suspect Minorities in Canada
SOCI 475	(3)	Canadian Ethnic Studies Seminar

## 3.10.20.8 Bachelor of Arts (B.A.) - Minor Concentration Indigenous Studies (18 credits)

The Minor Concentration in Indigenous Studies provides students with a broad, interdisciplinary view of key issues in the historical, social and cultural dimensions of Indigenous life in Canada. Core courses offered within the program will provide interdisciplinary treatments of Indigenous life. The Program

will focus on the history of indigenous populations in Canada, Aboriginal art and culture, the experience of indigeneity and gender, and legacies of Indigenous resistance to the Canadian state.

## **Required Courses (6 credits)**

INDG 200	(3)	Introduction to Indigenous Studies
INDG 401	(3)	Interdisciplinary Seminar in Indigenous Studies

## **Complementary Courses (12 credits)**

A maximum of 3 complementary course credits at the 200-level. A maximum of 6 credits from any given discipline with the exception of Indigenous Studies (INDG) courses.

## Anthropology

ANTH 338	(3)	Indigenous Studies of Anthropology
ANTH 436	(3)	North American Native Peoples

#### **Canadian Studies**

CANS 306	(3)	Topics in Indigenous Public Affairs
CANS 315	(3)	Indigenous Art and Culture

### **English**

ENGL 297	(3)	Special Topics of Literary Study
ENGL 440	(3)	First Nations and Inuit Literature and Medi

#### ENGL 440 (3) First Nations and Inuit Literature and Med

## Gender, Sexuality, and Feminist Studies

GSFS 307	(3)	Indigenous Feminisms
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## Geography

GEOG 301	(3)	Geography of Nunavut
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#### History

HIST 202	(3)	Survey: Canada to 1867
HIST 223	(3)	Indigenous Peoples and Empires
HIST 303	(3)	History of Quebec
HIST 309	(3)	History of Latin America to 1825
HIST 333	(3)	Indigenous Peoples and French
HIST 361	(3)	Topics in Canadian Regional History
HIST 363	(3)	Canada 1870-1914
HIST 408	(3)	Selected Topics in Indigenous History

#### **Indigenous Studies**

INDG 202	(3)	Topics in Indigenous Studies 1
INDG 300	(3)	Topics in Indigenous Studies 2
INDG 301	(3)	Indigenous Contemporary Resistance

INDG 302	(3)	Introduction to Kanien'ké:ha
INDG 400	(3)	Seminar: Indigenous Studies
INDG 420	(3)	Indigenous Food Sovereignty
INDG 450	(3)	Rotinonhsón:ni Land-Based Pedagogy
Interdisciplinary Field C	ourse	
IDFC 500	(3)	Indigenous Field Studies
Law		
CMPL 500	(3)	Indigenous Peoples and the State
CMPL 500D1	(1.5)	Indigenous Peoples and the State
CMPL 500D2	(1.5)	Indigenous Peoples and the State
Linguistics		
LING 211	(3)	Introduction to Indigenous Languages
LING 411	(3)	Structure of an Indigenous Language

## **Political Science**

POLI 221	(3)	Government of Canada
POLI 222	(3)	Political Process and Behaviour in Canada
SOCI 230	(3)	Sociology of Ethnic Relations

## 300-400 Levels

 $9\mbox{-}15$  credits in the interdisciplinary Canadian Studies (CANS) courses chosen from:

CANS 300	(3)	Topics in Canadian Studies 1
CANS 301	(3)	Topics in Canadian Studies 2
CANS 307	(3)	Canada in the World
CANS 308	(3)	Sex and Gender in Canada
CANS 310	(3)	Canadian Cultures: Context and Issues
CANS 311	(3)	Topics in Canadian Public Affairs 1
CANS 312	(3)	Topics in Canadian Public Affairs 2
CANS 315	(3)	Indigenous Art and Culture
CANS 401	(3)	Canadian Studies Seminar 1
CANS 402	(3)	Canadian Studies Seminar 2
CANS 404	(3)	Canadian Studies Seminar 4
CANS 405	(3)	Canadian Studies Seminar 5
CANS 406	(3)	Canadian Studies Seminar 6
CANS 408	(3)	Individual Reading Course
CANS 412	(3)	Canada and Americas Seminar
CANS 413	(3)	Canada and Quebec Seminar
CANS 499	(3)	Internship - Canadian Studies

#### 6-12 credits chosen from:

ANTH 338	(3)	Indigenous Studies of Anthropology
ARTH 302	(3)	Aspects of Canadian Art
ECON 303	(3)	Canadian Economic Policy
ECON 305	(3)	Industrial Organization
ECON 308	(3)	Governmental Policy Towards Business
ENGL 313	(3)	Canadian Drama and Theatre
ENGL 393	(3)	Canadian Cinema
FREN 315	(3)	Cinéma québécois
HIST 303	(3)	History of Quebec
HIST 342	(3)	Canada and the World
HIST 343	(3)	Women in Post-Confederation Canada
HIST 357	(3)	Cultural Diversity in Canada
HIST 363	(3)	Canada 1870-1914
HIST 364	(3)	Canada 1914-1945
HIST 367	(3)	Canada since 1945
LING 325	(3)	Canadian English
POLI 336	(3)	Le Québec et le Canada

POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 417	(3)	Health Care in Canada
POLI 426	(3)	Partis politiques et comportements électoraux au Québec
POLI 478	(3)	The Canadian Constitution
QCST 300	(3)	Quebec Culture and Society
SOCI 375	(3)	Suspect Minorities in Canada
SOCI 475	(3)	Canadian Ethnic Studies Seminar

3.10.20.10 Quebec Studies/Études sur le Québec 3.10.20.10.1 Généralités: Études sur le Québec

Le Programme études québecoises veut fav

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# **Art History and Communication Studies**

Canadian Broadcasting Polic

POLI 342	(3)	Canadian Foreign Policy
POLI 378	(3)	The Canadian Judicial Process
POLI 417	(3)	Health Care in Canada
POLI 426	(3)	Partis politiques et comportements électoraux au Québec
Sociology / Sociologie	е	
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 475	(3)	Canadian Ethnic Studies Seminar

### 3.10.21 International Development

#### 3.10.21.1 Location

Institute for the Study of International Development 3610 McTavish Street, 2nd Floor

Montreal QC H3A 1Y2 Telephone: 514-398-4804 Email: ids@mcgill.ca Website: mcgill.ca/isid

Adviser: Lisa Stanischewski, lisa.stanischewski@mcgill.ca

#### 3.10.21.2 About International Development

McGill's Institute for the Study of International Development (ISID) works to improve people's lives through cutting edge research, training, and communication that accelerates global sustainable development. It does this by educating successive generations of socially responsible and politically engaged students, developing intellectual capacity, and conducting leading edge research that is relevant for policymaking. Equally important, ISID is committed to connecting our teaching and research with the decision makers and principal actors tackling today's most pressing issues by supporting and engaging with NGOs, governments, community organizations, private sector actors, and civil society more broadly, working to increase our collective capacity for achieving sustainable development that will lead to economic and social improvements across the globe.

# 3.10.21.3 International Development Studies 3.10.21.3.1 About International Development Studies

The International Development Studies (IDS) program is designed for those students who wish to take advantage of the resources available at McGill to pursue an interdisciplinary program of study focusing on the problems of the developing countries.

Most courses above the 200 level have prerequisites. Although these may be waived by instructors in some cases, students are urged to confirm their eligibility for courses when they prepare their programs of study. Note that certain courses (especially those in Management) may not be available owing to space limitations. Students should check the *Class Schedule* on Minerva for confirmation as to which term courses are offered.

## 3.10.21.5 Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)

The B.A.; Minor Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, and key development-related themes.

At least 9 of the 18 credits must be at the 300 level or above.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

#### **Required Courses (9 credits)**

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
INTD 200	(3)	Introduction to International Development

#### **Complementary Courses (9 credits)**

#### **Thematic**

9 credits from the following:

## **Agriculture**

A Global Issues on Development, Food and Agriculture

ANTH 512	(3)	Political Ecology
Business Admini	stration	
BUSA 433*	(3)	Topics in International Business 1
* When topic is relev	vant to IDS.	
Canadian Studies	5	
CANS 315	(3)	Indigenous Art and Culture
East Asian Studie	es	
EAST 211	(3)	Introduction: East Asian Culture: China
EAST 213	(3)	Introduction: East Asian Culture: Korea
Economics		
ECON 205	(3)	An Introduction to Political Economy
ECON 209	(3)	Macroeconomic Analysis and Applications
ECON 223	(3)	Political Economy of Trade Policy
ECON 314	(3)	Economic Development 2
ECON 326	(3)	Ecological Economics
ECON 336	(3)	The Chinese Economy
ECON 347	(3)	Economics of Climate Change
ECON 411	(3)	Economic Development: A World Area
ECON 416	(3)	Topics in Economic Development 2
ECON 473	(3)	Income Distribution
English		
ENGL 440	(3)	First Nations and Inuit Literature and Media
Geography		
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 325	(3)	New Master-Planned Cities
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 425	(3)	Southeast Asia Urban Field Studies
GEOG 510	(3)	Humid Tropical Environments

# History

Students may count either HIST 339 or POLI 347 towards their program but not both.

(3)	FYS: Race in Latin America
(3)	Introduction to African History
(3)	Modern African History
(3)	Introduction to East Asian History
(3)	Introduction to South Asian History
(3)	World History, 600-2000
(3)	Modern East Asian History
(3)	Indigenous Peoples and Empires
(3)	History of Latin America to 1825
(3)	Themes in Indian Ocean World History
(3)	Indigenous Peoples and French
(3)	Twentieth-Century China
(3)	History of Modern Egypt
(23)1.8s in S0 0 1	$\textit{TTh52} n4s22a1SDmt(op332an8stissto3ryTm(T)6j1\ 0\ 0\ r4))1\ 0\ 0\ 1\ 5410 ory\ of\ Latin$
(3)	Latin America since 1825
(3)	Topics in Canadian Regional History
(3)	Canada 1870-1914
	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)

ISLA 345	(3)	Science and Civilization in Islam
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 365	(3)	Middle East Since the 1970's
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 421	(3)	Islamic Culture - Indian Subcontinent

#### Latin American & Caribbean Studies

LACS 497 (3) Research Seminar: Latin America and the C	ne Caribbean
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<sup>\*</sup> When topic is relevant to IDS.

## **Management Core**

MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business

## Management, Organizational Behavior

ORGB 380	(3)	Cross Cultural Management

## **Management Policy**

MGPO 435	(3)	The Origins of Capitalism
MGPO 438	(3)	Social Entrepreneurship and Innovation
MGPO 440	(3)	Strategies for Sustainability
MGPO 469	(3)	Managing Globalization
MGPO 475	(3)	Strategies for Developing Countries
MSUS 402	(3)	Systems Thinking and Sustainability

## Nutrition

NUTR 501 (3) Nutrition in Developing Countries

## **Political Science**

POLI 227	(3)	Developing Areas/Introduction
POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa
POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 345	(3)	International Organizations

POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime
POLI 359	(3)	Topics in International Politics 1
POLI 369	(3)	Politics of Southeast Asia
POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
POLI 441	(3)	IPE: Trade
POLI 442	(3)	International Relations of Ethnic Conflict
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 450	(3)	Peacebuilding
POLI 474	(3)	Inequality and Development
POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
Religious Studies		
RELG 331	(3)	Religion and Globalization
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 375	(3)	Religion, Politics and Society
Sociology		
SOCI 234	(3)	Population and Society
SOCI 254	(3)	Development and Underdevelopment
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 309	(3)	Health and Illness
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 446	(3)	Colonialism and Society
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 550	(3)	Developing Societies
SOCI 555	(3)	Comparative Historical Sociology

# Social Work

SWRK 400 (3) Policy and Practice for Refugees

#### 3.10.21.6 Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)

The B.A.; Major Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

#### Course Selection Guidelines for the Overall Program

- 1. At least 18 of the 36 credits must be at the 300 level or above.
- 2. At least 9 credits must be from INTD courses.
- 3. Students cannot take more than 12 credits in any one discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

#### Required Courses (12 credits)

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
INTD 200	(3)	Introduction to International Development
INTD 497	(3)	Advanced Topics in International Development

#### **Complementary Courses (24 credits)**

6 credits from the following two Introductory Categories.

#### **Culture, Populations and Development**

3 credits from the following:

ANTH 202	(3)	Socio-Cultural Anthropology
ANTH 212	(3)	Anthropology of Development
GEOG 210	(3)	Global Places and Peoples
INTD 350	(3)	Culture and Development

## **Politics, Society and Development**

3 credits from the following:

POLI 227	(3)	Developing Areas/Introduction
POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
SOCI 254	(3)	Development and Underdevelopment

#### **Thematic**

12-15 credits from the following:

#### Agriculture

AGRI 411 (3) Global Issues on Development, Food and Agriculture

#### **Agricultural Economics**

AGEC 430 (3) Agriculture, Food and Resource Policy

Economics of International Agricultural De

ECON 473	(3)	Income Distribution
English		
ENGL 440	(3)	First Nations and Inuit Literature and Media
Geography		
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 325	(3)	New Master-Planned Cities
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 425	(3)	Southeast Asia Urban Field Studies
GEOG 510	(3)	Humid Tropical Environments
History		
HIST 197	(3)	FYS: Race in Latin America
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 208	(3)	Introduction to East Asian History
HIST 209	(3)	Introduction to South Asian History
HIST 213	(3)	World History, 600-2000
HIST 218	(3)	Modern East Asian History
HIST 223	(3)	Indigenous Peoples and Empires
HIST 309	(3)	History of Latin America to 1825
HIST 317	(3)	Themes in Indian Ocean World History
HIST 333	(3)	Indigenous Peoples and French
HIST 338	(3)	Twentieth-Century China
HIST 340	(3)	History of Modern Egypt
HIST 341	(3)	Themes in South Asian History
HIST 360	(3)	Latin America since 1825
HIST 361	(3)	Topics in Canadian Regional History
HIST 363	(3)	Canada 1870-1914
HIST 366	(3)	Themes in Latin American History
HIST 382	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 528	(3)	Indian Ocean World Slave Trade

International De

SOCI 307	(3)	Globalization
SOCI 309	(3)	Health and Illness
SOCI 365	(3)	Health and Development
		Sociology: Hd De

## 3.10.21.7 Bachelor of Arts (B.A.) - Honours International Development Studies (57 credits)

The B.A.; Honours in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

Honours students must maintain a CGPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

#### **Course Selection Guidelines for the Overall Program**

- 1. At least 30 of the 57 credits must be at the 300 level or above; 9 credits of these must be at the 400 level or above.
- 2. At least 12 credits must be from INTD courses.
- 3. Students cannot take more than 18 credits in any discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

#### Required Courses (12 credits)

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
INTD 200	(3)	Introduction to International Development
INTD 498	(3)	Honours Seminar in International Development

#### Complementary Courses (45 credits)

6 credits from the following two Introductory Categories.

#### **Culture, Populations and Development**

3 credits from the following:

ANTH 202	(3)	Socio-Cultural Anthropology
ANTH 212	(3)	Anthropology of Development
GEOG 210	(3)	Global Places and Peoples
INTD 350	(3)	Culture and Development

#### Politics, Society and Development

3 credits from the following:

POLI 227	(3)	Developing Areas/Introduction
POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
SOCI 254	(3)	Development and Underdevelopment

#### **Thematic**

30-33 credits from the following:

## Agriculture

#### **Agricultural Economics**

AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development

Anthro	ogo	loav

ANTH 206	(3)	Environment and Culture
ANTH 209	(3)	Anthropology of Religion
ANTH 222	(3)	Legal Anthropology
ANTH 227	(3)	Medical Anthropology
ANTH 308	(3)	Political Anthropology 01
ANTH 318	(3)	Globalization and Religion
ANTH 322	(3)	Social Change in Modern Africa
ANTH 326	(3)	Anthropology of Latin America
ANTH 327	(3)	Anthropology of South Asia
ANTH 338	(3)	Indigenous Studies of Anthropology
ANTH 339	(3)	Ecological Anthropology
ANTH 343	(3)	Anthropology and the Animal
ANTH 418	(3)	Environment and Development
ANTH 422	(3)	Contemporary Latin American Culture and Society
ANTH 436	(3)	North American Native Peoples
ANTH 500	(3)	Chinese Diversity and Diaspora
ANTH 512	(3)	Political Ecology

## **Business Administration**

BUSA 433\* (3) Topics in International Business 1

## **Canadian Studies**

CANS 315 (3) Indigenous Art and Culture

## East Asian Studies

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 213	(3)	Introduction: East Asian Culture: Korea

## Economics3)EAST 211

ECON 205	(3)	An Introduction to Political Economy
ECON 209	(3)	Macroeconomic Analysis and Applications

(3)ANTH 343

<sup>\*</sup> When topic is relevant to IDS.

English		
ENGL 440	(3)	First Nations and Inuit Literature and Media
Geography		
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 325	(3)	New Master-Planned Cities
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 425	(3)	Southeast Asia Urban Field Studies
GEOG 510	(3)	Humid Tropical Environments
History		
HIST 197	(3)	FYS: Race in Latin America
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 208	(3)	Introduction to East Asian History
HIST 209	(3)	Introduction to South Asian History
HIST 213	(3)	World History, 600-2000
HIST 218	(3)	Modern East Asian History
HIST 223	(3)	Indigenous Peoples and Empires
HIST 309	(3)	History of Latin America to 1825
HIST 317	(3)	Themes in Indian Ocean World History
HIST 333	(3)	Indigenous Peoples and French
HIST 338	(3)	Twentieth-Century China
HIST 340	(3)	History of Modern Egypt
HIST 341	(3)	Themes in South Asian History
		Latin

INTD 350	(3)	Culture and Development
INTD 352	(3)	Disasters and Development
INTD 354	(3)	Civil Society and Development
INTD 360	(3)	Environmental Challenges in Development
INTD 397	(3)	Topics in International Development
INTD 398	(3)	Topics in Conflict and Development
INTD 490	(3)	Development Research Project
INTD 491	(3)	Honours Thesis
INTD 492	(6)	Honours Thesis with Field Research
INTD 497	(3)	Advanced Topics in International Development
INTD 499	(3)	Internship: International Development Studies
INTD 597	(3)	Seminar in International Development
Islamic Studies		
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 310	(3)	Women in Islam
ISLA 310 ISLA 345	(3)	
	. ,	Women in Islam
ISLA 345	(3)	Women in Islam Science and Civilization in Islam
ISLA 345 ISLA 355	(3)	Women in Islam Science and Civilization in Islam Modern History of the Middle East
ISLA 345 ISLA 355 ISLA 360	(3) (3) (3)	Women in Islam Science and Civilization in Islam Modern History of the Middle East Islam and Politics
ISLA 345 ISLA 355 ISLA 360 ISLA 365	(3) (3) (3) (3)	Women in Islam Science and Civilization in Islam Modern History of the Middle East Islam and Politics Middle East Since the 1970's
ISLA 345 ISLA 355 ISLA 360 ISLA 365 ISLA 383	(3) (3) (3) (3) (3)	Women in Islam Science and Civilization in Islam Modern History of the Middle East Islam and Politics Middle East Since the 1970's Central Questions in Islamic Law

Latin American & Caribbean Studies

#### 3.10.21.8 Bachelor of Arts (B.A.) - Joint Honours Component International Development Studies (36 credits)

The B.A.; Joint Honours - International Development Studies component focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary Honours thesis (if applicable).

Honours students must maintain a CGPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

#### Course Selection Guidelines for the Overall Program

- 1. At least 18 of the 36 credits must be at the 300 level or above. Nine credits must be at the 400 level or above.
- 2. At least 12 credits must be from INTD courses.
- 3. Students cannot take more than 12 credits in any one discipline other than the INTD discipline.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

NOTE: Students in the Econ-IDS Joint Honours program are required to take ECON 257D1/D2 and therefore cannot also take ECON 227 as part of their IDS program requirements.

#### **Required Courses (12 credits)**

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
INTD 200	(3)	Introduction to International Development
INTD 498	(3)	Honours Seminar in International Development

#### Complementary Courses (24 credits)

6 credits from the following two Introductory e follo

Agricultural Economics				
AGEC 430	(3)	Agriculture, Food and Resource Policy		
AGEC 442	(3)	Economics of International Agricultural Development		
Anthropology				
ANTH 206	(3)	Environment and Culture		
ANTH 209	(3)	Anthropology of Religion		
ANTH 222	(3)	Legal Anthropology		
ANTH 227	(3)	Medical Anthropology		
ANTH 308	(3)	Political Anthropology 01		
ANTH 318	(3)	Globalization and Religion		
ANTH 322	(3)	Social Change in Modern Africa		
ANTH 326	(3)	Anthropology of Latin America		
ANTH 327	(3)	Anthropology of South Asia		
ANTH 338	(3)	Indigenous Studies of Anthropology		
ANTH 339	(3)	Ecological Anthropology		
ANTH 343	(3)	Anthropology and the Animal		
ANTH 418	(3)	Environment and Development		
ANTH 422	(3)	Contemporary Latin American Culture and Society		
ANTH 436	(3)	North American Native Peoples		
ANTH 500	(3)	Chinese Diversity and Diaspora		
ANTH 512	(3)	Political Ecology		
Business Adminis	stration			
BUSA 433*	(3)	Topics in International Business 1		
* When topic is relevant to IDS.				
O II O				
Canadian Studies				

## **Canadian Studies**

CANS 315 (3) Indigenous Art and Culture

## **East Asian Studies**

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 213	(3)	Introduction: East Asian Culture: Korea

#### **Economics**

ECON 205	(3)	An Introduction to Political Economy
ECON 209	(3)	Macroeconomic Analysis and Applications
ECON 223	(3)	Political Economy of Trade Policy
ECON 314	(3)	Economic Development 2
ECON 326	(3)	Ecological Economics
ECON 336	(3)	The Chinese Economy

ECON 347	(3)	Economics of Climate Change
ECON 411	(3)	Economic Development: A World Area
ECON 416	(3)	Topics in Economic Development 2
ECON 473	(3)	Income Distribution

# English

HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 528	(3)	Indian Ocean World Slave Trade
International Deve	lopment Studie	es
INTD 350	(3)	Culture and Development
INTD 352	(3)	Disasters and Development
INTD 354	(3)	Civil Society and Development
INTD 360	(3)	Environmental Challenges in Development
INTD 397	(3)	Topics in International Development
INTD 398	(3)	Topics in Conflict and Development
INTD 490	(3)	Development Research Project
INTD 491	(3)	Honours Thesis
INTD 492	(6)	Honours Thesis with Field Research
INTD 497	(3)	Advanced Topics in International Development
INTD 499	(3)	Internship: International Development Studies
INTD 597	(3)	Seminar in International Development
Islamic Studies		
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 310	(3)	Women in Islam
ISLA 345	(3)	Science and Civilization in Islam
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 365	(3)	Middle East Since the 1970's
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
Latin American &	Caribbean Stud	lies
LACS 497*	(3)	Research Seminar: Latin America and the Caribbean
* When topic is releva	ant to IDS.	
Management Core	)	
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business
Managamant Com	anizational Dat	oular
Management, Org	anızadonal Beh	avi∪i

Cross Cultural Management

ORGB 380

(3)

Management Policy		
MGPO 435	(3)	The Origins of Capitalism
MGPO 438	(3)	Social Entrepreneurship and Innovation
MGPO 440	(3)	Strategies for Sustainability
MGPO 469	(3)	Managing Globalization
MGPO 475	(3)	Strategies for Developing Countries
MSUS 402	(3)	Systems Thinking and Sustainability
Nutrition		
NUTR 501	(3)	Nutrition in Developing Countries
Political Science		
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa
POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 345	(3)	International Organizations
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime
POLI 359	(3)	Topics in International Politics 1
POLI 369	(3)	Politics of Southeast Asia
POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 422	(3)	Developing Areas/Topics 2
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality

POLI 441

(3)

IPE: Trade

F	RELG 331	(3)	Religion and Globalization
F	RELG 370	(3)	Religion and Human Rights
F	RELG 371	(3)	Ethics of Violence/Non-Violence
F	RELG 375	(3)	Religion, Politics and Society
s	ociology		
	SOCI 234	(3)	Population and Society
S	•	(3) (3)	Population and Society War, States and Social Change
5	SOCI 234	,	

~		•
50	cin	logy
20	$\mathbf{c}_{10}$	1027

SOCI 350	(3)	Statistics in Social Research
SOCI 461	(3)	Quantitative Data Analysis
SOCI 477	(3)	Qualitative Methods in Sociology

#### 3.10.22 Islamic Studies

Please see section 3.10.22.1: African Studies (AFRI) or section 3.10.22.2: World Islamic and Middle East Studies for more information.

#### 3.10.22.1 African Studies (AFRI)

#### 3.10.22.1.1 About African Studies

Established in 1969, the African Studies Program at McGill was the first of its kind in Canada. The Program offers courses across the disciplines leading to a Minor and Major Concentration and a Joint Honors Program, allowing students many exciting opportunities to explore a wide range of political, historical, social, economic, and environmental issues pertaining to Africa. The underlying conception of the African Studies Program emanates from the basic premise that African Studies is a foundational field of study and a global intellectual enterprise, rather than one constrained by territorial boundaries.

For students pursuing a Major or Minor concentration in African Studies, the plan of study begins with an introductory course that explores African issues from an interdisciplinary and global perspective and ends with an advanced research seminar. In addition to facilitating opportunities for students to travel and study in Africa, the Program also offers a course in Swahili, which greatly enhances knowledge of African culture and society and can, along with other courses offered, pave the path towards exciting future career and travel opportunities in Africa. The African Studies Program also sponsors a variety of other types of scholarly and cultural activities throughout the academic year related to Africa and the African diaspora, many of which are initiated by its undergraduate student organization, the African Studies Students Association (ASSA), as well as the McGill African Students Society (MASS).

Further information ts is available at asdmcgill.com/.

#### 3.10.22.1.2 African Studies Faculty

#### **Program Chair**

Khalid Mustafa Medani - Political Science & Islamic Studies

#### **Program Committee**

Wendell Nii Laryea Adjetev - History and Classical Studies

Gwyn Campbell - History and Classical Studies

Mbaye Diouf – Département des littératures de langue française, de traduction et de création

Elizabeth Elbourne - History and Classical Studies

Pedro Monaville - History and Classical Studies

Monica Popescu - English

 $Jon\ Unruh-Geography$ 

#### **Affiliated Faculty**

Michelle Laura Hartman - Institute of Islamic Studies

#### 3.10.22.1.3 Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)

The Minor Concentration African Studies is available for those students majoring in a discipline of the Faculty of Arts who wish to acquire interdisciplinary knowledge of Africa.

This program may be expanded to the Major Concentration African Studies.

#### Required Courses (6 credits)

AFRI 200	(3)	Introduction to African Studies
AFRI 598	(3)	Research Seminar in African Studies

## **Complementary Courses (12 credits)**

12 credits selected as follows:

3 credits from the Group A or "core" course list and

9 credits from the Group B course list drawn from at least 2 disciplines with no more than 6 credits from any one discipline.

If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the program adviser.

Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

## **Group A**

#### 3 credits from:

ANTH 322	(3)	Social Change in Modern Africa
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
POLI 324	(3)	Developing Areas/Africa

#### Group B

9 credits from the Group B course lists below drawn from at least 2 disciplines with no more than 6 credits from any one discipline.

#### **African Studies**

AFRI 401	(3)	Swahili Language and Culture
AFRI 480	(3)	Honours Thesis
AFRI 481	(3)	Special Topics 1
AFRI 499	(3)	Arts Internships: African Studies
HIST 579D1	(3)	Seminar: African History

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GEOG 403	3 (3)	Global Health and Environmental Change
GEOG 404	4 (3)	Environmental Management 2
GEOG 408	8 (3)	Geography of Development
GEOG 410	0 (3)	Geography of Underdevelopment: Current Problems
GEOG 41	6 (3)	Africa South of the Sahara

## **Complementary Courses (30 credits)**

30 credits selected as follows:

9 credits from the Group A or "core" course list and

21 credits from the Group B course list drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the Program Adviser.

Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

#### **Group A**

9 credits from:

ANTH 322	(3)	Social Change in Modern Africa
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
POLI 324	(3)	Developing Areas/Africa

#### **Group B**

21 credits from the Group B course lists below drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

#### **African Studies**

AFRI 401	(3)	Swahili Language and Culture
AFRI 480	(3)	Honours Thesis
AFRI 481	(3)	Special Topics 1
AFRI 499	(3)	Arts Internships: African Studies
HIST 579D1	(3)	Seminar: African History
HIST 579D2	(3)	Seminar: African History

# Anthropology

ANTH 212	(3)	Anthropology of Development
ANTH 301	(3)	Nomadic Pastoralists
ANTH 322	(3)	Social Change in Modern Africa
ANTH 411	(3)	Primate Studies and Conservation
ANTH 416	(3)	Environment/Development: Africa

#### **Economics**

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
ECON 416	(3)	Tonics in Economic Development 2

#### **English**

 $\ensuremath{^{*}}$  Note: Course is counted only when African materials are taught.

ENGL 320*	(3)	Postcolonial Literature
ENGL 352*	(3)	Theories of Difference
ENGL 421	(3)	African Literature

McGill Univ 435

Geography		
GEOG 216	(3)	Geography of the World Economy
GEOG 403	(3)	Global Health and Environmental Change
GEOG 404	(3)	Environmental Management 2
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 416	(3)	Africa South of the Sahara
History		
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 381	(3)	Colonial Africa
HIST 382	(3)	History of South Africa
		Independent Tm(En)Tj1 0 0 1 230.04lo0 0 1 230.04l81

ENGL 421	(3)	African Literature
Geography		
GEOG 216	(3)	Geography of the World Economy
GEOG 302	(3)	Environmental Management 1
GEOG 403	(3)	Global Health and Environmental Change
GEOG 404*	(3)	Environmental Management 2
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 416*	(3)	Africa South of the Sahara
GEOG 423*	(3)	Dilemmas of Development
GEOG 451*	(3)	Research in Society and Development in Africa
GEOG 493*	(3)	Health and Environment in Africa

<sup>\*</sup> Note: Normally offered as field courses (in African Studies Field Semester)

## History

HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 382	(3)	History of South Africa
HIST 444	(3)	British Colonies: Africa and Asia
HIST 498	(3)	Independent Research
HIST 528	(3)	Indian Ocean World Slave Trade

#### **Islamic Studies**

ISLA 221D1	(4.5)	Introductory Arabic
ISLA 221D2	(4.5)	Introductory Arabic
ISLA 360	(3)	Islam and Politics
ISLA 410	(3)	History: Middle-East 1798-1918

## **Political Science**

<sup>\*</sup> Note: Course is counted only when African materials are taught. Admission to this course will be subject to the Political Science departmental requirements and approval of the Departmental Honours Adviser. Priority will be given to Political Science students.

POLI 227	(3)	Developing Areas/Introduction
POLI 324	(3)	Developing Areas/Africa
POLI 522*	(3)	Seminar: Developing Areas

# Sociology

SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 446	(3)	Colonialism and Society
SOCI 484	(3)	Emerging Democratic States
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa

# 3.10.22.1.6 African Studies Related Programs and Study Semesters

(3)

31022.1.61 Africa Field Study Semester

See Study Abroad & Field Studies > Undergraduate > section 12.2.1.1: Africa Field Study Semester for details of the 15-credit interdisciplinary AFSS.

# 3.10.22.2 World Islamic and Middle East Studies 3.10.22.2.1 Location

Morrice Hall, Room 319 3485 McTavish Street Montreal QC H3A 0E1 Telephone: 514-398-6077 Email: info islamics@mcoill

Email: info.islamics@mcgill.ca Website: mcgill.ca/islamicstudies

## 3.10.22.2.2 About World Islamic and Middle East Studies

The under

# **Faculty Lecturers**

Da

ISLA 241D2	(3)	Introductory Persian
ISLA 251D1	(3)	Introductory Urdu-Hindi
ISLA 251D2	(3)	Introductory Urdu-Hindi
ISLA 300 Level an	d Higher	
6 credits from:		
ISLA 310	(3)	Women in Islam
ISLA 315	(3)	Ottoman State and Society to 1839
ISLA 322D1	(3)	Lower Intermediate Arabic
ISLA 322D2	(3)	Lower Intermediate Arabic
ISLA 325	(3)	Introduction to Shi'i Islam
ISLA 330	(3)	Islamic Mysticism: Sufism
ISLA 333D1	(3)	Lower Intermediate Turkish
ISLA 333D2	(3)	Lower Intermediate Turkish
ISLA 340	(3)	Islamic Law and Human Rights
ISLA 342D1	(3)	Lower Intermediate Persian
ISLA 342D2	(3)	Lower Intermediate Persian
ISLA 345	(3)	Science and Civilization in Islam
ISLA 350	(3)	From Tribe to Dynasty
ISLA 352D1	(3)	Intermediate Urdu-Hindi
ISLA 352D2	(3)	Intermediate Urdu-Hindi
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 370	(3)	The Qur'an: History and Interpretation
ISLA 380	(3)	Islamic Philosophy and Theology
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 385	(3)	Poetics and Politics in Arabic Literature
ISLA 388	(3)	Persian Literature
ISLA 392	(3)	Arabic Literature as World Literature
ISLA 423D1	(3)	Higher Intermediate Arabic
ISLA 423D2	(3)	Higher Intermediate Arabic
ISLA Courses		
ISLA 199	(3)	FYS: Narrations of the Middle East
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 325	(3)	Introduction to Shi'i Islam
ISLA 330	(3)	Islamic Mysticism: Sufism
ISLA 340	(3)	Islamic Law and Human Rights
ISLA 345	(3)	Science and Civilization in Islam
ISLA 350	(3)	From Tribe to Dynasty

**ISLA 355** 

(3)

Modern History of the Middle East

ISLA 360 (3) Islam and Politics
ISLA 370 (3) The Qur'an: History and Interpretation
Islamic Philosoph

ISLA 434D1	(3)	Higher Intermediate Turkish
ISLA 434D2	(3)	Higher Intermediate Turkish
ISLA 535D1	(3)	Advanced Turkish
ISLA 535D2	(3)	Advanced Turkish
Urdu		
ISLA 251D1	(3)	Introductory Urdu-Hindi
ISLA 251D2	(3)	Introductory Urdu-Hindi
ISLA 352D1	(3)	Intermediate Urdu-Hindi
ISLA 352D2	(3)	Intermediate Urdu-Hindi
ISLA 553	(3)	Advanced Urdu-Hindi 1
ISLA 554	(3)	Advanced Urdu-Hindi 2

# ISLA 100-/200-Level

3 credits from:

ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ISLA 430	(3)	Islamdom: Baghdad to Cordoba
ISLA 488	(3)	Tales of Wonder-Islamic World
ISLA 502	(3)	Art in the Age of Empires
ISLA 505	(3)	Islam: Origin and Early Development
ISLA 506	(3)	Revolutions in the Arab World
ISLA 512	(3)	Art of the Ottoman Empire
ISLA 515	(3)	The Medieval School in Islam
ISLA 516	(3)	Medieval Islam, 13th-15th Century
ISLA 526	(3)	Colloquial Arabic
ISLA 555	(3)	Urdu Poetry
ISLA 585	(3)	Arab Women's Literature

6-9 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

#### **Non-ISLA Courses**

ANTH 327	(3)	Anthropology of South Asia
HIST 240	(3)	Modern History of Islamic Movements
HIST 341	(3)	Themes in South Asian History
HIST 435	(3)	Topics in South Asian History
HIST 591D1	(3)	Modern Middle East History
HIST 591D2	(3)	Modern Middle East History
JWST 220D1	(3)	Introductory Hebrew
JWST 220D2	(3)	Introductory Hebrew
JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 320D1	(3)	Intermediate Hebrew
JWST 320D2	(3)	Intermediate Hebrew
JWST 323	(3)	The Israeli Novel
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 366	(3)	History of Zionism
JWST 367	(3)	Hebrew through Israeli Cinema
JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture
PHIL 356	(3)	Early Medieval Philosophy
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
RELG 204	(3)	Judaism, Christianity and Islam

RELG 307	(3)	Bible, Quran and Interpretations
RELG 309	(3)	World Religions and Cultures They Create
RELG 573	(3)	Religions in Global Society

#### 3.10.22.2.10 Bachelor of Arts (B.A.) - Honours World Islamic & Middle East Studies (60 credits)

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

Honours students must maintain a program GPA of 3.30 in their World Islamic and Middle East Studies courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

#### Required Courses (6 credits)

ISLA 495	(3)	World Islamic and Middle East Studies Research Seminar
ISLA 496	(3)	Independent Reading and Research

#### Complementary Courses (54 credits)

54 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:

18-21 credits (3 levels) in one language: Arabic, Persian, Turkish, or Urdu (lists below).

33-36 credits (33 if Introductory Arabic has been chosen), distributed as follows:

3 credits of 100-/200-level non-language ISLA courses;

12 credits of 300-level non-language ISLA courses;

9 credits of 400-/500-level non-language ISLA courses;

9-12 credits at any level, including more language courses, but no more than 9 credits overall at the 100-/200-level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

Languages (18-21 credits)

#### Arabic

ISLA 221D1	(4.5)	Introductory Arabic
ISLA 221D2	(4.5)	Introductory Arabic
ISLA 322	(6)	Lower Intermediate Arabic
ISLA 322D1	(3)	Lower Intermediate Arabic
ISLA 322D2	(3)	Lower Intermediate Arabic
ISLA 423D1	(3)	Higher Intermediate Arabic
ISLA 423D2	(3)	Higher Intermediate Arabic
ISLA 524	(3)	Advanced Arabic 1
ISLA 525	(3)	Advanced Arabic 2
Persian		

#### Persian

ISLA 241D1	(3)	Introductory Persian
ISLA 241D2	(3)	Introductory Persian
ISLA 342D1	(3)	Lower Intermediate Persian
ISLA 342D2	(3)	Lower Intermediate Persian
ISLA 443D1	(3)	Upper Intermediate Persian
ISLA 443D2	(3)	Upper Intermediate Persian
ISLA 545	(3)	Advanced Persian 1

ISLA 546	(3)	Advanced Persian 2
Turkish		
ISLA 232D1	(3)	Introductory Turkish
ISLA 232D2	(3)	Introductory Turkish
ISLA 333D1	(3)	Lower Intermediate Turkish
ISLA 333D2	(3)	Lower Intermediate Turkish
ISLA 434D1	(3)	Higher Intermediate Turkish
ISLA 434D2	(3)	Higher Intermediate Turkish
ISLA 535D1	(3)	Advanced Turkish
ISLA 535D2	(3)	Advanced Turkish
Urdu		

rdu-Hindi

Introductory Urdu-Hindi

ISLA 392 (3) Arabic Literature as World Literature

# ISLA 400-/500-Level

9 credits from:		
ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ISLA 430	(3)	Islamdom: Baghdad to Cordoba
ISLA 488	(3)	Tales of Wonder-Islamic World
ISLA 502	(3)	Art in the Age of Empires
ISLA 505	(3)	Islam: Origin and Early Development
ISLA 506	(3)	Revolutions in the Arab World
ISLA 512	(3)	Art of the Ottoman Empire
ISLA 515	(3)	The Medieval School in Islam
ISLA 516	(3)	Medieval Islam, 13th-15th Century
ISLA 526	(3)	Colloquial Arabic
ISLA 555	(3)	Urdu Poetry
ISLA 585	(3)	Arab Women's Literature

<sup>9-12</sup> credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 9 credits overall at the 100-/200-level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

# **Non-ISLA Courses**

ANTH 327	(3)	Anthropology of South Asia
HIST 240	(3)	Modern History of Islamic Movements
HIST 435	(3)	Topics in South Asian History
JWST 220D1	(3)	Introductory Hebrew
JWST 220D2	(3)	Introductory Hebrew
JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 320D1	(3)	Intermediate Hebrew
JWST 320D2	(3)	Intermediate Hebrew
JWST 323	(3)	The Israeli Novel
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 366	(3)	History of Zionism
JWST 367	(3)	Hebrew through Israeli Cinema
JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture
PHIL 356	(3)	Early Medieval Philosophy

POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
RELG 204	(3)	Judaism, Christianity and Islam
RELG 307	(3)	Bible, Quran and Interpretations
RELG 309	(3)	World Religions and Cultures They Create
RELG 573	(3)	Religions in Global Society

#### 31022211 Bachelor of Arts (B.A.) - Joint Honours Component World Islamic & Middle East Studies (36 credits)

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs."

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Joint Honours students must maintain a program GPA of 3.30 in their W

ISLA 241D2	(3)	Introductory Persian
ISLA 342D1	(3)	Lower Intermediate Persian
ISLA 342D2	(3)	Lower Intermediate Persian
ISLA 443D1	(3)	Upper Intermediate Persian
ISLA 443D2	(3)	Upper Intermediate Persian
ISLA 545	(3)	Advanced Persian 1
ISLA 546	(3)	Advanced Persian 2
Turkish		
ISLA 232D1	(3)	Introductory Turkish
ISLA 232D2	(3)	Introductory Turkish
ISLA 232D2 ISLA 333D1	<ul><li>(3)</li><li>(3)</li></ul>	Introductory Turkish  Lower Intermediate Turkish
		ř
ISLA 333D1	(3)	Lower Intermediate Turkish
ISLA 333D1 ISLA 333D2	(3)	Lower Intermediate Turkish Lower Intermediate Turkish

Adv

ISLA 360	(3)	Islam and Politics
ISLA 370	(3)	The Qur'an: History and Interpretation
ISLA 380	(3)	Islamic Philosophy and Theology
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 385	(3)	Poetics and Politics in Arabic Literature
ISLA 388	(3)	Persian Literature
ISLA 392	(3)	Arabic Literature as World Literature

## ISLA 400-/500-Level

3 credits from:	credits f	rom:
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ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ISLA 430	(3)	Islamdom: Baghdad to Cordoba
ISLA 488	(3)	Tales of Wonder-Islamic World
ISLA 502	(3)	Art in the Age of Empires
ISLA 505	(3)	Islam: Origin and Early Development
ISLA 506	(3)	Revolutions in the Arab World
ISLA 512	(3)	Art of the Ottoman Empire
ISLA 515	(3)	The Medieval School in Islam
ISLA 516	(3)	Medieval Islam, 13th-15th Century
ISLA 526	(3)	Colloquial Arabic
ISLA 555	(3)	Urdu Poetry
ISLA 585	(3)	Arab Women's Literature

<sup>3-6</sup> credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall of at the 200 level. Students may fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 366	(3)	History of Zionism
JWST 367	(3)	Hebrew through Israeli Cinema
JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture
PHIL 356	(3)	Early Medieval Philosophy
	(3)	Developing Areas/Middle East

#### **Emeritus Professor**

B. Barry Levy

#### **Professors**

David Aberbach; Carlos Fraenkel; Gershon Hundert

#### **Associate Professors**

Eric Caplan; Yael Halevi-Wise; Lawrence Kaplan

## **Assistant Professors**

Urszula Madej-Krupitski; Christopher Silver

#### Lecturers

Lea Fima; Yuri Vedenyapin

## **Adjunct Professor**

Daniel Kupfert Heller

## 3.10.23.4 Bachelor of Arts (B.A.) - Minor Concentration Jewish Studies (18 credits)

In order to permit students flexibility within their chosen area, all courses in the Jewish Studies Concentrations are placed into the cate

JWST 240	(3)	The Holocaust
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 445	(3)	The Poetry of Nationalism
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 585	(3)	Tutorial: Eastern European Studies 1
JWST 586	(3)	Tutorial: Eastern European Studies 2
Jewish History		
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 306	(3)	The American Jewish Community
		Denominations in North wish CoF6R97 3: 1000 - 4 344.141 Tm((3))Tj1 0 0 10 1 165.86(God anLib08 1 Tm(The )Tj1 (

JWST 315	(3)	Modern Liberal Jewish Thought
JWST 337	(3)	Jewish Philosophy and Thought 1
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 358	(3)	Topics in Jewish Philosophy 1
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 474	(3)	Maimonides' Mishneh Torah
JWST 558	(3)	Topics: Modern Jewish Thought

JWST 486	(3)	Tutorial in Yiddish Literature
JWST 530	(3)	Topics in Yiddish Literature
Modern Jewish St	udies	
EDER 319	(3)	Teaching the Holocaust
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 309	(3)	Jews in Film
		Modern Je

## **Other Department Courses - History**

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.

HIST 194	(3)	FYS: Jewish Concepts of Others
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History

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JWST 240	(3)	The Holocaust
JWST 306	(3)	The American Jewish Community
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism

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JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture
JWST 383	(3)	Holocaust Literature
JWST 403	(3)	Contemporary Hebrew Literature
JWST 445	(3)	The Poetry of Nationalism

# Language and Literature - Yiddish

JWST 206	(3)	Introduction to Yiddish Literature
JWST 281	(3)	Introductory Yiddish 1
JWST 282	(3)	Introductory Yiddish 2
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 387	(3)	Modern Jewish Authors
JWST 480	(3)	Advanced Yiddish 1
JWST 481	(3)	Advanced Yiddish 2
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 530	(3)	Topics in Yiddish Literature

#### **Modern Jewish Studies**

EDER 319	(3)	Teaching the Holocaust
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 309	(3)	Jews in Film
JWST 346	(3)	Modern Jewish Studies
JWST 347	(3)	Modern Jewish Studies
JWST 348	(3)	Modern Jewish Studies
JWST 349	(3)	Modern Jewish Studies
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 383	(3)	Holocaust Literature
JWST 386	(3)	American Jewish Literature

JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 445	(3)	The Poetry of Nationalism
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 585	(3)	Tutorial: Eastern European Studies 1
JWST 586	(3)	Tutorial: Eastern European Studies 2
Jewish History		
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000

JWST 240 (3) The Holocaust

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HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 309	(3)	Jews in Film
JWST 346	(3)	Modern Jewish Studies
JWST 347	(3)	Modern Jewish Studies
JWST 348	(3)	Modern Jewish Studies
JWST 349	(3)	Modern Jewish Studies
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 361	(3)	The Shtetl: 1500-1897

HIST 194	(3)	FYS: Jewish Concepts of Others
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History

## 3.10.23.7 Bachelor of Arts (B.A.) - Joint Honours Component Jewish Studies (36 credits)

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.00 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

## **Required Courses (9 credits)**

JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 491	(3)	Honours Thesis 1
JWST 492	(3)	Honours Thesis 2

## **Complementary Courses (27 credits)**

27 credits selected as follows:

#### **Jewish History**

6 credits of courses on Jewish history.

One of:

HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000

One of:

HIST 219 (3) Jewish History: 1000 - 2000

# **Biblical Studies**

JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 310	(3)	Believers, Heretics and Critics
JWST 327	(3)	A Book of the Bible
JWST 330	(3)	Topics in the Hebrew Bible
JWST 510	(3)	Jewish Bible Interpretation 1
JWST 511	(3)	Jewish Bible Interpretation 2
JWST 520	(3)	Bible Interpretation in Antiquity
JWST 538	(3)	Early Rabbinic Parshanut 1
JWST 581	(3)	Aramaic Language
RELG 307	(3)	Bible, Quran and Interpretations

JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
Jewish Thought		
EDER 318	(3)	Teaching the Jewish Liturgy
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
JWST 201	(3)	Jewish Law
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 310	(3)	Believers, Heretics and Critics
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 337	(3)	Jewish Philosophy and Thought 1
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 358	(3)	Topics in Jewish Philosophy 1
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 474	(3)	Maimonides' Mishneh Torah

# Language and Literature - Hebrew

**JWST 558** 

JWST 199 (3) FYS: Images - Jewish Identities

(3)

Topics: Modern Jewish Thought

JWST 370	(3)	Israeli Popular Culture	
JWST 383	(3)	Holocaust Literature	
JWST 403	(3)	Contemporary Hebrew Literature	
JWST 445	(3)	The Poetry of Nationalism	
Language and Literature - Yiddish			

JWST 206	(3)	Introduction to Yiddish Literature
JWST 281	(3)	Introductory Yiddish 1
JWST 282	(3)	Introductory Yiddish 2
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 387	(3)	Modern Jewish Authors
JWST 480	(3)	Advanced Yiddish 1
JWST 481	(3)	Advanced Yiddish 2
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 530	(3)	Topics in Yiddish Literature

#### **Modern Jewish Studies**

EDER 319	(2)	Tanahing the Hologoust
	(3)	Teaching the Holocaust
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 309	(3)	Jews in Film
JWST 346	(3)	Modern Jewish Studies
JWST 347	(3)	Modern Jewish Studies
JWST 348	(3)	Modern Jewish Studies
JWST 349	(3)	Modern Jewish Studies
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 383	(3)	Holocaust Literature
JWST 386	(3)	American Jewish Literature
JWST 387	(3)	Modern Jewish Authors
JWST 445	(3)	The Poetry of Nationalism

JWST 558	(3)	Topics: Modern Jewish Thought
JWST 585	(3)	Tutorial: Eastern European Studies 1
JWST 586	(3)	Tutorial: Eastern European Studies 2
		Arab-Israel Conflict, CrisisJWST 585

## 3.10.24 Languages, Literatures, and Cultures

## 3.10.24.1 Location

Department of Languages, Literatures, and Cultures 680 Sherbrooke Street West, Suite 425 Montreal QC H3A 2M7

Telephone: 514-398-3650 Email: info.llcu@mcgill.ca Website: mcgill.ca/langlitcultures

# 3.10.24.2 About Languages, Literatures, and Cultures

The Department of Languages, Literatures, and Cultures is dedicated to fostering a critical understanding of European and Latin American cultures in a global context. To this end, we offer programs in:

- section 3.10.24.3: European Literature and Culture
- section 3.10.24.4: German Studies
- section 3.10.24.5: Hispanic Studies

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# 3.10.24.4 German Studies

With faculty members working at the forefront of literary

- section 3.10.24.21: Bachelor of Arts (B.A.) Minor Concentration Italian Studies (18 credits) (Expandable)
- section 3.10.24.22: Bachelor of Arts (B.A.) Major Concentration Italian Studies (36 credits)
- section 3.10.24.23: Bachelor of Arts (B.A.) Honours Italian Studies (54 credits)
- section 3.10.24.24: Bachelor of Arts (B.A.) Joint Honours Component Italian Studies (36 credits)

## 3.10.24.7 Latin American and Caribbean Studies

The Honours Latin American and Caribbean Studies is designed to meet the needs of students who plan to attend graduate or professional school upon completion of the B.A. This programs provides a comprehensive interdisciplinary understanding of Latin America and the Caribbean, upon which more specialized coursework and research may be based. This program is recommended for students who en

Adviser: Daniel W. Pratt 680 Sherbrooke, Room 333

Telephone: 514-398-4400, ext. 094513

- section 3.10.24.25: Bachelor of Arts (B.A.) Minor Concentration Russian (18 credits) (Expandable)
- section 3.10.24.26: Bachelor of Arts (B.A.) Minor Concentration Russian Culture (18 credits)
- section 3.10.24.27: Bachelor of Arts (B.A.) Major Concentration Russian (36 credits)
- section 3.10.24.28: Bachelor of Arts (B.A.) Honours Russian (60 credits)
- section 3.10.24.29: Bachelor of Arts (B.A.) Joint Honours Component Russian (36 credits)

#### 3.10.24.10 Languages, Literatures, and Cultures Faculty

#### Chair

Fernanda Macchi

## Directors of Undergraduate Studies/Advisers

Amanda Holmes (Hispanic Studies)

Eugenio Bolongaro (Italian Studies)

Daniel W. Pratt (Russian Studies)

Stephanie Posthumus (European Literature and Culture)

Tove Holmes (German Studies)

Katherine Zien (Latin American and Caribbean Studies)

Matteo Soranzo (Liberal Arts)

#### **Directors of Graduate Studies**

Karin Bauer (German Studies)

TBD (Russian Studies)

## Required Course (3 credits)

LLCU 210 (3) Introduction to European Literature and Culture

## **Complementary Courses (15 credits)**

9-15 credits selected from the list below. At least 6 credits should be at the 300-level or above.

Students with an advanced knowledge of German, Italian, Russian, or Spanish can count GERM, HISP, ITAL, and RUSS literature courses taught in those languages toward the Minor Concentration. No more than 6 credits in any given area (LLCU, GERM, HISP, ITAL, and RUSS) shall count toward the Minor Concentration (not including LLCU 210).

GERM 355	(3)	Nietzsche and Wagner
GERM 357	(3)	German Culture in European Context
GERM 358	(3)	Franz Kafka

Students may begin at the intermediate or advanced level in their first year if they have taken German courses in high school or in CEGEP or through McGill Summer Studies.

Note: Beginners' and Intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.

## Complementary Courses (18 credits)

18 credits of language courses or any course above the 325 level given in the German language, selected from the following:

#### **Language Courses**

GERM 200	(6)	German Language, Intensive Beginners
GERM 202	(6)	German Language, Beginners'
GERM 202D1	(3)	German Language, Beginners'
GERM 202D2	(3)	German Language, Beginners
GERM 300	(6)	German Language Intensive Intermediate
GERM 307	(6)	German Language - Intermediate
GERM 307D1	(3)	German Language - Intermediate
GERM 307D2	(3)	German Language - Intermediate
GERM 325	(6)	German Language - Intensive Advanced

GERM 385	(3)	Critical Theory
GERM 388	(3)	Post-Wall Culture
GERM 390	(3)	Topics in 21st Century German Literature and Culture
GERM 397	(3)	Individual Reading Course 01
GERM 398	(3)	Individual Reading Course 02
GERM 401	(3)	Advanced Topics in German Literature and Culture

## 3.10.24.13 Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)

The Minor Concentration in German Studies provides an introduction to and critical understanding of a variety of aspects of German culture from the eighteenth century to the present day. It is designed to complement other forms of disciplinary and cultural inquiry, such as international studies, the digital humanities, and studies in other languages or geographic areas. Courses include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture.

This program may be expanded to a Major Concentration.

#### **Complementary Courses (18 credits)**

18 credits of courses in German literature, culture, and film taught in English or German selected from the following list.

A maximum of 6 credits of LLCU courses can be taken, with prior departmental approval.

Beginners' and Intermediate Language courses may not be applied towards this Minor Concentration.

GERM 325 may be applied towards this Minor Concentration.

GERM 259	(3)	Introduction to German Literature 1
GERM 260	(3)	Introduction to German Literature 2
GERM 325	(6)	German Language - Intensive Advanced
GERM 326	(3)	Topics: German Language and Culture
GERM 331	(3)	Germany after Reunification
GERM 332	(3)	Topics in Eighteenth-Century German Literature and Culture
GERM 333	(3)	What is Enlightenment?
GERM 335	(3)	Science and Literature
GERM 336	(3)	German Language, Media and Culture
GERM 337	(3)	Literature and Revolution
GERM 340	(3)	Romanticism
GERM 344	(3)	Realism
GERM 348	(3)	Nature and Ecopoetics
GERM 350	(3)	Modernism and the Avant-Garde
GERM 351	(3)	Berlin
GERM 355	(3)	Nietzsche and Wagner
GERM 357	(3)	German Culture in European Context
GERM 358	(3)	Franz Kafka
GERM 359	(3)	Bertolt Brecht
GERM 360	(3)	German Drama
GERM 362	(3)	20th Century Literature Topics
GERM 364	(3)	Gender and Society in German Literature and Culture
GERM 365	(3)	Modern Short Fiction
GERM 366	(3)	Lyric Poetry
GERM 368	(3)	Fin-de-Siècle Vienna

GERM 336	(3)	German Language, Media and Culture
GERM 337	(3)	Literature and Revolution
GERM 340	(3)	Romanticism
GERM 344	(3)	Realism
GERM 348	(3)	Nature and Ecopoetics
GERM 350	(3)	Modernism and the Avant-Garde
GERM 351	(3)	Berlin
GERM 355	(3)	Nietzsche and Wagner
GERM 357	(3)	German Culture in European Context
GERM 358	(3)	Franz Kafka
GERM 359	(3)	Bertolt Brecht
GERM 360	(3)	German Drama
GERM 362	(3)	20th Century Literature Topics
GERM 364	(3)	Gender and Society in German Literature and Culture
GERM 365	(3)	Modern Short Fiction
GERM 366	(3)	Lyric Poetry
GERM 368	(3)	Fin-de-Siècle Vienna
GERM 369	(3)	The German Novel
GERM 371	(3)	German Cinema
GERM 372	(3)	Topics in German Cinema
GERM 373	(3)	Weimar German Cinema
GERM 375	(3)	German Media Studies
GERM 379	(3)	German Visual Culture
GERM 381	(3)	Topics in German Thought
GERM 385	(3)	Critical Theory
GERM 388	(3)	Post-Wall Culture
GERM 390	(3)	Topics in 21st Century German Literature and Culture
GERM 397	(3)	Individual Reading Course 01
GERM 398	(3)	Individual Reading Course 02
GERM 401	(3)	Advanced Topics in German Literature and Culture
GERM 580	(3)	Topics in German Literature and Culture

#### 3.10.24.15 Bachelor of Arts (B.A.) - Honours German Studies (60 credits)

The Honours in German Studies provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the Honours program and all courses towards Honours will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

Note: Beginners' and intermediate language levels are offered either as a one-term intensive course or a two-term spanned course. Students choose which version of the level they prefer.

Admission to the Honours program requires departmental approval. Students may begin this program in their first year. Honours students must maintain a GPA of 3.30 in their program courses, and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Honours students, according to Faculty regulations, also must complete at least a minor concentration (18 credits) in another academic unit.

#### Required Courses (6 credits)

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GERM 575 (6) Honours Thesis

## **Complementary Courses (54 credits)**

54 credits of complementary courses taken in German selected with the following specifications:

6 credits must be in pre-20th century literature and culture.

Students can take a maximum of 6 credits of LLCU courses and only with prior approval.

A maximum of 9 credits in GERM courses offered in English and only with prior approval.

3 credits at the 400-level.

#### **Language Courses**

GERM 200	(6)	German Language, Intensive Beginners
GERM 202	(6)	German Language, Beginners'
GERM 202D1	(3)	German Language, Beginners'
GERM 202D2	(3)	German Language, Beginners
GERM 300	(6)	German Language Intensive Intermediate
GERM 307	(6)	German Language - Intermediate
GERM 307D1	(3)	German Language - Intermediate
GERM 307D2	(3)	German Language - Intermediate
GERM 325	(6)	German Language - Intensive Advanced

## **List of Complementary Courses:**

GERM 259	(3)	Introduction to German Literature 1
GERM 260	(3)	Introduction to German Literature 2
GERM 331*	(3)	Germany after Reunification
GERM 332	(3)	Topics in Eighteenth-Century German Literature and Culture
GERM 333	(3)	What is Enlightenment?
GERM 335	(3)	Science and Literature
GERM 336*	(3)	German Language, Media and Culture
GERM 337	(3)	Literature and Revolution
GERM 340	(3)	Romanticism
GERM 344	(3)	Realism
GERM 348	(3)	Nature and Ecopoetics
GERM 350	(3)	Modernism and the Avant-Garde
GERM 351	(3)	Berlin
GERM 355	(3)	Nietzsche and Wagner
GERM 357	(3)	German Culture in European Context
GERM 358	(3)	Franz Kafka
GERM 359	(3)	Bertolt Brecht
GERM 360	(3)	German Drama
GERM 362	(3)	20th Century Literature Topics
GERM 364	(3)	Gender and Society in German Literature and Culture
GERM 365	(3)	Modern Short Fiction
GERM 366	(3)	Lyric Poetry

GERM 368 (3) Fin-de-Siècle Vienna GERM 369 (3) The German Novel

GERM 307D1	(3)	German Language - Intermediate
GERM 307D2	(3)	German Language - Intermediate
GERM 325	(6)	German Language - Intensive Advanced

# **Literature and Culture Courses**

\*NOTE: Students can take either GERM 331 or GERM 336 but not both.

GERM 259	(3)	Introduction to German Literature 1
GERM 260	(3)	Introduction to German Literature 2
GERM 331	(3)	Germany after Reunification
GERM 332	(3)	Topics in Eighteenth-Century German Literature and Culture
GERM 333	(3)	What is Enlightenment?
GERM 336	(3)	German Language, Media and Culture
GERM 337	(3)	Literature and Revolution
GERM 340	(3)	Romanticism
GERM 344	(3)	Realism
GERM 348	(3)	Nature and Ecopoetics
GERM 350	(3)	Modernism and the Avant-Garde
GERM 351	(3)	Berlin
GERM 355	(3)	Nietzsche and Wagner
GERM 357	(3)	German Culture in European Context
GERM 358	(3)	Franz Kafka
GERM 359	(3)	Bertolt Brecht
GERM 360	(3)	German Drama

ntury Literature 20th Century Literature Topics

## 3.10.24.17 Bachelor of Arts (B.A.) - Minor Concentration Hispanic Studies (18 credits)

The Minor Concentration in Hispanic Studies provides students with a solid foundation on Spanish language and culture. It can be expanded to the Major Concentration in Hispanic Studies - Languages, if a language course is included in the Minor Concentration, or the Major Concentration in Hispanic Studies - Literature and Culture, if no language course is included in the Minor Concentration.

#### **Complementary Courses**

0-12 credits in language courses.

HISP 210	(6)	Spanish Language: Beginners
HISP 218	(6)	Spanish Language Intensive - Elementary
HISP 219	(6)	Spanish Language Intensive - Intermediate
HISP 220	(6)	Spanish Language: Intermediate

If fewer than 12 credits are chosen, students must fulfill the balance from other eligible HISP courses as listed below.

At least 3 credits in Surveys of Literature to be chosen from the following courses:

HISP 241	(3)	Survey of Spanish Literature and Culture 1
HISP 242	(3)	Survey of Spanish Literature and Culture 2
HISP 243	(3)	Survey of Latin American Literature and Culture 1
HISP 244	(3)	Survey of Latin American Literature and Culture 2

At least 3 credits chosen from the following courses [Note: No more than 6 credits in courses taught in English shall count towards the Minor Concentration.]

#### **Courses Taught in Spanish**

HISP 321	(3)	Hispanic Literature of the 18th Century
HISP 324	(3)	20th Century Drama
HISP 325	(3)	Spanish Novel of the 19th Century
HISP 326	(3)	Spanish Romanticism
HISP 327	(3)	Literature of Ideas: Spain
HISP 328	(3)	Literature of Ideas: Latin America
HISP 332	(3)	Latin American Literature of 19th Century
HISP 333	(3)	Theatre, Performance and Politics in Latin America
HISP 340	(3)	Latin American Cinema
HISP 341	(3)	Spanish Cinema
HISP 350	(3)	Spanish Literature from 1898 to the Civil War
HISP 352	(3)	Latin American Novel
HISP 356	(3)	Latin American Short Story
HISP 358	(3)	Gender and Textualities
HISP 432	(3)	Literature - Discovery and Exploration Spain New World
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 438	(3)	Topics: Spanish Literature
HISP 439	(3)	Topics: Latin American Literature
HISP 453	(3)	20th Century Latin American Poetry
HISP 454	(3)	Major Figures: Spanish Literature and Culture
HISP 455	(3)	Major Figures: Latin American Literature and Culture

HISP 457	(3)	Medieval Literature
HISP 458	(3)	Golden Age Literature: Renaissance
HISP 460	(3)	Golden Age Literature: Baroque
HISP 505	(3)	Seminar in Hispanic Studies 01

# **Courses Tses**

## 300-Level or Above Hispanic Literature

12-30 credits in Hispanic literature at the 300 level or above, of which at least 6 credits must be in literature of the pre-1800 period, from:

HISP 320	(3)	Contemporary Brazilian Literature and Film
HISP 321	(3)	Hispanic Literature of the 18th Century
HISP 324	(3)	20th Century Drama
HISP 325	(3)	Spanish Novel of the 19th Century
HISP 326	(3)	Spanish Romanticism
HISP 327	(3)	Literature of Ideas: Spain
HISP 328	(3)	Literature of Ideas: Latin America
HISP 332	(3)	Latin American Literature of 19th Century
HISP 333	(3)	Theatre, Performance and Politics in Latin America
HISP 340	(3)	Latin American Cinema
HISP 341	(3)	Spanish Cinema
HISP 345	(3)	Contemporary Hispanic Cultural Studies
HISP 347	(3)	Queer Iberia
HISP 350	(3)	Spanish Literature from 1898 to the Civil War
HISP 352	(3)	Latin American Novel
HISP 355	(3)	Contemporary Spanish Literature and Culture
HISP 356	(3)	Latin American Short Story
HISP 357	(3)	Latin American Digital Literature and Culture
HISP 358	(3)	Gender and Textualities
HISP 425	(3)	Topics in Hispanic and Lusophone Visual Cultures
HISP 432	(3)	Literature - Discovery and Exploration Spain New World
HISP 438	(3)	Topics: Spanish Literature
HISP 439	(3)	Topics: Latin American Literature
HISP 453	(3)	20th Century Latin American Poetry
HISP 454	(3)	Major Figures: Spanish Literature and Culture
HISP 455	(3)	Major Figures: Latin American Literature and Culture
HISP 505	(3)	Seminar in Hispanic Studies 01

#### Pre-1800 Literature

At least 6 credits from:

HISP 432	(3)	Literature - Discovery and Exploration Spain New World
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 451	(3)	Don Quixote
HISP 458	(3)	Golden Age Literature: Renaissance
HISP 460	(3)	Golden Age Literature: Baroque

Note: No more than 12 credits in courses taught in English shall count towards the Major.

#### 3.10.24.19 Bachelor of Arts (B.A.) - Honours Hispanic Studies (60 credits)

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional,

linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.

McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website

Prerequisite for admission into Honours Hispanic Studies: a first-year Spanish course with a final grade of B+. Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Students must take an 18-credit Minor concentration in another area.

#### Required Courses (21 credits)

HISP 241	(3)	Survey of Spanish Literature and Culture 1
HISP 242	(3)	Survey of Spanish Literature and Culture 2
HISP 243	(3)	Survey of Latin American Literature and Culture 1
HISP 244	(3)	Survey of Latin American Literature and Culture 2
HISP 451	(3)	Don Quixote
HISP 490D1	(3)	Honours Thesis
HISP 490D2	(3)	Honours Thesis

#### **Complementary Courses (39 credits)**

39 credits with at least 6 credits selected from:

HISP 432	(3)	Literature - Discovery and Exploration Spain New World
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 458	(3)	Golden Age Literature: Renaissance
HISP 460	(3)	Golden Age Literature: Baroque

All remaining credits may be selected from courses given in Spanish in the Department at or above the intermediate Spanish language level (HISP 219 OR HISP 220D1/HISP 220D2).

No more than 18 credits in courses taught in English will count towards the Honours program.

#### 3.10.24.20 Bachelor of Arts (B.A.) - Joint Honours Component Hispanic Studies (36 credits)

The Department of Languages, Literatures, and Cultures - Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.

McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Joint Honours students are expected to maintain a program GPA of 3.30 and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

#### **Required Courses (9 credits)**

HISP 451	(3)	Don Quixote
HISP 490D1	(3)	Honours Thesis
HISP 490D2	(3)	Honours Thesis

#### Complementary Courses (27 credits)

## 27 credits selected as follows:

# **Survey of Literature**

At least 6-12 credits from the following:

HISP 241	(3)	Survey of Spanish Literature and Culture 1
HISP 242	(3)	Survey of Spanish Literature and Culture 2
HISP 243	(3)	Survey of Latin American Literature and Culture 1
HISP 244	(3)	Survey of Latin American Literature and Culture 2

## 400-Level

At least 6 credits from the 400-level courses below:

HISP 432	(3)	Literature - Discovery and Exploration Spain New World
HISP 437	(3)	Colonial / Postcolonial Latin America
		Golden

ITAL 295	(3)	Italian Cultural Studies
ITAL 310	(3)	The Invention of Italian Literature
ITAL 329	(3)	Italian Cinematic Tradition
ITAL 332	(3)	Italian Theatrical Traditions
ITAL 341	(3)	The Art of Essay Writing
ITAL 345	(3)	Romanticism in Italy
ITAL 356	(3)	Medieval Discourses on Love
ITAL 360	(3)	Contemporary Italian Prose
ITAL 362	(3)	Post-World War 2 Literature and Society
ITAL 368	(3)	Literature of the Renaissance
ITAL 371	(3)	The Italian Baroque
ITAL 376	(3)	Italian Epic Poetry
ITAL 380	(3)	Italian Realisms
ITAL 383	(3)	Women's Writing since 1880
ITAL 400	(3)	Italian Regional Identities
ITAL 410	(3)	Italian Modernism
ITAL 411	(3)	Pirandello
ITAL 420	(3)	Leopardi Poet and Philosopher
ITAL 435	(3)	Petrarch and His Legacy
ITAL 436	(3)	Tasso's "Gerusalemme Liberata"
ITAL 542	(3)	History of Italian Language
ITAL 551	(3)	Boccaccio and the Italian Novella
ITAL 560	(3)	Topics in 19th and 20th Century Literature
ITAL 563	(3)	13th-16th Century Literature

# **Group C - Courses Taught in English**

ITAL 199	(3)	FYS: Italy's Literature in Context
ITAL 230	(3)	Understanding Italy
ITAL 307	(3)	Topics in Italian Culture
ITAL 355	(3)	Dante and the Middle Ages
ITAL 361	(3)	Modern Italian Literature
ITAL 363	(3)	Gender, Literature and Society
ITAL 365	(3)	The Italian Renaissance
ITAL 374	(3)	Classics of Italian Cinema
ITAL 375	(3)	Cinema and Society in Modern Italy
ITAL 385	(3)	Italian Futurist Movement
ITAL 395	(3)	Interdisciplinary Seminar
ITAL 416	(3)	The Twentieth Century
ITAL 450	(3)	Italy and the Visual Age
ITAL 464	(3)	Machiavelli
ITAL 465	(3)	Religious Identities in Italy
ITAL 477	(3)	Italian Cinema and Video

## 3.10.24.22 Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)

All students wishing to register for the Major Concentration Italian Studies are strongly urged to meet with a departmental adviser.

## **Complementary Courses (36 credits)**

36 credits selected from the three Italian course lists as follows:

Group A – Basic Language Courses (0-12 credits)

- Students with no knowledge of the Italian language must take 12 credits in language.
- Students with some knowledge of the language may take 6 credits only selected from ITAL 210D1/ITAL 210D2, ITAL 215D1/ITAL 215D2, or ITAL 216.
- Students with competency in the language may substitute courses from Groups B and C for Group A Basic Language courses.

ALL students with some background must consult with the Department for proper placement.

Group B - Courses Taught in Italian (a minimum of 12 credits, of which a maximum of 6 credits may be at the 200 level)

Group C – Courses Taught in English (0-12 credits)

## **Group A - Basic Language Courses**

ITAL 205D1	(3)	Italian for Beginners
ITAL 205D2	(3)	Italian for Beginners
ITAL 206	(6)	Beginners Italian Intensive
ITAL 210D1	(3)	Italian for Advanced Beginners
ITAL 210D2	(3)	Italian for Advanced Beginners
ITAL 215D1	(3)	Intermediate Italian
ITAL 215D2	(3)	Intermediate Italian
ITAL 216	(6)	Intermediate Italian Intensive

#### **Group B - Courses Taught in Italian**

\* Note: Only one of ITAL 250 or ITAL 255 can count toward the program.

ITAL 250*	(3)	Italian Literary Composition
ITAL 255*	(6)	Advanced Reading and Composition
ITAL 260	(3)	Reading Italian Literature
ITAL 270	(3)	Manzoni: Novel and Nationhood
ITAL 281	(3)	Masterpieces of Italian Literature 2
ITAL 290	(3)	Commedia Dell'Arte
ITAL 295	(3)	Italian Cultural Studies
ITAL 310	(3)	The Invention of Italian Literature
ITAL 329	(3)	Italian Cinematic Tradition
ITAL 332	(3)	Italian Theatrical Traditions
ITAL 341	(3)	The Art of Essay Writing
ITAL 345	(3)	Romanticism in Italy
ITAL 356	(3)	Medieval Discourses on Love
ITAL 360	(3)	Contemporary Italian Prose
ITAL 362	(3)	Post-World War 2 Literature and Society
ITAL 368	(3)	Literature of the Renaissance
ITAL 371	(3)	The Italian Baroque
ITAL 376	(3)	Italian Epic Poetry

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48 credits, 9 of which must be at the 400 level or above, selected from the four Italian course lists as follows:

0-12 credits from Group A – Basic Language Courses.

30-48 credits from Group B – Courses Taught in Italian.

 $0\text{-}9\ credits\ combined\ from\ Group\ C-Courses\ Taught\ in\ English\ and\ Group\ D-Courses\ Offered\ in\ Other\ Departments.$ 

Note: Students with advanced standing in the language must replace language courses with courses from groups B, C, and D.

## **Group A - Basic Language Courses**

ITAL 205D1	(3)	Italian for Beginners
ITAL 205D2	(3)	Italian for Beginners
ITAL 206	(6)	Beginners Italian Intensive
ITAL 210D1	(3)	Italian for Advanced Beginners
ITAL 210D2	(3)	Italian for Advanced Beginners
ITAL 215D1	(3)	Intermediate Italian
ITAL 215D2	(3)	Intermediate Italian
ITAL 216	(6)	Intermediate Italian Intensive

# **Group B - Courses Taught in Italian**

 $\ensuremath{^{*}}$  Note: Only one of ITAL 250 or ITAL 255 can count toward the program.

ITAL 250*	(3)	Italian Literary Composition
ITAL 255*	(6)	Advanced Reading and Composition
ITAL 260	(3)	Reading Italian Literature
ITAL 270	(3)	Manzoni: Novel and Nationhood
ITAL 281	(3)	Masterpieces of Italian Literature 2
ITAL 290	(3)	Commedia Dell'Arte
ITAL 295	(3)	Italian Cultural Studies
ITAL 307	(3)	Topics in Italian Culture
ITAL 310	(3)	The Invention of Italian Literature
ITAL 329	(3)	Italian Cinematic Tradition
ITAL 332	(3)	Italian Theatrical Traditions
ITAL 345	(3)	Romanticism in Italy

Medieval Discourses on LovMedie

ITAL 365	(3)	The Italian Renaissance
ITAL 374	(3)	Classics of Italian Cinema
ITAL 375	(3)	Cinema and Society in Modern Italy
ITAL 450	(3)	Italy and the Visual Age
ITAL 464	(3)	Machiavelli
ITAL 465	(3)	Religious Identities in Italy
ITAL 477	(3)	Italian Cinema and Video

#### **Group D - Courses Offered in Other Departments**

ARTH 223	(3)	Introduction Italian Renaissance Art 1300-1500
ARTH 325	(3)	Visual Culture Renaissance Venice
CLAS 302	(3)	Roman Literature and Society
CLAS 404	(3)	Classical Tradition
ENGL 447	(3)	Crosscurrents/English Literature and European Literature 1
HIST 345	(3)	History of Italian Renaissance
HIST 380	(3)	The Medieval Mediterranean
HIST 398	(3)	Topics in Italian History
HIST 401	(3)	Topics: Medieval Culture and Society
MUHL 387	(3)	Opera from Mozart to Puccini

#### 3.10.24.24 Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Joint Honours students must maintain a GPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Admission to Joint Honours requires departmental approval. Students wishing to register in the program should consult with the Department as early as possible. Students may register for Joint Honours in the first year, instead of the second year, if in the opinion of the departments they are found to be qualified.

#### Required Courses (6 credits)

ITAL 355	(3)	Dante and the Middle Ages
ITAL 470	(3)	Joint Honours Thesis

#### **Complementary Courses (30 credits)**

30 credits, 6 of which must be at the 400 level or above, selected from the four Italian course lists as follows:

0-12 credits from Group A - Basic Language Courses.

12-30 credits from Group B – Courses Taught in Italian.

0-18 credits combined from Group C - Courses Taught in English and Group D - Courses Offered in Other Departments.

Note: Students with advanced standing in the language must replace language courses with courses from groups B, C, and D.

#### **Group A - Basic Language Courses**

ITAL 205D1	(3)	Italian for Beginners
ITAL 205D2	(3)	Italian for Beginners
ITAL 206	(6)	Beginners Italian Intensive
ITAL 210D1	(3)	Italian for Advanced Beginners

ITAL 210D2	(3)	Italian for Advanced Beginners
ITAL 215D1	(3)	Intermediate Italian
ITAL 215D2	(3)	Intermediate Italian
ITAL 216	(6)	Intermediate Italian Intensive

# **Group B - Courses Taught in Italian**

 $\ensuremath{^{*}}$  Note: Only one of ITAL 250 or ITAL 255 can count toward the program.

ITAL 250*	(3)	Italian Literary Composition
ITAL 255*	(6)	Advanced Reading and Composition
ITAL 260	(3)	Reading Italian Literature
ITAL 270	(3)	Manzoni: Novel and Nationhood
ITAL 281	(3)	Masterpieces of Italian Literature 2
ITAL 290	(3)	Commedia Dell'Arte
ITAL 295	(3)	Italian Cultural Studies
ITAL 307	(3)	Topics in Italian Culture
ITAL 310	(3)	The Invention of Italian Literature
ITAL 332	(3)	Italian Theatrical Traditions
ITAL 356	(3)	Medieval Discourses on Love
ITAL 360	(3)	Contemporary Italian Prose
ITAL 383	(3)	Women's Writing since 1880
ITAL 400	(3)	Italian Regional Identities
ITAL 410	(3)	Italian Modernism
ITAL 560	(3)	Topics in 19th and 20th Century Literature

# **Group C - Courses Taught in English**

ITAL 199	(3)	FYS: Italy's Literature in Context
ITAL 355	(3)	Dante and the Middle Ages
ITAL 365	(3)	The Italian Renaissance
ITAL 375	(3)	Cinema and Society in Modern Italy
ITAL 464	(3)	Machiavelli
ITAL 477	(3)	Italian Cinema and Video

Group D - Courses Offered in Other Depard Other Depar.1 0 0 T864 f1 0 0 1 74j1 0 0 1 77.93ediate Iroduclian aissance

(3)

The Minor Concentration in Russian will give students a basic working knowledge of Russian and the tools with which to explore Russian life and culture in the original. Students who can demonstrate to the Department that they have acquired the equivalent competence elsewhere may waive prerequisites for 300-level courses and above.

The Minor Concentration in Russian may be expanded to the Major Concentration in Russian.

## Complementary Courses (18 credits)

18 credits to be chosen from:

RUSS 210	(3)	Elementary Russian Language 1
RUSS 211	(3)	Elementary Russian Language 2
RUSS 215*	(6)	Elementary Russian Language Intensive 1
RUSS 250	(3)	The Central European Novel
RUSS 300	(3)	Russian for Heritage Speakers 1
R5 508.501 Tm(ers 2)17m(v)(Bj)1 0 0e9		Russian for Heritage Speakers 2

RUSS 218	(3)	Russian Literature and Revolution
RUSS 223	(3)	Russian 19th Century: Literary Giants 1
RUSS 224	(3)	Russian 19th Century: Literary Giants 2
Group B		
6-12 credits from:		
RUSS 213	(3)	Introduction to Soviet Film
RUSS 229	(3)	Introduction to Russian Folklore
RUSS 250	(3)	The Central European Novel
RUSS 330	(3)	Chekhov without Borders
RUSS 333	(3)	Petersburg: City of Myth
RUSS 337	(3)	Vladimir Nabokov
RUSS 340	(3)	Russian Short Story
RUSS 347	(3)	Late and Post-Soviet Culture
RUSS 350	(3)	Central European Film
RUSS 357	(3)	Leo Tolstoy
RUSS 358	(3)	Fyodor Dostoevsky
RUSS 365	(3)	Supernatural and Absurd in Russian Literature
RUSS 369	(3)	Narrative and Memory in Russian Culture
RUSS 381	(3)	Russia's Utopia Complex
RUSS 382	(3)	Russian Opera
RUSS 385	(3)	Russian Drama: from Pushkin to Chekhov
RUSS 390	(3)	Special Topics in Russian
RUSS 395	(3)	Soviet Cinema: Art and Politics
RUSS 397	(3)	Tarkovsky: Cinema and Philosophy
RUSS 398	(3)	Soviet Women Filmmakers
RUSS 427	(3)	Russian Fin de Siècle
RUSS 428	(3)	Russian Avantgarde
RUSS 430	(3)	High Stalinist Culture 1
RUSS 440	(3)	Russia and Its Others
RUSS 454	(3)	Narratives of Desire
RUSS 475	(3)	Special Topics in Russ Culture
RUSS 500	(3)	Special Topics

#### 3.10.24.27 Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)

The Major Concentration in Russian gives students a foundation in the language, literature, and culture of Russia from the 19th century to the present. It incorporates a balance of instruction in the Russian language, the opportunity to read selected texts in the original language, and to explore Russian language and culture through translated texts.

By arrangement with the Department and subject to University approval, transfer credits will be accepted from Department-approved exchange/immersion programs.

#### **Complementary Courses (36 credits)**

36 credits selected from the following specifications:

#### Group A: Russian Language (18 credits)

Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group B or Group C.

18 credits selected from the following courses or their equivalent:

RUSS 210	(h3n)tensi	Elementary Russian Language 1
RUSS 211	(3)	Elementary Russian Language 2
RUSS 215*	(6)	Elementary Russian Language Intensive 1
RUSS 300	(3)	Russian for Heritage Speakers 1
RUSS 301	(3)	Russian for Heritage Speakers 2

RUSS 365	(3)	Supernatural and Absurd in Russian Literature
RUSS 369	(3)	Narrative and Memory in Russian Culture
R	(3)	Russia's Utopia Complex

RUSS 310	(3)	Intermediate Russian Language 1
RUSS 311	(3)	Intermediate Russian Language 2
RUSS 316	(6)	Intermediate Russian Language Intensive 2
RUSS 400	(3)	Advanced Russian Language 1
RUSS 401	(3)	Advanced Russian Language 2
RUSS 415	(6)	Advanced Russian Language Intensive 1
RUSS 416	(6)	Advanced Russian Language Intensive 2

# **Complementary Courses (33 credits)**

33 credits selected from the following specifications:

# **Group A:Russian Language**

Students entering this program with previous knowledge of or e

RUSS 347	(3)	Late and Post-Soviet Culture
RUSS 350	(3)	Central European Film
RUSS 357	(3)	Leo Tolstoy
RUSS 358	(3)	Fyodor Dostoevsky
RUSS 365	(3)	Supernatural and Absurd in Russian Literature
RUSS 369	(3)	Narrative and Memory in Russian Culture
		Russia's Utopia Compl)

Note: For pre/corequisites and availability of Anthropology (ANTH), Economics (ECON), History (HIST), Jewish Studies (JWST), Political Science (POLI), and Sociology (SOCI) courses, students should consult the offering department and Class Schedule.

# 3.10.24.30 Latin-American and Caribbean Studies 3.10.24.30.1 About Latin-American and Caribbean Studies

Established in 1971, the interdisciplinary program in Latin-American and Caribbean Studies offers a comprehensive array of courses on the peoples, cultures, history, literature, politics, economy, and geography of Latin America and the Caribbean, providing students with a broad-based understanding of this geographic region, and with the language and research skills required for advanced scholarship. The program in Latin-American and Caribbean Studies encourages the free exchange of ideas and perspectives in order to foster an environment suitable for serious reflection and critical analysis.

#### Study Abroad

Students in the program in Latin-American and Caribbean Studies are encouraged to consider the opportunities for foreign study and research made available by bilateral exchange agreements with leading universities in the Spanish and Portuguese-speaking world. These exchanges are open to all members of the McGill University community. Further information may be obtained from:

Service Point 3415 McTavish Street Montreal QC H3A 0C8 Telephone: 514-398-7878

or from the International Education website.

An agreement of cooperation with the Center for Latin American Studies at Georgetown University (Washington, D.C.) permits Honours students in Latin-American and Caribbean Studies at McGill to count a portion of their undergraduate coursework toward the degree requirements for Georgetown's M.A. in Latin American Studies, thus permitting completion of the M.A. in one calendar year. See the Program Adviser for additional information.

#### 3.1024.302 Undergraduate Degree Programs

The 0 1 68.52 471.363 Tmfrom the

Hispanic Studies	His	panio	: Stu	dies
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HISP 219	(6)	Spanish Language Intensive - Intermediate
HISP 220D1	(3)	Spanish Language: Intermediate
HISP 220D2	(3)	Spanish Language: Intermediate
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
HISP 301	(3)	Hispanic Literature and Culture in English 1
HISP 320	(3)	Contemporary Brazilian Literature and Film
HISP 328	(3)	Literature of Ideas: Latin America
HISP 332	(3)	Latin American Literature of 19th Century
HISP 333	(3)	Theatre, Performance and Politics in Latin America
HISP 352	(3)	Latin American Novel
HISP 356	(3)	Latin American Short Story
HISP 358	(3)	Gender and Textualities
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 439	(3)	Topics: Latin American Literature
HISP 453	(3)	20th Century Latin American Poetry
HISP 505	(3)	Seminar in Hispanic Studies 01
History		

HIST 197	(3)	FYS: Race in Latin America
11131 177	(3)	1 15. Race in Latin America
HIST 223	(3)	Indigenous Peoples and Empires
HIST 366	(3)	Themes in Latin American History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 580D1	(3)	European and Native-American Encounters
HIST 580D2	(3)	European and Native-American Encounters

#### **Political Science**

POLI 227 (3) Developing Areas/Introduction

# 3.10.24.30.5 Bachelor of Arts (B.A.) - Major Concentration Latin American & Caribbean Studies (36 credits)

# Required Courses (18 credits)

\* Note: Successful completion of intermediate-level Spanish (HISP 220D1/D2 or HISP 219 or equivalent) is a prerequisite for the required courses HISP 243 and HISP 244.

HISP 243*	(3)	Survey of Latin American Literature and Culture 1
HISP 244*	(3)	Survey of Latin American Literature and Culture 2
HIST 309	(3)	History of Latin America to 1825
HIST 360	(3)	Latin America since 1825
LACS 497	(3)	Research Seminar: Latin America and the Caribbean
POLI 319	(3)	Politics of Latin America

## **Complementary Courses (18 credits)**

18 credits selected from the Complementary Course List in consultation with the Program Adviser with the following requirements:

- 1) Courses from at least two disciplines or departments must be included.
- 2) At least 6 of the 18 credits must be at the 300 level or above.
- 3) No more than 6 credits in Spanish or Portuguese language (HISP 210D1/D2, HISP 218, HISP 219, HISP 220D1/D2, HISP 222) shall count for the Major concentration.

## **Complementary Course List**

## Anthropology

ANTH 212	(3)	Anthropology of Development
ANTH 307	(3)	Andean Prehistory
ANTH 319	(3)	Inka Archaeology and Ethnohistory
ANTH 326	(3)	Anthropology of Latin America
ANTH 422	(3)	Contemporary Latin American Culture and Society
ANTH 428	(3)	Saints and Mediation in Latin America

#### **Canadian Studies**

McGill Whis 412	(3)	Canada and Americas Seminar	507

#### **Economics**

ECON 313	(3)	Economic Development 1
ECON 314	(3)	Economic Development 2

# **English**

<sup>\*</sup> when given under a topic related to Latin American & Caribbean Studies

## Geography

<sup>\*</sup> Note: GEOG 404 may only count toward the requirements for this program when the topic is related to Panama.

GEOG 310	(3)	Development and Livelihoods
GEOG 404*	(3)	Environmental Management 2
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 498	(3)	Humans in Tropical Environments
GEOG 510	(3)	Humid Tropical Environments

## **Hispanic Studies**

Portuguese Language: BegilTm(vironmen,6e1 250.997 184.847 Tmsb16))Tj1 0 0 1 70.52 1184.847 TmsHISP 202viron

\* Note: Successful completion of intermediate-level Spanish (HISP 220D1/D2 or HISP 219 or equivalent) is a prerequisite for the required courses HISP 243 and HISP 244.

HISP 243*	(3)	Survey of Latin American Literature and Culture 1
HISP 244*	(3)	Survey of Latin American Literature and Culture 2
HIST 309	(3)	History of Latin America to 1825
HIST 360	(3)	Latin America since 1825
LACS 497	(3)	Research Seminar: Latin America and the Caribbean
LACS 498	(3)	Honours Thesis
POLI 319	(3)	Politics of Latin America

## **Complementary Courses (39 credits)**

39 credits selected from the Complementary Course List in consultation with the Program Adviser with the following requirements.

- 1) 12 credits must be taken in Spanish or Portuguese.
- 2) 27 additional credits on Latin America and the Caribbean (exclusive of language courses).
- 3) A minimum of 15 of these 27 credits must be taken in one of the following disciplinary clusters, which may also include up to 6 credits of theoretical and/or methodological courses of particular relevance to the student's research interests: Cluster 1 Literature and Culture; Cluster 2 Economics, History, and Political Science; Cluster 3 Anthropology and Geography.

#### **Complementary Course List**

## **Hispanic Studies - Languages**

HISP 210D1	(3)	Spanish Language: Beginners
HISP 210D2	(3)	Spanish Language: Beginners
HISP 218	(6)	Spanish Language Intensive - Elementary
HISP 219	(6)	Spanish Language Intensive - Intermediate
HISP 220D1	(3)	Spanish Language: Intermediate
HISP 220D2	(3)	Spanish Language: Intermediate

#### Latin American and Caribbean Studies

LACS 499 (3) Internship: Latin America and Caribbean Studies

## Cluster 1: Literature and Culture - Hispanic Studies

HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
HISP 328	(3)	Literature of Ideas: Latin America
HISP 332	(3)	Latin American Literature of 19th Century
HISP 333	(3)	Theatre, Performance and Politics in Latin America
HISP 352	(3)	Latin American Novel
HISP 356	(3)	Latin American Short Story
HISP 358	(3)	Gender and Textualities
HISP 437	(3)	Colonial / Postcolonial Latin America
	(3)(3)	20th Century Latin American Poetry

ECON 313	(3)	Economic Development 1
ECON 314	(3)	Economic Development 2
HIST 197	(3)	FYS: Race in Latin America
HIST 223	(3)	Indigenous Peoples and Empires
HIST 366	(3)	Themes in Latin American History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 564D1	(3)	Seminar: Latin American History
HIST 564D2	(3)	Seminar: Latin American History
HIST 580D1	(3)	European and Native-American Encounters
HIST 580D2	(3)	European and Native-American Encounters
POLI 227	(3)	Developing Areas/Introduction

# **Cluster 3: Anthropology and Geography**

<sup>\*</sup> Note: GEOG 404 may only count tow

# **Complementary Courses (15 credits)**

No more than 9 courses in one field.

# Anthropology

Anthropology of Dev

HISP 356	(3)	Latin American Short Story
HISP 358	(3)	Gender and Textualities
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 439	(3)	Topics: Latin American Literature
HISP 453	(3)	20th Century Latin American Poetry
HISP 505	(3)	Seminar in Hispanic Studies 01
History		
HIST 197	(3)	FYS: Race in Latin America
HIST 223	(3)	Indigenous Peoples and Empires
HIST 366	(3)	Themes in Latin American History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 580D1	(3)	European and Native-American Encounters
HIST 580D2	(3)	European and Native-American Encounters

# **Political Science**

(3) Developing Areas/Introduction

ARTH 205	(3)	Introduction to Modern Art
ARTH 207	(3)	Introduction Early Modern Art 1400-1700
ARTH 209	(3)	Introduction to Ancient Art and Architecture
CLAS 203	(3)	Greek Mythology
CLAS 301	(3)	Ancient Greek Literature and Society
CLAS 302	(3)	Roman Literature and Society
EAST 211	(3)	Ritroduction: East Asian Culture: China
	(3)	Introduction: East Asian Culture: Japan

ARCH 532	(3)	Origins of Modern Architecture
ARTH 352	(3)	Feminism in Art and Art History
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 362	(3)	Japanese Cinema
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 464	(3)	Image, Text, Performance
EAST 467	(3)	Topics: Japanese Cinema
EAST 550	(3)	Classical Chinese Poetry Themes and Genres
EAST 562	(3)	Japanese Literary Theory and Practice
		Adv

ANTH 322	(3)	Social Change in Modern Africa
ANTH 327	(3)	Anthropology of South Asia
ANTH 338	(3)	Indigenous Studies of Anthropology
ANTH 355	(3)	Theories of Culture and Society
ANTH 422	(3)	Contemporary Latin American Culture and Society
ARTH 310	(3)	Postcolonialism
CATH 315	(3)	Catholicism and Ethics
CATH 340	(3)	Catholicism and Public Policy
CLAS 203	(3)	Greek Mythology
CLAS 308	(3)	Gender in the Ancient World
CLAS 404	(3)	Classical Tradition
CLAS 406	(3)	Greek and Roman Historiography
EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 370	(3)	History of Sexuality in Japan
EAST 385	(3)	Global Korea
EAST 390	(3)	The Chinese Family in History
EAST 462	(3)	Japan in Asia
EAST 493	(3)	Special Topics: East Asian Studies 1
EAST 494	(3)	Special Topics: East Asian Studies 2
FREN 336	(3)	Histoire de la langue française
GERM 331	(3)	Germany after Reunification
GERM 357	(3)	German Culture in European Context
GERM 364	(3)	Gender and Society in German Literature and Culture
GERM 365	(3)	Modern Short Fiction
GERM 368	(3)	Fin-de-Siècle Vienna
HISP 437	(3)	Colonial / Postcolonial Latin America

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ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ITAL 230	(3)	Understanding Italy
ITAL 295	(3)	Italian Cultural Studies
ITAL 356	(3)	Medieval Discourses on Love
ITAL 362	(3)	Post-World War 2 Literature and Society
ITAL 363	(3)	Gender, Literature and Society
ITAL 365	(3)	The Italian Renaissance
ITAL 371	(3)	The Italian Baroque
ITAL 400	(3)	Italian Regional Identities
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 306	(3)	The American Jewish Community
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
LIBA 395	(3)	Individual Reading Course
LLCU 212	(3)	Understanding Digital and Social Media
LLCU 250	(3)	History and Future of the Book
LLCU 311	(3)	Digital Studies/Citizenry
RELG 201	(3)	Religions of the Ancient Near East
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 270	(3)	Religious Ethics and the Environment
RELG 322	(3)	Church and Empire to 1300
RELG 323	(3)	Church and State since 1300
RELG 326	(3)	Christians in the Roman World
RELG 331	(3)	Religion and Globalization
RELG 334	(3)	Theology of History
RELG 338	(3)	Women and the Christian Tradition
RELG 375	(3)	Religion, Politics and Society
RELG 559	(3)	Caste and Dalits: Historical and Political Perspectives
RUSS 217	(3)	Russia's Eternal Questions
RUSS 229	(3)	Introduction to Russian Folklore
RUSS 427	(3)	Russian Fin de Siècle
RUSS 428	(3)	Russian Avantgarde
RUSS 430	(3)	High Stalinist Culture 1
RUSS 454	(3)	Narratives of Desire

## Stream 3: Philosophy and Religion

This stream is designed for students whose primary interests lie in the study of philosophy and religion across geographical boundaries and historical traditions.

Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.

The additional courses may be substituted with the approval of the Program Director.

Students must choose 30 credits as follows:

6 credits from the courses in List A

24 credits from the courses in List B

#### List A (6 credits)

ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 240	(3)	Political Philosophy 1
POLI 231	(3)	Introduction to Political Theory
RELG 201	(3)	Religions of the Ancient Near East
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 207	(3)	Introduction to the Study of Religions
RELG 252	(3)	Hinduism and Buddhism
RELG 253	(3)	Religions of East Asia
RELG 321	(3)	Western Intellectual Tradition
RELG 334	(3)	Theology of History
RELG 341	(3)	Introduction: Philosophy of Religion
RELG 373	(3)	Christian Ethics of Love
RELG 380	(3)	Religion, Philosophy, Modernity

## List B (24 credits)

Students in the Philosophy and Religion stream may choose from:

- any course (other than a course dedicated to teaching a language) at the 200 level or above in the following departments and programs: Philosophy (PHIL), Religious Studies (RELG), Catholic Studies (CATH), Islamic Studies (ISLA), and Jewish Studies (JWST); and
- any course in Political Science (POLI) listed in the eCalendar under the heading "Political Theory."

Students in this stream may also choose a maximum of 9 credits from the folloj1 0e 0 1 79.and8f 9 5sn Political ScS4.4clgion 0 0 1 280 0 0 1 280 0 0 1 280 0 04 380.33

HIST 440	(3)	Fiction and History
ITAL 355	(3)	Dante and the Middle Ages
ITAL 465	(3)	Religious Identities in Italy
LIBA 395	(3)	Individual Reading Course
LLCU 301	(3)	Topics in Culture and Thought

<sup>\*</sup> ENVR 203 is a prerequisite for ENVR 400.

#### 3.1024.31.4 Bachelor of Arts (B.A.) - Honours Liberal Arts (60 credits)

The Honours in Liberal Arts exposes students to texts from and histories of a suitably wide range of cultures and societies. Students are able to choose among three intellectual streams: literature and the arts (including theatre and architecture); history, culture and society; and philosophy and religion. Students in each stream must satisfy a language requirement as well as distribution requirements in relation to minimum number of 300/400+ level courses; maximum number of courses in one discipline; geographical areas and historical periods.

Honours student must maintain a program GPA of 3.30 and an overall GPA of 3.00.

All students in the Honours Liberal Arts are also required to complete a Minor Concentration in a language program (other than English). Students who are native speakers of a language other than English are strongly encouraged to fulfill this requirement in a third language.

The approved language minors are:

Minor Concentration in Classics (Language Stream)

Minor Concentration in East

to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.

The additional courses may be substituted with the approval of the Program Director.

Students must choose 51 credits as follows:

9 credits from the courses in List A

42 credits from the courses in List B

# List A (9 credits)

ARTH 204	(3)	Introduction to Medieval Art and Architecture
ARTH 205	(3)	Introduction to Modern Art
ARTH 207	(3)	Introduction Early Modern Art 1400-1700
ARTH 209	(3)	Introduction to Ancient Art and Architecture
CLAS 203	(3)	Greek Mythology
CLAS 301	(3)	Ancient Greek Literature and Society
CLAS 302	(3)	Roman Literature and Society
EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: East Asian Culture: Korea
EAST 215	(3)	Introduction to East Asian Art
ENGL 202	(3)	Departmental Survey of English Literature 1
ENGL 203	(3)	Departmental Survey of English Literature 2
ENGL 215	(3)	Introduction to Shakespeare
ENGL 230	(3)	Introduction to Theatre Studies
FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800

FREN 252Tm(Roman Literat(B): 1)Tj1 0 0 1 1 6 its 4 at three This Experimental Conference of the Confer

Students in this stream may also choose a maximum of 12 credits from the following list:

AFRI 401	(3)	Swahili Language and Culture
ARCH 250	(3)	Architectural History 1
ARCH 251	(3)	Architectural History 2
ARCH 354	(3)	Architectural History 3
ARCH 355	(3)	Architectural History 4
ARCH 531	(3)	Architectural Intentions Vitruvius - Renaissance
ARCH 532	(3)	Origins of Modern Architecture
ARTH 352	(3)	Feminism in Art and Art History
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
		C 1 10

Gender and Se

RELG 313	(3)	Topics in Biblical Studies 1
RELG 455	(3)	Religion and the Performing Arts in South India

#### Stream 2: History, Culture, and Society

This stream is designed for students whose primary interests lie in the study of history, culture, and society across geographical boundaries and historical traditions.

Approved courses are listed below. The courses appearing in List A are introductory in nature and should be taken early in the program. The courses appearing in List B are of two kind: (a) courses taught in the "core" disciplines in this stream, and (b) courses taught in other disciplines which are nevertheless pertinent to this stream. Though wide ranging, the choice of courses is limited by the stream's orientation, as well as by the overall objectives of the Liberal Arts Program.

The additional courses may be substituted with the approval of the Program Director.

Students must choose 51 credits as follows:

9 credits from the courses in List A

42 credits from the courses in List B

#### List A (9 credits)

CATH 200	(3)	Introduction to Catholicism
COMS 200	(3)	History of Communication
COMS 210	(3)	Introduction to Communication Studies
COMS 230	(3)	Communication and Democracy
EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: East Asian Culture: Korea
EAST 215	(3)	Introduction to East Asian Art
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 205	(3)	Ancient Mediterranean History
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 208	(3)	Introduction to East Asian History
HIST 213	(3)	World History, 600-2000
HIST 214	(3)	Early Modern Europe
HIST 215	(3)	Modern Europe
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
POLI 212	(3)	Government and Politics - Developed World
POLI 227	(3)	Developing Areas/Introduction
POLI 231	(3)	Introduction to Political Theory
POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
SOCI 210	(3)	Sociological Perspectives
SOCI 211	(3)	Sociological Inquiry

#### List B (42 credits)

Students in the History and Culture stream may choose from any course at the 200 level or above in the following departments and programs: History (HIST), Political Science (POLI), Sociology (SOCI) and Art History and Communication Studies (labelled COMS).

Students in this stream may also choose a maximum of 12 credits from the following list:

ANTH 202 (3) Socio-Cultural Anthropology
ANTH 206 (3) Environment and Culture
Anthropology of De

ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 365	(3)	Middle East Since the 1970's
ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ITAL 230	(3)	Understanding Italy
ITAL 295	(3)	Italian Cultural Studies
ITAL 356	(3)	Medieval Discourses on Love
ITAL 362	(3)	Post-World War 2 Literature and Society
ITAL 363	(3)	Gender, Literature and Society
ITAL 365	(3)	The Italian Renaissance
ITAL 371	(3)	The Italian Baroque
ITAL 400	(3)	Italian Regional Identities
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 306	(3)	The American Jewish Community
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
LIBA 395	(3)	Individual Reading Course
LLCU 212	(3)	Understanding Digital and Social Media
LLCU 250	(3)	History and Future of the Book
LLCU 311	(3)	Digital Studies/Citizenry
RELG 201	(3)	Religions of the Ancient Near East
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 270	(3)	Religious Ethics and the Environment
RELG 322	(3)	Church and Empire to 1300
RELG 323	(3)	Church and State since 1300
RELG 326	(3)	Christians in the Roman World
RELG 331	(3)	Religion and Globalization
RELG 334	(3)	Theology of History
RELG 338	(3)	Women and the Christian Tradition
RELG 375	(3)	Religion, Politics and Society
RELG 559	(3)	Caste and Dalits: Historical and Political Perspectives
RUSS 217	(3)	Russia's Eternal Questions
RUSS 229	(3)	Introduction to Russian Folklore
RUSS 427	(3)	Russian Fin de Siècle

ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400*	(3)	Environmental Thought
GERM 355	(3)	Nietzsche and Wagner
GERM 367	(3)	Topics in German Thought
HIST 320	(3)	Themes in Intellectual History
HIST 350	(3)	Science and the Enlightenment
HIST 440	(3)	Fiction and History
ITAL 355	(3)	Dante and the Middle Ages
ITAL 465	(3)	Religious Identities in Italy
LIBA 395	(3)	Individual Reading Course
LLCU 301	(3)	Topics in Culture and Thought

<sup>\*</sup> ENVR 203 is a prerequisite for ENVR 400.

## 3.10.25 Linguistics

#### 3.10.25.1 Location

Department of Linguistics 1085 Dr. Penfield Avenue, Room 111 Montreal QC H3A 1A7

Telephone: 514-398-4222 Website: *mcgill.ca/linguistics* 

### 3.10.25.2 About Linguistics

Linguistics is the scientific study of human language. Topics covered at McGill University include: the structure of the world's languages at the level of sounds (phonetics and phonology), words (morphology), sentences (syntax), and meaning (semantics); how people learn languages (acquisition); how people use two languages (bilingualism); how to model and process linguistic data using computational methods (computational linguistics); how languages change over time (historical linguistics); and how languages vary in relation to region and social identity (dialectology and sociolinguistics). In addition to preparing students for adv

# **Associate Professors**

L. Alonso-Ovalle; C. Boberg; M. Clayards; J. Shimoyama; M. Sonderegger

#### **Assistant Professors**

J.A. Crippen; T.J. O'Donnell; M. Martinovi ; S. Reddy; F. Torreira

## 3.10.25.6 Bachelor of Arts (B.A.) - Minor Concentration Linguistics (18 credits)

This program may be expanded to the Major Concentration Linguistics.

## **Required Courses (9 credits)**

LING 201	(3)	Introduction to Linguistics
LING 330	(3)	Phonetics
LING 371	(3)	Syntax 1

# **Complementary Courses (9 credits)**

9 credits in Linguistics chosen according to the student's interests. At least 3 of these credits must be at the 400 or 500 lev

LING 331	(3)	Phonology 1
LING 360	(3)	Introduction to Semantics
LING 371	(3)	Syntax 1
LING 480D1	(3)	Honours Thesis
LING 480D2	(3)	Honours Thesis
PHIL 210	(3)	Introduction to Deductive Logic 1

# Complementary Courses (36 credits)

36 credits in Linguistics including 12 credits in related fields. At least 15 of the credits in Linguistics must be at the 400/500 level. Only 3 credits at the 200 level may count towards complementary credits.

#### Other Fields

12 credits in related fields selected from the following list.

## **Computer Science**

COMP 202	(3)	Foundations of Programming
COMP 230	(3)	Logic and Computability
COMP 250	(3)	Introduction to Computer Science

## French Language and Literature

FREN 231	(3)	Linguistique française
FREN 336	(3)	Histoire de la langue française
FREN 434	(3)	Sociolinguistique du français

# Language

Any course in language (other than the student's native language) - literature courses are not acceptable.

Discrete Structures

# Mathematics MATH 240

Philosophy		
PHIL 304	(3)	Chomsky
PHIL 306	(3)	Philosophy of Mind
PHIL 415	(3)	Philosophy of Language

(3)

# **Psychology**

PSYC 311	(3)	Human Cognition and the Brain
PSYC 340	(3)	Psychology of Language
PSYC 341	(3)	The Psychology of Bilingualism
PSYC 433	(3)	Cognitive Science
PSYC 530	(3)	Applied Topics in Deafness

#### **Statistics**

Any course in statistics (from any department).

# 3.10.25.9 Bachelor of Arts (B.A.) - Joint Honours Component Linguistics (36 credits)

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two

# Non-Expandable Version: Complementary Courses (9 credits)

(3)

Students selecting the non-expandable version of this program complete 9 credits of complementary courses from the Complementary Course List. It is strongly recommended that students take MATH 323 as a complementary course.

# **Complementary Course List**

\* Note: Either MATH 249 or MATH 316 may be taken but not both.

MATH 249*	(3)	Honours Complex Variables
MATH 314	(3)	Advanced Calculus
MATH 316*	(3)	Complex Variables
MATH 317	(3)	Numerical Analysis
MATH 318	(3)	Mathematical Logic
MATH 319	(3)	Partial Differential Equations
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 340	(3)	Discrete Mathematics
MATH 346	(3)	Number Theory
MATH 348	(3)	Euclidean Geometry
MATH 417	(3)	Linear Optimization

Bachelor of Arts (B.A.) - Supplementary Minor Concentration in Mathematics (18 credits)

12 credits from:		
MATH 204	(3)	Principles of Statistics 2
MATH 308	(3)	Fundamentals of Statistical Learning
MATH 317	(3)	Numerical Analysis
MATH 318	(3)	Mathematical Logic
MATH 319	(3)	Partial Differential Equations
MATH 324	(3)	Statistics
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 329	(3)	Theory of Interest
MATH 335	(3)	Computational Algebra
MATH 338	(3)	History and Philosophy of Mathematics
MATH 340	(3)	Discrete Mathematics
MATH 346	(3)	Number Theory
MATH 348	(3)	Euclidean Geometry
MATH 352	(1)	Problem Seminar
MATH 378	(3)	Nonlinear Optimization
MATH 410	(3)	Majors Project
MATH 417	(3)	Linear Optimization
MATH 423	(3)	Applied Regression
MATH 430	(3)	Mathematical Finance
MATH 447	(3)	Introduction to Stochastic Processes
MATH 463	0	Convex Optimization
MATH 523	(4)	Generalized Linear Models
MATH 524	(4)	Nonparametric Statistics

#### 3.10.26.5 Bachelor of Arts (B.A.) - Minor Concentration Statistics (18 credits)

(4)

The Minor Concentration Statistics is offered only in a non-expandable version, that is, one that cannot be expanded into the Major Concentration Mathematics.

Sampling Theory and Applications

The Minor Concentration Statistics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System, or together with the Major Concentration Mathematics and a minor concentration (which must be in some other discipline than Mathematics) under option C.

Under option C, it is not possible to combine the Minor Concentration Statistics and the Minor Concentration Mathematics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

No overlap is permitted with other programs.

## **Program Prerequisites**

**MATH 525** 

12 credits from:

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2

# **Required Courses (15 credits)**

\* Note: If the Minor Concentration Statistics is combined with the Major Concentration Mathematics, the required courses MATH 222, MATH 223 and MATH 323 must be replaced by courses selected from the Complementary Courses. Credit cannot be received for both MATH 223 and MATH 236 (listed as a required course in the Major Concentration Mathematics).

MATH 222*	(3)	Calculus 3
MATH 223*	(3)	Linear Algebra
MATH 323*	(3)	Probability
MATH 324	(3)	Statistics
MATH 423	(3)	Applied Regression

# **Complementary Courses (3 credits)**

3	credits	from

MATH 204	(3)	Principles of Statistics 2
MATH 208	(3)	Introduction to Statistical Computing
MATH 308	(3)	Fundamentals of Statistical Learning
MATH 317	(3)	Numerical Analysis
MATH 427	(3)	Statistical Quality Control
MATH 447	(3)	Introduction to Stochastic Processes
MATH 523	(4)	Generalized Linear Models

MATH 423\* (3) Applied Regression

# **Complementary Courses (12 credits)**

Part I: 3 credits selected from \*\*:

\*\* Students who have sufficient knowledge in programming are encouraged to take COMP 250.

COMP 202 (3) Foundations of Programming

COMP 204 (3) Computer Programming for Life Sciences

MATH 557	(4)	Mathematical Statistics 2
MATH 558	(4)	Design of Experiments
MATH 559	(4)	Bayesian Theory and Methods
MATH 598	(4)	Topics in Probability and Statistics
WCOM 314	(3)	Communicating Science

Вас

MATH 423	(3)	Applied Regression
MATH 427	(3)	Statistical Quality Control
MATH 447	(3)	Introduction to Stochastic Processes
MATH 523	(4)	Generalized Linear Models
MATH 524	(4)	Nonparametric Statistics
MATH 525	(4)	Sampling Theory and Applications
MATH 540	(4)	Life Actuarial Mathematics
MATH 541	(4)	Nonlife Actuarial Models
MATH 545	(4)	Introduction to Time Series Analysis
MATH 556	(4)	Mathematical Statistics 1
MATH 557	(4)	Mathematical Statistics 2
MATH 558	(4)	Design of Experiments
MATH 559	(4)	Bayesian Theory and Methods
		Top891.949Mdrs 70(T)Tj1 0.2T)

# **Complementary Courses (15 credits)**

15 credits selected as follows:

At least 9 credits from:

 $\ensuremath{^{*}}$  Note: Either MATH 249 or MATH 316 may be taken but not both.

MATH 249*	(3)	Honours Complex Variables
MATH 315	(3)	Ordinary Differential Equations
MATH 316*	(3)	Complex Variables
MATH 317	(3)	Numerical Analysis
MATH 324	(3)	Statistics
MATH 340	(3)	Discrete Mathematics

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MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 222	(3)	Calculus 3

## Required Courses (9 credits)

MATH 235	(3)	Algebra 1	
MATH 251	(3)	Honours Algebra 2	
MATH 255	(3)	Honours Analysis 2	

## **Complementary Courses (27 credits)**

3 credits selected from:

MATH 242	(3)	Analysis 1	
MATH 254*	(3)	Honours Analysis	

<sup>\*</sup> It is strongly recommended that students take MATH 254.

3 credits selected from:

MATH 248	(3)	Honours Vector Calculus
MATH 358	0	Honours Advanced Calculus

<sup>\*\*</sup> It is strongly recommended that students take MATH 358.

15 credits selected from the list below. The remaining credits are to be chosen from the full list of available Honours courses in Mathematics and Statistics.

<sup>++</sup> Not open to students who have taken MATH 380.

MATH 325	(3)	Honours Ordinary Differential Equations
MATH 356	(3)	Honours Probability
MATH 357	(3)	Honours Statistics
MATH 454*	(3)	Honours Analysis 3
MATH 455**	(3)	Honours Analysis 4
MATH 456***	(3)	Honours Algebra 3
MATH 457+	(3)	Honours Algebra 4
MATH 458++	(3)	Honours Differential Geometry
MATH 466	(3)	Honours Complex Analysis

#### 3.10.26.10 Bachelor of Science (B.Sc.) - Honours Applied Mathematics (63 credits)

Applied Mathematics is a very broad field and students are encouraged to choose a coherent program of complementary courses. Most students specialize in "continuous" or "discrete" applied mathematics, but there are many sensible combinations of courses, and the following informal guidelines should be discussed with the student's adviser. Also, aside from seeking to develop a sound basis in Applied Mathematics, one of the objectives of the program is to kindle the students' interest in possible areas of application. To develop an appreciation of the diversity of Applied Mathematics, students are advised to develop some depth (e.g., by completing a minor) in a field related to Applied Mathematics such as Atmospheric and Oceanic Sciences, Biology, Biochemistry, Chemistry, Computer Science, Earth and Planetary Sciences, Economics, Engineering, Management, Physics, Ph

<sup>\*</sup> Not open to students who have taken MATH 354.

<sup>\*\*</sup> Not open to students who have taken MATH 355.

<sup>\*\*\*</sup> Not open to students who have taken MATH 370.

<sup>+</sup> Not open to students who have taken MATH 371.

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from MATH 222.

#### **Program Prerequisites**

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents:

MATH 133	(3)	Linear Algebra and Geometry
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

In particular, MATH 150/151 and MATH 140/222 are considered equivalent.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/151 are not required to take MATH 222.

Note: COMP 202—or an equivalent introduction to computer programming course—is a program prerequisite. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take it as an elective in their first semester.

Students who transfer to Honours in Applied Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.

To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

#### **Required Courses**

(39-42 credits)

- \* Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.
- \*\* Students select either MATH 251 or MATH 247, but not both.

\*\*\* Students who have successfully completed MATH 150/151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.

COMP 250*	(3)	Introduction to Computer Science
COMP 252	(3)	Honours Algorithms and Data Structures
MATH 222***	(3)	Calculus 3
MATH 235	(3)	Algebra 1
MATH 247**	(3)	Honours Applied Linear Algebra
MATH 251**	(3)	Honours Algebra 2
MATH 255	(3)	Honours Analysis 2
MATH 325	(3)	Honours Ordinary Differential Equations
MATH 350	(3)	Honours Discrete Mathematics
MATH 356	(3)	Honours Probability
MATH 357	(3)	Honours Statistics
MATH 358	(3)	Honours Advanced Calculus
MATH 376	(3)	Honours Nonlinear Dynamics
MATH 470	(3)	Honours Research Project
MATH 475	(3)	Honours Partial Differential Equations

#### **Complementary Courses (21 credits)**

3 credits selected from:

MATH 242	(3)	Analysis 1
MATH 254+	(3)	Honours Analysis 1

+ It is strongly recommended that students take MATH 254.

#### Advising Notes:

Students interested in continuous applied mathematics are urged to choose these as part of their Complementary Courses: MATH 454, MATH 455 and MATH 478, and are advised to choose additional courses from MATH 387, MATH 397, MATH 555, MATH 574, MATH 578, MATH 579, MATH 580, MATH 581.

Students interested in discrete applied mathematics are advised to choose from these as part of their Complementary Courses: COMP 362, COMP 490, MATH 456, MATH 457, MATH 517, MATH 547, MATH 550, MATH 552.

#### 3 credits selected from:

MATH 249	(3)	Honours Complex Variables
MATH 466	(3)	Honours Complex Analysis

#### at least 3 credits selected from:

MATH 387	(3)	Honours Numerical Analysis
MATH 397	(3)	Honours Matrix Numerical Analysis

0-6 credits from the following courses for which no Honours equivalent exists.

MATH 204	(3)	Principles of Statistics 2
MATH 208	(3)	Introduction to Statistical Computing
MATH 308	(3)	Fundamentals of Statistical Learning
MATH 329	(3)	Theory of Interest
MATH 338	(3)	History and Philosophy of Mathematics
MATH 430	(3)	Mathematical Finance

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## 3.10.26.11 Bachelor of Science (B.Sc.) - Honours Mathematics (63 credits)

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from MATH 222.

#### **Program Prerequisites**

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents.

MATH 133	(3)	Linear Algebra and Geometry
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

In particular, MATH 150/151 and MATH 140/141/222 are considered equivalent.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/1151 are not required to take MATH 222.

Students who transfer to Honours in Mathematics from other programs will have credits for pre

-6 credits from the following courses for which no Honours equivalent exists:

MATH 204	(3)	Principles of Statistics 2
MATH 208	(3)	Introduction to Statistical Computing
MATH 308	(3)	Fundamentals of Statistical Learning
MATH 329	(3)	Theory of Interest

#### Required Courses (28-31 credits)

- \* Students with limited programming experience should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250.
- \*\* Students select either MATH 251 or MATH 247, but not both.
- \*\*\* Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Note: Students with limited knowledge of computer programming should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take one of these courses as an elective in their first semester.

Note: Students who wish to take MATH 204 as a complementary course are strongly advised to take MATH 203 beforehand, in their first semester or their first year.

Students who transfer to Honours in Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.

To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

COMP 250*	(3)	Introduction to Computer Science
MATH 208	(3)	Introduction to Statistical Computing
MATH 222***	(3)	Calculus 3
MATH 235	(3)	Algebra 1
MATH 247**	(3)	Honours Applied Linear Algebra
MATH 251**	(3)	Honours Algebra 2
MATH 255	(3)	Honours Analysis 2
MATH 356	(3)	Honours Probability
MATH 357	(3)	Honours Statistics
MATH 470	(3)	Honours Research Project
MATH 533	(4)	Regression and Analysis of Variance

## Complementary Courses (32 credits)

Advising notes:

- Students wishing to pursue mathematical statistics in graduate school are advised to take MATH 587 and recommended to take honours mathematics courses as complementary courses in Part II, in particular MATH 358, MATH 454 (preferably prior to MATH 587), and MATH 455.
- Students wishing to pursue applied statistics and/or careers as statisticians in industry or government are advised to take MATH 523, MATH 524, MATH 547, at least one of MATH 525 and MATH 558, and as many courses as possible from Part III of the list of Complementary Courses below. Students interested in obtaining the

- + Students can select either MATH 248 or MATH 358, but not both.
- ++ Students may obtain credit for both MATH 455 and MATH 587.

COMP 206	(3)	Introduction to Software Systems
COMP 252	(3)	Honours Algorithms and Data Structures
MATH 248+	(3)	Honours Vector Calculus
MATH 325	(3)	Honours Ordinary Differential Equations
MATH 350	(3)	Honours Discrete Mathematics
MATH 352	(1)	Problem Seminar
MATH 358+	(3)	Honours Advanced Calculus
MATH 376	(3)	Honours Nonlinear Dynamics
MATH 387	(3)	Honours Numerical Analysis
MATH 397	(3)	Honours Matrix Numerical Analysis
MATH 398	(3)	Honours Euclidean Geometry
MATH 454	(3)	Honours Analysis 3
MATH 455++	(3)	Honours Analysis 4
MATH 458	(3)	Honours Differential Geometry
MATH 466	(3)	Honours Complex Analysis
MATH 475	(3)	Honours Partial Differential Equations
MATH 478	(3)	Computational Methods in Applied Mathematics
MATH 480	(3)	Honours Independent Study

and any 500-level course offered by the Department of Mathematics and Statistics not listed in Part III below.

Part III: 18-23 credits in probability and statistics selected as follows:

15-23 credits selected from:

+++ Students must take MATH 204 before taking MATH 357 or MATH 533. Moreover, it is strongly advised to take MATH 203 before taking MATH 204.

MATH 204+++ (3) Principles of Statistics 2

MATH 378 (3) Nonlinear Optimization
MATH 427 (3) Statistical Quality Control

0-8 credits selected from:

+++ Students may select either MATH 594 or MATH 598 but not both.

COMP 370 (3) Introduction to Data Science

COMP 362	(3)	Honours Algorithm Design
MATH 222*	(3)	Calculus 3
MATH 235	(3)	Algebra 1
MATH 251	(3)	Honours Algebra 2
MATH 255	(3)	Honours Analysis 2
MATH 350	(3)	Honours Discrete Mathematics

## **Complementary Courses**

36-39 credits

0-3 credits selected from:

COMP 202**	(3)	Foundations of Programming
COMP 204**	(3)	Computer Programming for Life Sciences
COMP 208**	(3)	Computer Programming for Physical Sciences and Engineering

<sup>\*\*</sup> Students who have sufficient knowledge of computer programming are not required to take COMP 202/COMP 204/COMP 208.

#### 3 credits selected from:

MATH 242 (3) Analysis 1
MATH 254\*\*\* (3) Honours Analysis 1

#### 3 credits selected from:

MATH 248 (3) Honours Vector Calculus
MATH 358 (3) Honours Advanced Calculus

18 credits in Mathematics, at least 9 credits selected from:

+ Not open to students who have taken MATH 354.

MATH 356	(3)	Honours Probability
MATH 357	(3)	Honours Statistics
MATH 387	(3)	Honours Numerical Analysis
MATH 454+	(3)	Honours Analysis 3
MATH 455	(3)	Honours Analysis 4

<sup>\*\*\*</sup> It is strongly recommended that students take MATH 254.

• WCOM 206: Communication in Engineering

Special Topics

- WCOM 371: Selected Communication Topic 1
- WCOM 372: Selected Communication Topic 2

## 3.10.28 Management for Arts Students

\*\*This program is currently not offered as it is under review.\*\*

The Desautels Faculty of Management offers four minor programs for non-Management students open for application to students in the Faculty of Arts. Please refer to Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.7: Minors for Non-Management Students for detailed information regarding applying to the following programs.

- section 9.8.7.3: Bachelor of Commerce (B.Com.) Minor Finance (For Non-Management Students) (18 credits)
- section 9.8.7.4: Bachelor of Commerce (B.Com.) Minor Management (For Non-Management Students) (18 credits)
- section 9.8.7.5: Bachelor of Commerce (B.Com.) Minor Marketing (For Non-Management Students) (18 credits)
- section 9.8.7.6: Bachelor of Commerce (B.Com.) Minor Operations Management (For Non-Management Students) (18 credits)

#### 3.10.29 Music

#### 3.10.29.1 Location

Strathcona Music Building 555 Sherbrooke Street West Montreal QC H3A 1E3

Email: studentaffairs.music@mcgill.ca

Website: mcgill.ca/music

## 3.10.29.2 About Music Programs in Arts

Available within the Faculty of Arts are a Major and a Minor Concentration in Music.

Program details and registration instructions for the music minor and major programs for B.A. students are found on this website:

Music Ensembles		
MUEN 567	(1)	Beethoven Orchestra
MUEN 569	(1)	Tabla Ensemble
MUEN 572	(2)	Cappella Antica
MUEN 573	(2)	Baroque Orchestra
MUEN 590	(2)	McGill Wind Orchestra
MUEN 592	(2)	Chamber Jazz Ensemble
MUEN 593 (section 001)	(2)	Choral Ensembles (Schulich Singers)
MUEN 593 (section 002)	(2)	Choral Ensembles (Concert Choir)
MUEN 593 (section 003)	(2)	Choral Ensembles (University Chorus)
MUEN 594	(2)	Contemporary Music Ensemble
MUEN 595	(2)	Jazz Ensembles
MUEN 597	(2)	McGill Symphony Orchestra

# 3.10.29.4 Courses Offered by the Schulich School of Music open to Bachelor of Arts students

Students from other faculties may also register for the courses listed below as long as they have the necessary prerequisites or co-requisites and/or permission from the instructor. Consult with your home faculty adviser to see how these courses may fit into your program.

Courses with a MU

#### Required Courses (9 credits)

Prior to registering for each required course, students must either have completed the pre-requisite course or have successfully passed the diagnostic placement exam.

MUHL 286	(3)	Critical Thinking About Music
MUTH 250	(3)	Theory and Analysis 3
MUTH 251	(3)	Theory and Analysis 4

#### **Complementary Courses (9 credits)**

Students may select from courses in the Schulich School of Music except for courses with a MUAR subject code. Students must meet all prerequisite and/or corequisite requirements before registering.

#### 3.10.29.7 Bachelor of Arts (B.A.) - Major Concentration Music (36 credits)

This Major Concentration studies music as a vital art form in contemporary society and in the history of Western civilization. Its central purpose emphasizes music within broader intellectual and cultural contexts; the Major concentration's premise is that, as a product of culture, music must be considered in relation to the other humanistic disciplines. This program could be an excellent preparation for graduate work in music (musicology, music theory, music librarianship, music journalism, arts administration) or for professional studies in other fields.

Students in the Music Major Concentration must consult the Music Adviser prior to registration. Questions regarding the general requirements of the B.A. program and especially elective courses should be addressed to the Office of Advising and Student Information Services (OASIS) at the Faculty of Arts.

Completion of the diagnostic placement exams for music theory and musicianship is mandatory. Students should refer to the placement exam website for more details: https://www.mcgill.ca/music/student-resources/undergraduates/new-students/placement-exams.

#### **Prerequisite Courses**

Students must complete the diagnostic placement exams for music theory and musicianship. Depending on the results, they may be asked to register for one or more of the prerequisite courses listed below. These prerequisite courses cannot be counted toward the 36 credits of the program requirements.

MUHL 186	(3)	Western Musical Traditions
MUSP 140	(2)	Musicianship Training 1
MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 100	(3)	Music Theory Fundamentals

Theory and 363 Tm(31.2 494.962 Tm(260.643 311.363 Tm(363 Tm(31.2 494.961 0 0 s2 Tm(260.. Tm(260.. Tm311.363

## 3.10.29.8 Music Related Programs 3.10.29.8.1 Minor in Musical Applications of Technology

(18 credits) (Non-Exp93fr1 0 0 1 68.10.29.8.1

# 3.10.30.3 Philosophy Faculty

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Ian Gold

## **Emeritus Pr**

Group B		
PHIL 210	(3)	Introduction to Deductive Logic 1
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 306	(3)	Philosophy of Mind
PHIL 310	(3)	Intermediate Logic
PHIL 311	(3)	Philosophy of Mathematics
PHIL 341	(3)	Philosophy of Science 1
PHIL 411	(3)	Topics in Philosophy of Logic and Mathematics
PHIL 415	(3)	Philosophy of Language
PHIL 419	(3)	Epistemology
PHIL 421	(3)	Metaphysics
PHIL 441	(3)	Philosophy of Science 2
PHIL 470	(3)	Topics in Contemporary Analytic Philosophy
Group C		
PHIL 375	(3)	Existentialism
PHIL 474	(3)	Phenomenology
PHIL 475	(3)	Topics in Contemporary European Philosophy
Group D		
PHIL 344	(3)	Medieval and Renaissance Political Theory
PHIL 345	(3)	Greek Political Theory
PHIL 350	(3)	History and Philosophy of Ancient Science
PHIL 353	(3)	The Presocratic Philosophers
	(3)(12j16(2 1 72	24 <b>9k45</b> . 347.7664 363.443 Tm((3))18PHIL 345

# Complementary Courses (33 credits)

33 credits, of which no more than 9 may be at the 200 level and at least 9 must be at the 400 or 500 level, distributed as follows:

18 credits from Groups A, B, C, D, E, and F:

3 credits from Group A

3 credits from Group B

## **Group D**

6 credits (two courses) from Group C OR Group D:

PHIL 360	(3)	17th Century Philosophy
PHIL 361	(3)	18th Century Philosophy
PHIL 366	(3)	18th and Early 19th Century German Philosophy
PHIL 367	(3)	19th Century Philosophy
PHIL 444	(3)	Early Modern Political Theory
PHIL 445	(3)	19th Century Political Theory

# Group E

_	4.	
- '4	credits	trom

PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 237	(3)	Contemporary Moral Issues
PHIL 240	(3)	Political Philosophy 1
PHIL 242	(3)	Introduction to Feminist Theory

## **Group F**

3 credits from:

PHIL 334	(3)	Ethical Theory
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
PHIL 427	(3)	Topics in Critical Philosophy of Race
PHIL 434	(3)	Metaethics
PHIL 442	(3)	Topics in Feminist Theory

## 3.10.30.6 Bachelor of Arts (B.A.) - Honours Philosophy (60 credits)

According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00. Admission to Honours: Students must attain a 3.00 CGPA and have a 3.00 GPA in Philosophy courses.

# Required Courses (15 credits)

PHIL 210	(3)	Introduction to Deductive Logic 1
PHIL 301	(3)	Philosophical Fundamentals
PHIL 334	(3)	Ethical Theory
		Tutorial 06

PHIL 410	(3)	Advanced Topics in Logic 1
PHIL 411	(3)	Topics in Philosophy of Logic and Mathematics
PHIL 415	(3)	Philosophy of Language
PHIL 419	(3)	Epistemology
PHIL 421	(3)	Metaphysics
PHIL 470	(3)	Topics in Contemporary Analytic Philosophy

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## 3.10.30.7 Bachelor of Arts (B.A.) - Joint Honours Component Philosophy (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Prior to registering for each Joint Honours component, students should consult an adviser in each department for approval of their course selection and their interdisciplinary research project (if applicable).

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00.

Admission to Joint Honours: Students must attain a 3.00 CGPA and have a 3.00 GPA in Philosophy courses.

Philos@phy9021M1Dedducti

Intermediate Logic

#### Required Courses (9 credits)

PHIL 210	(3)	Introduction to Deductive Logic 1
PHIL 301	(3)	Philosophical Fundamentals
PHIL 334	(3)	Ethical Theory

#### **Complementary Courses (27 credits)**

(3)

(3)

27 credits distributed as follows:

# 3 credits from: PHIL 306

PHIL 310

PHIL 370	(3)	Problems in Analytic Philosophy
PHIL 410	(3)	Advanced Topics in Logic 1
PHIL 411	(3)	Topics in Philosophy of Logic and Mathematics
		Philosophy of Langu254.317 395.362 Tmse4 411.082 Tm((3))angu254.317 0.52 411.082 Tm(PHIL 4oph)Tj1 0 0 221.9

# Group B

6 credits from Group A or Group B.

(3) 17th Century Philosophy

HPSC 300	(3)	Independent Studies: History and Philosophy of Science
HPSC 500	(3)	Interdisciplinary Seminar: History & Philosophy of Science
Philosophy (PHIL)	)	
PHIL 210	(3)	Introduction to Deductive Logic 1
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 306	(3)	Philosophy of Mind
PHIL 310	(3)	Intermediate Logic
PHIL 311	(3)	Philosophy of Mathematics
PHIL 341	(3)	Philosophy of Science 1
PHIL 350	(3)	History and Philosophy of Ancient Science
PHIL 411	(3)	Topics in Philosophy of Logic and Mathematics
PHIL 441	(3)	Philosophy of Science 2
PHIL 453	(3)	Ancient Metaphysics and Natural Philosophy

# **History of Science**

6-12 credits of courses focused on the History of Science with no more than 6 credits at the 200 level chosen from the following:

Health and the Healer in Western History

The Scientific Revol 24GPep

# Anthropology (ANTH)

HIST 249

ANTH 359	(3)	History of Archaeological Theory
BIOL 210	(3)	Perspectives of Science
History (HIST)		

(3)

## Islamic Studies (ISLA)

ISLA 345 (3) Science and Civilization in Islam

#### Mathematics (MATH)

MATH 338 (3) History and Philosophy of Mathematics

## Psychology (PSYC)

PSYC 403 (3) Modern Psychology in Historical Perspective

# 3.10.30.9 Philosophy (PHIL) Related Programs 3.10.30.9.1 Minor in Cognitive Science

Students following Major or Honours programs in Philosophy with an interest in cognition may consider the Minor in Cognitive Science. For more information, see Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.8: Cognitive Science.

## 3.10.31 Political Science

#### 3.10.31.1 Location

Stephen Leacock Building, 4th Floor 855 Sherbrooke Street West Montreal QC H3A 2T7

Website: mcgill.ca/politicalscience

#### 3.10.31.2 About Political Science

Students wishing to do an honours degree or a major or minor concentration in Political Science should consult a Political Science departmental adviser each year in order to de

POLI 426	(3)	Partis politiques et comportements électoraux au Québec
POLI 427	(3)	Selected Topics: Canadian Politics
POLI 436	(3)	Aboriginal Rights in the Canadian Constitution
POLI 478	(3)	The Canadian Constitution
POLI 521	(3)	Seminar: Canadian Politics and Government

# **Comparative Politics - Developed Areas**

GEOG 420*	(3)	Memory, Place, and Power	
POLI 212	(3)	Government and Politics - Developed World	W
POLI 316	(3)	Black Lives Matter and American Democracy	
POLI 318	(3)	Comparative Local Government	
POLI 325	(3)	U.S. Politics	
POLI 328	(3)	Comparing European Democracies	
POLI 329	(3)	Russian and Soviet Politics	
POLI 330	(3)	Law and Courts in Europe	
POLI 331	(3)	Politics in East Central Europe	
POLI 339	(3)	Comparative Developed: Topics 1	
POLI 357	(3)	Politics: Contemporary Europe	
POLI 361	(3)	Political Participation in Comparative Perspective	
POLI 419	(3)	Transitions from Communism	
POLI 420*	(3)	Memory, Place, and Power	
POLI 421	(3)	The Politics of Misinformation	
POLI 424	(3)	Media and Politics	
POLI 425	(3)	Topics in American Politics	

 $POLI\ 43954, 2 ((C\ 0\ 1\ 70 Na 23\cancel{3})61681\ Ttatace, \texttt{PaulitRes}) \\ \textbf{Tij}\ \textbf{A0t} 0\ 1\ 20\ 0\ 1\ 5a6516\ .641\ Tm(Memory) \\ \textbf{Tj} 1\ 09 mlo$ 

POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 422	(3)	Developing Areas/Topics 2
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
POLI 450	(3)	Peacebuilding
POLI 473	(3)	Democracy and the Market
POLI 474	(3)	Inequality and Development
POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
POLI 522	(3)	Seminar: Developing Areas

## International Relations

POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 341	(3)	Foreign Policy: The Middle East
POLI 342	(3)	Canadian Foreign Policy
POLI 345	(3)	International Organizations
POLI 346	(3)	American Foreign Policy
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime

Political Theory		
POLI 231	(3)	Introduction to Political Theory
POLI 333	(3)	Western Political Theory 1
POLI 334	(3)	Western Political Theory 2
POLI 362	(3)	Political Theory and International Relations
POLI 363	(3)	Contemporary Political Theory
POLI 364	(2)	
POLI 367	(3)	Liberal Political Theory
POLI 368	(3)	Political Theory and Indigeneity.
POLI 433	(3)	History of Political/Social Theory 3
POLI 434	(3)	History of Political/Social Theory 4
POLI 459	(3)	Topics in Political Theory 2
POLI 470	(3)	Philosophy, Economy and Society
POLI 561	(3)	Seminar: Political Theory
Methods		

Intermediate Quantitative Political Science

Advanced Quantitative Political Science

Introduction to Qualitative Methods in Political Science

POLI 313

POLI 461

(3)

(3)

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POLI 226	(3)	La vie politique québécoise
POLI 317	(3)	The Politics of Race in Canada
POLI 318	(3)	Comparative Local Government
POLI 320	(3)	Issues in Canadian Democracy
POLI 321	(3)	Issues: Canadian Public Policy
POLI 326	(3)	Provincial Politics
POLI 336	(3)	Le Québec et le Canada
POLI 342	(3)	Canadian Foreign Policy
POLI 348	(3)	Gender and Canadian Politics
POLI 371	(3)	Challenge of Canadian Federalism
POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 378	(3)	The Canadian Judicial Process
POLI 379	(3)	Topics in Canadian Politics
POLI 410	(3)	Canadian Political Parties
POLI 412	(3)	Canadian Voting/Public Opinion
POLI 417	(3)	Health Care in Canada
POLI 424	(3)	Media and Politics
POLI 426	(3)	Partis politiques et comportements électoraux au Québec
POLI 427	(3)	Selected Topics: Canadian Politics
POLI 436	(3)	Aboriginal Rights in the Canadian Constitution
POLI 478	(3)	The Canadian Constitution
POLI 521	(3)	Seminar: Canadian Politics and Government

## **Comparative Politics - Developed Areas**

GEOG 420*	(3)	Memory, Place, and Power
POLI 212	(3)	Government and Politics - Developed World
POLI 316	(3)	Black Lives Matter and American Democracy
POLI 318	(3)	Comparative Local Government
POLI 325	(3)	U.S. Politics
POLI 328	(3)	Comparing European Democracies
POLI 329	(3)	Russian and Soviet Politics
POLI 330	(3)	Law and Courts in Europe
POLI 331	(3)	Politics in East Central Europe
POLI 339	(3)	Comparative Developed: Topics 1
POLI 357	(3)	Politics: Contemporary Europe
POLI 361	(3)	Political Participation in Comparative Perspective
POLI 419	(3)	Transitions from Communism
POLI 420*	(3)	Memory, Place, and Power
POLI 421	(3)	The Politics of Misinformation
POLI 424	(3)	Media and Politics
POLI 425	(3)	Topics in American Politics
POLI 430	(3)	Politics of Art

POLI 431	(3)	Nations and States/Developed World
POLI 432	(3)	Selected Topics: Comparative Politics
POLI 451	(3)	The European Union
POLI 452	(3)	Conflict Simulation
POLI 475	(3)	Social Capital in Comparative Perspective
POLI 476	(3)	Religion and Politics
POLI 524	(3)	Seminar: Developed Areas

<sup>\*</sup> Either POLI 420 or GEOG 420 but not both.

# **Comparative Politics - Developing Areas**

POLI 227	(3)	Developing Areas/Introduction
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa
POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 369	(3)	Politics of Southeast Asia
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 422	(3)	Developing Areas/Topics 2
POLI 423	(3)	Politics of Ethno-Nationalism

POLI 355	(3)	The Politics of International Law
POLI 358	(3)	Political Economy of International Organizations
POLI 359	(3)	Topics in International Politics 1
POLI 360	(3)	Security: War and Peace
POLI 362	(3)	Political Theory and International Relations
POLI 441	(3)	IPE: Trade
POLI 442	(3)	International Relations of Ethnic Conflict
POLI 443	(3)	Intervention in World Politics
POLI 444	(3)	Topics in International Politics 2
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 446	(3)	International Law and Politics of Human Rights
POLI 447	(3)	Political Economy of Multinationals
POLI 448	(3)	Gender and International Relations
POLI 449	(3)	Diplomacy in Practice
POLI 450	(3)	Peacebuilding
POLI 451	(3)	The European Union
POLI 452	(3)	Conflict Simulation
POLI 575	(3)	Seminar: International Politics

## 3.10.31.8 Bachelor of Arts (B.A.) - Honours Political Science (54 credits)

The Honours Political Science program consists of 54 credits, of which 48 must be in Political Science. The remaining 6 credits must be in related social studies disciplines and must be taken at the 300 or 400 level.

To enter, remain and graduate in Honours, students must achieve/maintain a 3.3 average in their political science courses and more than half of the political science grades must be at the B+ level or higher. According to Faculty regulations, Honours students must maintain a minimum CGPA of 3.00 in general.

To be awarded First Class Honours at graduation, in addition to the Faculty requirement of a 3.50 CGPA, students must achieve a 3.6 average in their political science courses and more than half of political science grades must be at the

(3)

POLI 227	(3)	Developing Areas/Introduction
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa
POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 369	(3)	Politics of Southeast Asia
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 422	(3)	Developing Areas/Topics 2
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
POLI 450	(3)	Peacebuilding
POLI 473	(3)	Democracy and the Market
POLI 474	(3)	Inequality and Development
POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
POLI 522	(3)	Seminar: Developing Areas

## International Relations

POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 341	(3)	Foreign Policy: The Middle East
POLI 342	(3)	Canadian Foreign Policy
POLI 345	(3)	International Organizations
POLI 346	(3)	American Foreign Policy
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime
POLI 354	(3)	Approaches to International Political Economy

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Students may enter the Joint Honours program in U1.

#### Required Course (3 credits)

POLI 210\* (3) Political Science Research Methods

NOTE: If the POLI 210 requirement is waived, students must still fulfill the 36-credit program requirement.

#### **Complementary Courses (33 credits)**

33 credits of complementary courses selected with the following specifications.

3 credits in methods courses at the 300 or 400 level.

No more than one-half (18 credits) of a student's political science credits may be in any one field (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas, the maximum is 21 credits. Refer to the lists below for course choices in each field.

One quarter (9 credits) of political science credits must be at the 400-level or above including one 500-level Honours Seminar. Refer to the lists below for course choices at the 400 and 500 levels in each field.

No more than 12 credits of political science courses (including POLI 210) may be at the 200 level. No more than 3 credits may be taken at the 200 level in each of the five groups of courses (Canadian Politics, International Relations, ComparativCan5540.142 Tm(e inclu 122 Tm(v)Tj1 0 0 1 357.941 5786)Tj1 0 0 9be

<sup>\*</sup> The POLI 210 requirement is waived for students admitted to McGill BEFORE Fall 2017. The POLI 210 requirement is waived for students who have taken SOCI 211.

# **Comparative Politics - Developed Areas**

GEOG 420*	(3)	Memory, Place, and Power
POLI 212	(3)	Government and Politics - Developed World
POLI 316	(3)	Black Lives Matter and American Democracy
POLI 318	(3)	Comparative Local Government
POLI 325	(3)	U.S. Politics
POLI 328	(3)	Comparing European Democracies
POLI 329	(3)	Russian and Soviet Politics
POLI 330	(3)	Law and Courts in Europe
POLI 331	(3)	Politics in East Central Europe
POLI 339	(3)	Comparative Developed: Topics 1
		Politics: Contemporary Europe

POLI 473	(3)	Democracy and the Market
POLI 474	(3)	Inequality and Development
POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
POLI 522	(3)	Seminar: Developing Areas
International R	elations	
POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 341	(3)	Foreign Policy: The Middle East
POLI 342	(3)	Canadian Foreign Policy
POLI 345	(3)	International Organizations
POLI 346	(3)	American Foreign Policy
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime
POLI 354	(3)	Approaches to International Political Economy
POLI 359	(3)	Topics in International Politics 1
POLI 360	(3)	Security: War and Peace
POLI 362	(3)	Political Theory and International Relations
POLI 441	(3)	IPE: Trade
POLI 442	(3)	International Relations of Ethnic Conflict
POLI 443	(3)	Intervention in World Politics
POLI 444	(3)	Topics in International Politics 2
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 446	(3)	International Law and Politics of Human Rights
POLI 447	(3)	Political Economy of Multinationals
POLI 448	(3)	Gender and International Relations
POLI 449	(3)	Diplomacy in Practice
POLI 450	(3)	Peacebuilding
POLI 451	(3)	The European Union
POLI 452	(3)	Conflict Simulation
POLI 575	(3)	Seminar: International Politics
Political Theory	1	
POLI 231	(3)	Introduction to Political Theory
POLI 333	(3)	Western Political Theory 1
POLI 334	(3)	Western Political Theory 2
POLI 362	(3)	Political Theory and International Relations
POLI 363	(3)	Contemporary Political Theory
POLI 364	(3)	Radical Political Thought

POLI 365	(3)	Democratic Theory
POLI 366	(3)	Topics in Political Theory 1
POLI 367	(3)	Liberal Political Theory
POLI 368	(3)	Political Theory and Indigeneity.
POLI 433	(3)	History of Political/Social Theory 3
POLI 434	(3)	History of Political/Social Theory 4
POLI 459	(3)	Topics in Political Theory 2
POLI 470	(3)	Philosophy, Economy and Society
POLI 561	(3)	Seminar: Political Theory
Methods		
POLI 210	(3)	Political Science Research Methods
POLI 311	(3)	Introduction to Quantitative Political Science
POLI 312	(3)	Intermediate Quantitative Political Science
POLI 313	(3)	Introduction to Qualitative Methods in Political Science
POLI 461	(3)	Advanced Quantitative Political Science

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### Required Background

Students are required to complete a course in Introductory Psychology either at the collegial or freshman level. Students who have not previously completed CEGEP Psychology 350-101 or 350-102 or equivalent are required to complete PSYC 100 during the first year of study at McGill.

#### **Program Prerequisite**

PSYC 100 (3) Introduction to Psychology

#### Complementary Courses (18 credits)

6 credits selected from:

PSYC 204	(3)	Introduction to Psychological Statistics
PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 212	(3)	Perception
PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology

12 credits in Psychology at the 300 level or above.

#### 3.10.32.5 Bachelor of Arts (B.A.) - Minor Concentration Behavioural Science (18 credits)

Restricted to students registered in the Major Concentration Psychology.

Students who wish to go on to graduate training in Psychology, and those who may wish to apply for membership in the Ordre des Psychologues du Québec (once the additional graduate requirements of the Ordre have been completed), are advised to take the following supplementary Minor Concentration Behavioural Science.

Note that this counts as a second minor concentration, and is open only to students registered in the Major Concentration Psychology. A first minor concentration must also be completed in a discipline other than Psychology.

### **Complementary Courses (18 credits)**

18 credits selected as follows:

3 credits in Psychology from List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)

3 credits in Psychology from List B - (Social, Health and Developmental Psychology)

3 credits in Psychology at the 400 or 500 level

9 credits at the 300 level or above from one or more of the following disciplines: Psychology (PSYC), Anthropology (ANTH), Linguistics (LING), or Sociology (SOCI).

## List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)

NSCI 201	(3)	Introduction to Neuroscience 2
PSYC 301	(3)	Animal Learning and Theory
PSYC 302	(3)	The Psychology of Pain
PSYC 310	(3)	Intelligence
PSYC 311	(3)	Human Cognition and the Brain
PSYC 315	(3)	Computational Psychology
PSYC 317	(3)	Genes and Behaviour
PSYC 318	(3)	Behavioural Neuroscience 2
PSYC 319	(3)	Computational Models - Cognition
PSYC 329	(3)	Introduction to Auditory Cognition
PSYC 340	(3)	Psychology of Language
PSYC 341	(3)	The Psychology of Bilingualism

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PSYC 342	(3)	Hormones and Behaviour
PSYC 352	(3)	Cognitive Psychology Laboratory
PSYC 403	(3)	Modern Psychology in Historical Perspective
	4i-2221.949 2.g6PanchBkhgical Tests	

PSYC 474	(3)	Interpersonal Relationships
PSYC 475	(3)	Neuroscience of Social Psychology
PSYC 483	(3)	Seminar in Experimental Psychopathology
PSYC 491D1	(3)	Advanced Study: Behavioural Disorders
PSYC 491D2	(3)	Advanced Study: Behavioural Disorders
PSYC 507	(3)	Emotions, Stress, and Illness
PSYC 509	(3)	Diverse Clinical Populations
PSYC 512	(3)	Advanced Personality Seminar
PSYC 528	(3)	Vulnerability to Depression and Anxiety
PSYC 530	(3)	Applied Topics in Deafness
PSYC 535	(3)	Advanced Topics in Social Psychology
PSYC 539	(3)	Advanced Topics in Social Psychology 2

#### **Unclassified Courses**

Students may also select complementary courses from the research and topics courses below:

PSYC 395	(6)	Psychology Research Project 1
PSYC 450D1	(4.5)	Research Project and Seminar
PSYC 450D2	(4.5)	Research Project and Seminar
PSYC 488D1	(1.5)	Special Topics Seminar
PSYC 488D2	(1.5)	Special Topics Seminar
PSYC 492	(3)	Special Topics Seminar 1
PSYC 494D1	(4.5)	Psychology Research Project
PSYC 494D2	(4.5)	Psychology Research Project
PSYC 495	(6)	Psychology Research Project 2
PSYC 499	(1)	Reading Project

### 3.10.32.6 Bachelor of Arts (B.A.) - Major Concentration Psychology (36 credits)

The Major Concentration Psychology does not provide sufficient undergraduate background to enable students to apply for membership in the Ordre des Psychologues du Québec, even once the additional graduate requirements of the Ordre have been completed. Students who are interested in practising psychology in Quebec are advised to also complete the Minor Concentration Behavioral Science.

## **Recommended Background for Quebec CEGEP Students**

Students planning to apply to a Bachelor of Arts degree with a Major Concentration Psychology or a Bachelor of Arts and Science degree with a Major Concentration Psychology are advised to take courses in Introductory Psychology and Human Biology at the collegial level.

### **Program Prerequisites**

Students planning to enter the Major Concentration Psychology program are required to complete courses in Introductory Psychology and Human Biology at the collegial level or in their first year of study at McGill University.

Students who have completed 350-101 or 350-102 in CEGEP are exempt from the PSYC 100 requirement.

Bachelor of Arts students are required to complete BIOL 115 or BIOL 111 or BIOL 112 during their first year. Students who have completed one of Biology 101-301, 101-401, 101-911, or 101-921 in CEGEP are exempt from the Biology requirement.

BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology
BIOL 115	(3)	Essential Biology
PSYC 100	(3)	Introduction to Psychology

# Required Courses (18 credits)

\* Advising note for PSYC 204: Students who hav

PSYC 415	(3)	Electroencephalography (EEG) Laboratory in Psychology
PSYC 427	(3)	Sensorimotor Neuroscience
PSYC 433	(3)	Cognitive Science
PSYC 443	(3)	Affective Neuroscience
PSYC 444	(3)	Sleep Mechanisms and Behaviour
PSYC 470	(3)	Memory and Brain
PSYC 502	(3)	Psychoneuroendocrinology
PSYC 506	(3)	Cognitive Neuroscience of Attention
PSYC 513	(3)	Human Decision-Making
PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYC 531	(3)	Structural Equation Models
PSYC 537	(3)	Advanced Seminar in Psychology of Language
PSYC 538	(3)	Categorization, Communication and Consciousness
PSYC 541	(3)	Multilevel Modelling
PSYC 545	(3)	Topics in Language Acquisition
PSYC 560*	(3)	Machine Learning Tools in Psychology
PSYC 562	(3)	Measurement of Psychological Processes

<sup>\* 1.</sup> Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.

# List B - (Social, Health and Developmental Psychology)

PSYC 304	(3)	Child Development
PSYC 328	(3)	Health Psychology
PSYC 331	(3)	Inter-Group Relations
PSYC 332	(3)	Introduction to Personality
PSYC 333	(3)	Personality and Social Psychology
PSYC 337	(3)	Introduction to Psychopathology
PSYC 351	(3)	Research Methods in Social Psychology
PSYC 408	(3)	Principles and Applications of Psychotherapy
PSYC 409	(3)	Positive Psychology
PSYC 412	(3)	Child Development: Psychopathology
		Social Dev

<sup>2.</sup> Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

PSYC 507	(3)	Emotions, Stress, and Illness
PSYC 509	(3)	Diverse Clinical Populations
PSYC 512	(3)	Advanced Personality Seminar
	(3)	Vulnerability to Depression and Anxiety

PSYC 311	(3)	Human Cognition and the Brain
PSYC 315	(3)	Computational Psychology
PSYC 317	(3)	Genes and Behaviour
PSYC 318	(3)	Behavioural Neuroscience 2
PSYC 319	(3)	Computational Models - Cognition
PSYC 329	(3)	Introduction to Auditory Cognition
PSYC 340	(3)	Psychology of Language
PSYC 341	(3)	The Psychology of Bilingualism
PSYC 342	(3)	Hormones and Behaviour
PSYC 352	(3)	Cognitive Psychology Laboratory
PSYC 353	(3)	Laboratory in Human Perception
PSYC 403	(3)	Modern Psychology in Historical Perspective
PSYC 406	(3)	Psychological Tests
PSYC 410	(3)	Special Topics in Neuropsychology
PSYC 413	(3)	Cognitive Development
PSYC 415	(3)	Electroencephalography (EEG) Laboratory in Psychology
PSYC 427	(3)	Sensorimotor Neuroscience
PSYC 433	(3)	Cognitive Science
PSYC 443	(3)	Affective Neuroscience
PSYC 444	(3)	Sleep Mechanisms and Behaviour
PSYC 470	(3)	Memory and Brain
PSYC 502	(3)	Psychoneuroendocrinology
PSYC 506	(3)	Cognitive Neuroscience of Attention
		Human D(PSRug2 Tce)Tj1 0 0 1 Tmsor4 379.72 8s8s8s8s8s8s8s8e

PSYC 332	(3)	Introduction to Personality
PSYC 333	(3)	Personality and Social Psychology
PSYC 337	(3)	Introduction to Psychopathology
PSYC 351	(3)	Research Methods in Social Psychology
PSYC 408	(3)	Principles and Applications of Psychotherapy
PSYC 409	(3)	Positive Psychology
PSYC 412	(3)	Child Development: Psychopathology
PSYC 414	(3)	Social Development
PSYC 436	(3)	Human Sexuality and Its Problems
PSYC 471	(3)	Human Motivation
PSYC 473	(3)	Social Cognition and the Self
PSYC 474	(3)	Interpersonal Relationships
PSYC 475	(3)	Neuroscience of Social Psychology
PSYC 483	(3)	Seminar in Experimental Psychopathology
PSYC 491D1	(3)	Advanced Study: Behavioural Disorders
PSYC 491D2	(3)	Advanced Study: Behavioural Disorders
PSYC 507	(3)	Emotions, Stress, and Illness
PSYC 509	(3)	Diverse Clinical Populations
PSYC 512	(3)	Advanced Personality Seminar
PSYC 528	(3)	Vulnerability to Depression and Anxiety
PSYC 530	(3)	Applied Topics in Deafness
PSYC 535	(3)	Advanced Topics in Social Psychology
PSYC 539	(3)	Advanced Topics in Social Psychology 2

6 credits at the 300 level or above selected from the following disciplines:

 $Anthropology\ (ANTH),\ Linguistics\ (LING),\ Psychology\ (PSYC),\ or\ Sociology\ (SOCI).$ 

#### 3.10.32.8 Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Students should note that awarding of the Joint Honours degree will depend on both cumulative grade point average and a minimum grade of B on PSYC 380D1/PSYC 380D2, PSYC 482. "First Class Honours" is awarded to students who obtain a minimum CGPA of 3.50 and a minimum grade of A- in the required honours courses (i.e: PSYC 380D1/D2, PSYC 482). "Honours" is awarded to students with a minimum CGPA of 3.00 and a minimum grade of B in the required honours courses.

In addition to the requirements of the Joint Honours Component Psychology, students must also complete all requirements of their other Joint Honours component.

Admission to the Joint Honours component is selective. Students with a cumulative grade point average of 3.00 or higher are eligible to apply; however, normally only students with a U1 GPA above 3.50 are admitted. Students must complete a minimum of 27 graded credits in two terms in their U1 year to be eligible to apply. Once in the Joint Honours component, students must obtain a GPA of 3.00 in the U2 year in order to continue in the program for U3. Students in the Joint Honours component are encouraged to complete a minimum of 27 graded credits per academic year. This is also the minimum number of credits required to be eligible for fellowships and awards.

Students may apply to the Joint Honours component upon completion of the U1 year. Eligible students must have completed the following Psychology courses: PSYC 204, PSYC 211, PSYC 212, PSYC 213 and PSYC 215. Students are advised to complete PSYC 305 in their U1 year.

The application is available on the Psychology Dept website at:

http://www.mcgill.ca/psychology/undergraduate/current-students/research-opportunities/research-courses. The deadline is specified on the application form. Candidates will be informed of the Department's decision via email before classes begin in September.

# **Program Prerequisites**

Students planning on entering the Joint Honours Component Psychology program are required to complete Introductory Psychology; a course in Human Biology is strongly recommended.

Students who havs who ha

#### 3.10.33.2 About the School of Religious Studies

Cultivating a thorough understanding of the world's religions and the roles of religion throughout history and in contemporary society is at the heart of the School of Religious Studies' teaching at the undergraduate and *graduate levels*. The School takes a multidisciplinary approach to scholarship on a plurality of religions and incorporates a broad range of perspectives and methods. In studying the world's religious traditions, we emphasize the ways in which religious expression and practices are embedded in culture, politics, aesthetics, and social change.

The School of Religious Studies has enjoyed a long history at McGill providing a wide range of programs, including B.A. programs, theological programs, and several specialized graduate degree programs. The School's expertise in world religions engages many methods and disciplines, combining the rigorous and historically focused study of religious traditions and contexts with approaches that explore contemporary expressions of religions. For more on the School's distinctive, holistic approach to the study of religions, please visit *About Us*.

The School is affiliated with the Montreal Diocesan Theological College of the Anglican Church of Canada, the Presbyterian College Montreal, and the United Theological College of the United Church of Canada. Each of these colleges is located close to campus. In 2013, a landmark gift from the Barbara and Patrick Keenan Foundation launched a series of major new developments including the establishment of the Keenan Chair in Interfaith Studies and a new flagship course, "World Religions and the Cultures They Create" (RELG 208). The gift also funds a number of major fellowships and internships to provide formation and support for graduate and undergraduate students.

The School of Religious Studies is located in the handsome William and Henry Birks Building, erected in 1931, formerly known as Divinity Hall, at 3520

Bachelor of Arts programs in the School of Religious Studies explore the many cultural, historical, and political issues related to both Eastern and Western religions, and to religion in comparative perspective. Major and Minor concentrations in Religious Studies are available, as well as Honours and Joint Honours programs in Religious Studies.

# 3.10.33.7 Bachelor of Theology

The Bachelor of Theology program offers academic instruction in the disciplines of Theology, Biblical Studies, and Church History, and provides a more intensive study of Christianity than is available in the Bachelor of Arts degree programs.

Students interested in completing a Major Concentration, Minor Concentration, Honours, or Joint Honours in the broader field of Religious Studies should pursue a Bachelor of Arts program.

The Bachelor of Theology (B.Th.) may be taken as a first or second baccalaureate degree.

As a first degree (90 or 120 credits), it offers a more intensive study of Christianity than is available within the Bachelor of Arts (B.A.) programs, while also

Prerequisite courses and McGill's competitive admission process:

• two courses appropriate to the proposed area of study, each with a minimum grade of B or equivalent.

The Mature Student category is available to applicants who:

- · do not possess a conventional basis of admission such as a high school or CEGEP diploma; or
- have academic credentials that do not meet the minimum requirements and have no academic studies within the last five years that would constitute a basis for admission.

Applicants with regular academic studies completed during the last five years must apply under the regular high school, CEGEP, or university transfer categories.

#### Conditions for eligibility:

- Canadian citizenship or Canadian permanent residency;
- 23 years of age or older at time of registration (21 years of age for the Faculties of Management and Music);
- No college- or university-level studies within the last five years that would constitute a basis for admission;
- Two letters of reference;
- Letter of Intent, including description of previous educational experiences;
- Complete record of employment and personal history, highlighting points relevant to the application;
- Demonstrate academic potential by successfully completing a minimum number of appropriate courses within the three-year period prior to admission. These courses, which may be completed at CEGEP or university, will also fulfill prerequisites for the intended program.

Each student is considered on an individual basis, based on all elements in the file.

Please note that all required documents listed in *section 3.10.33.7.1.1: Application Procedures* must be received by the School of Religious Studies prior to these deadlines in order for the applicant to be considered by the Admissions Committee.

#### 310.337.1.3 Admissions Review Procedure

An unsuccessful applicant—or a School of Religious Studies Council member acting on behalf of an unsuccessful applicant—who believes that not all factors having a bearing on the application have been fully considered, may submit a request for a review of the decision.

The request must be made in writing and directed to the Chair of the B.Th. Admissions and Awards Committee. A CAD \$40 certified cheque or money order made payable to McGill University must accompany the request. The request must include information in support of reconsideration, such as a description of significant change in the applicant's circumstances since the initial consideration, correction of any missing or erroneous information in the application, or information that the applicant believes may have been overlooked when the original decision was made.

Requests for reconsideration must be received at McGill no more than two weeks after notification of refusal.

The review procedure will be carried out by the B.Th. Admissions and Awards Committee. Please note that the original admission decision will stand unless the Committee is persuaded that admissions standards have been misapplied or that an applicant'

The Master of Divinity Program is divided into two years of foundational studies at McGill's School of Religious Studies (i.e., the Bachelor of Theology degree) and a year of professional studies, known as the "In-Ministry Year", offered jointly by the three affiliated theological Colleges under the auspices of the Montreal School of Theology. The program is supervised by the Academic Committee of the Montreal School of Theology, on which all three Colleges and McGill's School of Religious Studies are represented.

Students from the affiliated colleges may be eligible for bursary assistance if they are properly registered candidates for the ministry. Information about church requirements and the professional year should be sought from the principals of the appropriate colleges.

One biblical language, usually Greek, is required by some of the colleges. Ministerial candidates should consult with the College advisers regarding biblical language requirements.

Prospective candidates for ordination with a B.A. Honours or Major in Religious Studies and a CGPA of 3.3 (B+) may apply for the Master of Sacred Theology (S.T.M.) degree upon completion of the professional In-Ministry Year (IMY).

**Applicants for the M.Div. program** must apply to the McGill B.Th. program, as well as to one of the Theological Colleges. College application forms should be requested from the Colleges themselves.

The Montreal School of Theology (formerly the Joint Board of Theological Colleges) École théologique de Montréal (affiliée à l'Université McGill) 3475 University Street Montreal QC H3A 2A8

Montreal Diocesan Theological College Séminaire Diocésain de Montréal 3475 University Street Montreal QC H3A 2A8

The Presbyterian College Le Collège Presbytérien 3495 University Street Montreal QC H3A 2A8

The United Theological College/Le séminaire Uni at Montreal Diocesan College/au Collège Diocésain de Montréal 3475 University Street Montreal QC H3A 2A8

### 3.10.33.9 Religious Studies Faculty

#### Director

Garth W. Green

#### **Graduate Program Director and Admissions Chair**

Daniel Cere and Hamsa Stainton

# **Administrative Officer**

Francesca Maniaci

## **Emeritus Professors**

Douglas J. Hall; Donna Runnalls; Frederik Wisse; Katherine K. Young

#### Professor (Post-Retirement)

G. Victor Hori

#### **Professors**

Douglas B. Farrow; W.J. Torrance Kirby; Gerbern S. Oegema; Armando Salvatore; Arvind Sharma

#### **Associate Professors**

Mikaël Baeur; Lara Braitstein; Daniel Cere; Andrea Farran; Gaëlle Fiasse; Garth W. Green; Ian H. Henderson; Hillary Kaell; Jim Kanaris; Patricia G. Kirkpatrick; Heidi Wendt

#### **Assistant Professors**

Rongdao Lai; Samuel Nelson; Hamsa Stainton

#### **Numata Visiting Professor**

Ann Gleig

#### **Faculty Lecturer**

Pablo Irizar Carrillo

#### **Adjunct Faculty**

Chukwuemeka Atansi; Brian A. Butcher; Alyson Huntly; Thupten Jinpa Langri; Lucille Marr; Maylanne Maybee; Sean Joseph McGrath; Jesse Zink

#### **Associate Member**

Eric Caplan; Robert Wisnovsky

#### **Affiliate Members**

Pierpaolo Ciccarelli; Roland De Vries; George Di Giovanni; Karen Finch; Roberto Formisano; Anne S. Leahy; Kieko Obuse; Susan J. Palmer; Peter Richardson-Bryson; Benjamin Schewel; John Simons

### 3.10.33.10 Bachelor of Arts (B.A.) - Minor Concentration Religious Studies (18 credits)

The B.A; Minor Concentration in Religious Studies focuses on the methodological approaches to the study of religious traditions, including the languages, teachings, and history of those traditions.

#### Required Course (3 credits)

RELG 207 (3) Introduction to the Study of Religions

# **Complementary Courses (15 credits)**

6 credits of Introductory Courses at the 200 level.

ANTH 209	(3)	Anthropology of Religion
CATH 200	(3)	Introduction to Catholicism
CATH 220	(3)	Selected Topics in Catholic Studies
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
JWST 201	(3)	Jewish Law
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 245	(3)	Jewish Life in the Islamic World
JWST 254	(3)	The Jewish Holy Days
JWST 261	(3)	History of Jewish Philosophy and Thought
RELG 201	(3)	Religions of the Ancient Near East
RELG 202	(3)	Religion of Ancient Israel
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 205	(3)	Death and Dying

RELG 210 (3) Jesus of Nazareth

RELG 211 (3) Theology through Fiction

RELG 331	(3)	Religion and Globalization
RELG 332	(3)	Conversations Across World Religions
RELG 333	(3)	Principles of Theology
RELG 334	(3)	Theology of History
RELG 336	(3)	Contemporary Theological Issues
RELG 337	(3)	Themes in Buddhist Studies
RELG 338	(3)	Women and the Christian Tradition
RELG 341	(3)	Introduction: Philosophy of Religion
RELG 344	(3)	Mahayana Buddhism
RELG 348	(3)	Classical Hinduism
RELG 350	(3)	Bhakti Hinduism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 354	(3)	Chinese Religions
RELG 358	(3)	Religion and Cinema in India
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 368	(3)	Japanese Religions in Pop Culture
RELG 369	(3)	Tibetan Buddhism
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 372	(3)	Hindu Goddesses
RELG 373	(3)	Christian Ethics of Love
RELG 375	(3)	Religion, Politics and Society
RELG 376	(3)	Religious Ethics
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
RELG 379	(3)	Eastern Orthodox Christianity
RELG 380	(3)	Religion, Philosophy, Modernity
RELG 384	(3)	Religion and Public Policy
RELG 387	(3)	Introduction to Jainism
RELG 388	(3)	Introduction to Sikhism
RELG 398	(3)	North American Christianity
RELG 399	(3)	Christian Spirituality
RELG 407	(3)	The Writings
RELG 408	(3)	The Prophets
RELG 419	(3)	Religious Heritage and Tourism
RELG 423	(3)	Reformation Thought
RELG 434	(3)	Advanced Theology
RELG 440	(3)	Global Islam
RELG 442	(3)	Pure Land Buddhism

RELG 454	(3)	Modern Hindu Thought
RELG 455	(3)	Religion and the Performing Arts in South India
RELG 470	(3)	Theological Ethics
RELG 479	(3)	Christianity in Global Perspective
	(3)	Greco-Roman Judaism

JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 245	(3)	Jewish Life in the Islamic World
JWST 254	(3)	The Jewish Holy Days
JWST 261	(3)	History of Jewish Philosophy and Thought
RELG 201	(3)	Religions of the Ancient Near East
RELG 202	(3)	Religion of Ancient Israel
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 20amic	(3)	Death and Dying

RELG 357D2	(3)	Sanskrit 2
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 381	(3)	Advanced New Testament Greek
RELG 390D1	(3)	Elementary Biblical Hebrew
RELG 390D2	(3)	Elementary Biblical Hebrew
RELG 457D1	(3)	Advanced Sanskrit
RELG 457D2	(3)	Advanced Sanskrit
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 491	(3)	Biblical Hebrew Narratives
RELG 492	(3)	Biblical Hebrew Poetry

15-21 credits of Advanced Courses at the 300 level or higher.

CATH 310	(3)	Catholic Intellectual Traditions
CATH 315	(3)	Catholicism and Ethics
CATH 320	(3)	Catholicism and Modernity
CATH 325	(3)	Mystery and the Imagination
CATH 330	(3)	Catholicism in a Global Context
CATH 335	(3)	Confessions of Saint Augustine
CATH 340	(3)	Catholicism and Public Policy
CATH 370	(3)	Topics in Catholic Studies
CATH 375	(3)	Topics in Catholic Theology
CATH 460	(3)	Catholic Studies Seminar
HIST 427	(3)	The Hasidic Movement
ISLA 310	(3)	Women in Islam
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 382	(3)	Jews, Judaism and Social Justice
RELG 300	(3)	Second Temple Judaism
RELG 302	(3)	Literature of Ancient Israel 1
RELG 303	(3)	Literature of Ancient Israel 2
RELG 307	(3)	Bible, Quran and Interpretations
RELG 309	(3)	World Religions and Cultures They Create
RELG 310	(3)	Canadian Church History
RELG 311	(3)	Formation of the New Testament
RELG 312	(3)	The Gospels
RELG 313	(3)	Topics in Biblical Studies 1
RELG 315	(3)	Special Topics in Religion 1
RELG 316	(3)	New Religious Movements
RELG 317	(3)	Special Topics in Religion 2
RELG 318	(3)	Special Topics in Religion 3
RELG 319	(3)	Special Topics in Religion 4

RELG 322	(3)	Church and Empire to 1300
RELG 323	(3)	Church and State since 1300
RELG 325	(3)	Varieties Religious Experience in Christianity
RELG 326	(3)	Christians in the Roman World
RELG 331	(3)	Religion and Globalization
RELG 332	(3)	Conversations Across World Religions
RELG 333	(3)	Principles of Theology
RELG 334	(3)	Theology of History
RELG 336	(3)	Contemporary Theological Issues
RELG 337	(3)	Themes in Buddhist Studies
RELG 338	(3)	Women and the Christian Tradition
RELG 341	(3)	Introduction: Philosophy of Religion
RELG 344	(3)	Mahayana Buddhism
RELG 348	(3)	Classical Hinduism
RELG 350	(3)	Bhakti Hinduism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 353	(3)	Gandhi: His Life and Thought
RELG 354	(3)	Chinese Religions
RELG 358	(3)	Religion and Cinema in India
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 368	(3)	Japanese Religions in Pop Culture
RELG 369	(3)	Tibetan Buddhism
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 372	(3)	Hindu Goddesses
RELG 373	(3)	Christian Ethics of Love
RELG 375	(3)	Religion, Politics and Society
RELG 376	(3)	Religious Ethics
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
RELG 379	(3)	Eastern Orthodox Christianity
RELG 380	(3)	Religion, Philosophy, Modernity
RELG 387	(3)	Introduction to Jainism
RELG 388	(3)	Introduction to Sikhism
RELG 398	(3)	North American Christianity
RELG 399	(3)	Christian Spirituality
RELG 407	(3)	The Writings
RELG 408	(3)	The Prophets
		Paul and His Legacih269.68 21g687 143.9urituality

(3)	Indian Ocean Religious Networks
(3)	Modern Buddhism
(3)	The Way of the Kami
(3)	Zen Buddhism: Poetry and Art
(3)	Vajrayana Buddhism
(3)	Modern Hindu Thought
(3)	Religion and the Performing Arts in South India
(3)	Bhagavadgita and Mahabharata
(3)	Theological Ethics
(3)	Christianity in Global Perspective
(3)	Greco-Roman Judaism
(3)	History of Christian Thought 1
(3)	History of Christian Thought 2
(3)	Ethnography as Method in Religious Studies
	Ramayana: Multiple HoS7 479
	(3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)

CATH 200	(3)	Introduction to Catholicism
CATH 220	(3)	Selected Topics in Catholic Studies
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
JWST 201	(3)	Jewish Law
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 245	(3)	Jewish Life in the Islamic World
JWST 254	(3)	The Jewish Holy Days
JWST 261	(3)	History of Jewish Philosophy and Thought
RELG 201	(3)	Religions of the Ancient Near East
RELG 202	(3)	Religion of Ancient Israel
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 205	(3)	Death and Dying
RELG 210	(3)	Jesus of Nazareth
RELG 211	(3)	Theology through Fiction
RELG 252	(3)	Hinduism and Buddhism
RELG 253	(3)	Religions of East Asia
RELG 254	(3)	Introduction to Yoga Traditions
RELG 270	(3)	Religious Ethics and the Environment
RELG 271	(3)	Religion and Sexuality
RELG 288	(3)	Introduction to Sikhism

# 0-12 credits of Classical language courses.

CLAS 210	(3)	Introductory Latin 1
CLAS 212	(3)	Introductory Latin 2
CLAS 215	(6)	Intensive Introductory Latin
	(3)	Introductory Ancient Greek 1

RELG 257D1	(3)	Introductory Sanskrit
RELG 257D2	(3)	Introductory Sanskrit
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 357D1	(3)	Sanskrit 2
RELG 357D2	(3)	Sanskrit 2
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 381	(3)	Advanced New Testament Greek
RELG 390D1	(3)	Elementary Biblical Hebrew
RELG 390D2	(3)	Elementary Biblical Hebrew
RELG 457D1	(3)	Advanced Sanskrit
RELG 457D2	(3)	Advanced Sanskrit
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 491	(3)	Biblical Hebrew Narratives
RELG 492	(3)	Biblical Hebrew Poetry

33-39 credits of Advanced courses at the 300 level or higher.

CATH 310	(3)	Catholic Intellectual Traditions
CATH 315	(3)	Catholicism and Ethics
CATH 320	(3)	Catholicism and Modernity
CATH 325	(3)	Mystery and the Imagination
CATH 330	(3)	Catholicism in a Global Context
CATH 335	(3)	Confessions of Saint Augustine
CATH 340	(3)	Catholicism and Public Policy
CATH 370	(3)	Topics in Catholic Studies
CATH 375	(3)	Topics in Catholic Theology
CATH 460	(3)	Catholic Studies Seminar
HIST 427	(3)	The Hasidic Movement
ISLA 310	(3)	Women in Islam
JWST 314	(3)	Denominations in North American Judaism
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 382	(3)	Jews, Judaism and Social Justice
RELG 300	(3)	Second Temple Judaism
RELG 302	(3)	Literature of Ancient Israel 1
RELG 303	(3)	Literature of Ancient Israel 2
RELG 307	(3)	Bible, Quran and Interpretations
RELG 310	(3)	Canadian Church History
RELG 311	(3)	Formation of the New Testament
RELG 312	(3)	The Gospels
RELG 313	(3)	Topics in Biblical Studies 1

RELG 315	(3)	Special Topics in Religion 1
RELG 316	(3)	New Religious Movements
RELG 317	(3)	Special Topics in Religion 2
RELG 318	(3)	Special Topics in Religion 3
RELG 319	(3)	Special Topics in Religion 4
RELG 322	(3)	Church and Empire to 1300
RELG 323	(3)	Church and State since 1300
RELG 325	(3)	Varieties Religious Experience in Christianity
RELG 326	(3)	Christians in the Roman World
RELG 331	(3)	Religion and Globalization
RELG 332	(3)	Conversations Across World Religions
RELG 333	(3)	Principles of Theology
RELG 334	(3)	Theology of History
RELG 336	(3)	Contemporary Theological Issues
RELG 337	(3)	Themes in Buddhist Studies
RELG 338	(3)	Women and the Christian Tradition
RELG 341	(3)	Introduction: Philosophy of Religion
RELG 344	(3)	Mahayana Buddhism
RELG 348	(3)	Classical Hinduism
RELG 350	(3)	Bhakti Hinduism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 353	(3)	Gandhi: His Life and Thought
RELG 354	(3)	Chinese Religions
RELG 358	(3)	Religion and Cinema in India
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 368	(3)	Japanese Religions in Pop Culture
RELG 369	(3)	Tibetan Buddhism
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 372	(3)	Hindu Goddesses
RELG 373	(3)	Christian Ethics of Love
RELG 375	(3)	Religion, Politics and Society
RELG 376	(3)	Religious Ethics
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
RELG 380	(3)	Religion, Philosophy, Modernity
RELG 384	(3)	Religion and Public Policy
RELG 387	(3)	Introduction to Jainism
RELG 388	(3)	Introduction to Sikhism
RELG 398	(3)	North American Christianity
RELG 399	(3)	Christian Spirituality
RELG 407	(3)	The Writings
RELG 408	(3)	The Prophets
RELG 410	(3)	Paul and His Legacy

RELG 419	(3)	Religious Heritage and Tourism
RELG 423	(3)	Reformation Thought
RELG 434	(3)	Advanced Theology
RELG 440	(3)	Global Islam
RELG 442	(3)	Pure Land Buddhism

RELG 365	(3)	Intermediate Tibetan 2
RELG 381	(3)	Advanced New Testament Greek
RELG 390D1	(3)	Elementary Biblical Hebrew
RELG 390D2	(3)	Elementary Biblical Hebrew
RELG 457D1	(3)	Advanced Sanskrit
RELG 457D2	(3)	Advanced Sanskrit
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 491	(3)	Biblical Hebrew Narratives
RELG 492	(3)	Biblical Hebrew Poetry

15-21 credits from advanced courses at the 300 level or higher:

		e
CATH 335	(3)	Confessions of Saint Augustine
CATH 375	(3)	Topics in Catholic Theology
		Second 0 0 1 247.67 0 c 3)

RELG 352	(3)	Japanese Religions: History and Thought
RELG 353	(3)	Gandhi: His Life and Thought
RELG 354	(3)	Chinese Religions
RELG 358	(3)	Religion and Cinema in India
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 368	(3)	Japanese Religions in Pop Culture
RELG 369	(3)	Tibetan Buddhism
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 372	(3)	Hindu Goddesses
RELG 373	(3)	Christian Ethics of Love
RELG 375	(3)	Religion, Politics and Society
RELG 376	(3)	Religious Ethics
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
RELG 380	(3)	Religion, Philosophy, Modernity
RELG 387	(3)	Introduction to Jainism
RELG 388	(3)	Introduction to Sikhism
RELG 399	(3)	Christian Spirituality
RELG 407	(3)	The Writings
RELG 408	(3)	The Prophets
RELG 419	(3)	Religious Heritage and Tourism
RELG 423	(3)	Reformation Thought
RELG 434	(3)	Advanced Theology
RELG 440	(3)	Global Islam
RELG 442	(3)	Pure Land Buddhism
RELG 444	(3)	Indian Ocean Religious Networks
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 453	(3)	Vajrayana Buddhism
RELG 454	(3)	Modern Hindu Thought
RELG 455	(3)	Religion and the Performing Arts in South India
RELG 459	(3)	Bhagavadgita and Mahabharata
RELG 470	(3)	Theological Ethics
RELG 479	(3)	Christianity in Global Perspective
RELG 502	(3)	Greco-Roman Judaism
RELG 532	(3)	History of Christian Thought 1
RELG 533	(3)	History of Christian Thought 2
RELG 544	(3)	Ethnography as Method in Religious Studies
RELG 545	(3)	Ramayana: Multiple Lives
RELG 546	(3)	Indian Philosophy
RELG 547	(3)	Special Topics in Hinduism
RELG 548	(3)	Indian Buddhist Philosophy
RELG 549	(3)	Japanese Buddhism in Historical Context
RELG 551	(3)	Special Topics in Buddhism

RELG 552	(3)	Advaita Vedanta
RELG 556	(3)	Issues in Buddhist Studies
RELG 558	(3)	Indian Tantric Traditions

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Nancy Nelson

BIOL 200	(3)	Molecular Biology
CHEM 212	(4)	Introductory Organic Chemistry 1

<sup>\*</sup> Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

Students who have completed CHEM 212 and CHEM 222 or their equivalents may take one or both of the following:

BIOC 311 (3) Metabolic Biochemistry

BIOC 312 (3) Biochemistry of Macromolecules

# Biology

Students interested in Biology can choose between two streams. Cell and molecular biology leads to upper-level courses in developmental biology, human genetics, molecular biology, or allied fields. Organismal biology leads to upper-level courses in biodiversity, ecology, neurobiology, behaviour, or conservation biology. See the Undergraduate Program

BIOL 308	(3)	Ecological Dynamics
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 465	(3)	Conservation Biology

# Chemistry

Prerequisites which cannot be counted toward the Minor concentration: BIOL 112, and CHEM 110 and CHEM 120, or their equivalents; MATH 140, and PHYS 101s; Mnamics

#### Geography

(Students in any Minor or Major concentration or Honours program in Geography cannot choose this disciplinary area.)

Geography advisers recommend including some preparation in chemistry, statistics, and calculus for study in this area even if formal prerequisites are not in place.

Students select 15 credits from the following courses and their associated prerequisites:

GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 272	(3)	Earth's Changing Surface
GEOG 305	(3)	Soils and Environment
GEOG 321	(3)	Climatic Environments
GEOG 322	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments
GEOG 470	(3)	Wetlands

#### **Mathematics and Statistics**

(Students in any Minor or Major concentration or Honours program in Mathematics and Statistics cannot choose this disciplinary area.)

Prerequisites which cannot be counted toward the Minor: MATH 133, MATH 140, and MATH 141 or equivalents.

Suggested courses:

MATH 203	(3)	Principles of Statistics 1
MATH 204	(3)	Principles of Statistics 2
MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 338	(3)	History and Philosophy of Mathematics

### Microbiology and Immunology

Prerequisites which cannot be counted toward the Minor concentration: BIOL 111 and BIOL 112, CHEM 110 and 120 or their equivalents.

Note: CHEM 212 or its equivalent is prerequisite, or corequisite, to these courses.

Students select 15 credits from the following courses and their associated prerequisites:

BIOL 200	(3)	Molecular Biology
BIOL 201*	(3)	Cell Biology and Metabolism
CHEM 212	(4)	Introductory Organic Chemistry 1
MIMM 211	(3)	Introductory Microbiology
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology

<sup>\*</sup> Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

#### **Pathology**

Prerequisites which cannot be counted toward the Minor concentration: BIOL 111 and BIOL 112, plus CHEM 110 and CHEM 120, MATH 140, and PHYS 101 or PHYS 131 and PHYS 102 or PHYS 142, or their equivalents.

PATH 300, together with its associate prerequisites, is well suited to students with an interest in medicine.

Students select 15 credits from the following courses and their associated prerequisites:

BIOL 200 (3) Molecular Biology

BIOL 201*	(3)	Cell Biology and Metabolism
CHEM 212	(4)	Introductory Organic Chemistry 1
PATH 300	(3)	Human Disease
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

<sup>\*</sup> Note: Students select BIOL 201 or ANAT 212 or BIOC 212.

### **Physics**

Prerequisites which cannot be counted toward the Minor concentration: PHYS 131, PHYS 142, MATH 140, MATH 141, MATH 222 or their equivalents.

Honours courses may be substituted for their Major equivalents only with the permission of the Department.

Students select 15 credits from the following courses and their associated prerequisites:

PHYS 224	(3)	Physics of Music
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 241	(3)	Signal Processing
PHYS 242	(2)	Electricity and Magnetism
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 320	(3)	Introductory Astrophysics

## **Physiology**

Prerequisites which cannot be counted towards the Minor concentration: BIOL 111 and BIOL 112, CHEM 110 and CHEM 120, MATH 140, PHYS 101 or PHYS 131, and PHYS 102 or PHYS 142, or their equivalents.

### Students should select:

BIOL 200	(3)	Molecular Biology
BIOL 201*	(3)	Cell Biology and Metabolism
CHEM 212	(4)	Introductory Organic Chemistry 1

<sup>\*</sup> Note: Students select BIOL 201 or BIOC 212.

### Both:

PHGY 209	(3)	Mammalian Physiology 1	
PHGY 210	(3)	Mammalian Physiology 2	

And, if credits permit, one or more of these intermediate-level Physiology courses:

PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience

### **Psychology**

(Students in any Minor or Major concentration or Honours program in Psychology cannot choose this disciplinary area.)

Prerequisites which cannot be counted toward the Minor concentration: PSYC 100 (or equivalent).

Students in the Minor concentration take 15 credits of Psychology selected as follows:

PSYC 204 (3) Introduction to Psychological Statistics

Plus 6 credits from the following core courses:

PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 212	(3)	Perception
PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology

Plus 6 credits Psychology courses at the 300 level or higher (excluding PSYC 305).

### 3.10.35 Social Entrepreneurship

#### 3.10.35.1 Location

Social Entrepreneurship Dawson Hall 853 Sherbrooke Street West Montreal QC H3A 0G5 Telephone: 514-396-1821 Website: mcgill.ca/socent/

Student Affairs Administrator and Program Adviser: Tara Alward Please email *interdisciplinary.arts@mcgill.ca* to make an appointment

### 3.10.35.2 About Social Entrepreneurship

The Minor Concentration in Social Entrepreneurship is a collaboration of the Faculty of Arts and Desautels Faculty of Management and is designed to provide Arts (B.A.) students with an understanding of how to conceptualize, develop, and manage successful new ventures—including social enterprises, not-for-profit organizations, and cooperatives. The program is interdisciplinary and integrative. Many courses will therefore include students from multiple McGill faculties.

Students who pursue this program will acquire the skills necessary to take on issues of social responsibility, environmental sustainability, and the know-how to develop products and services to alleviate social problems. The minor concentration will impart a comprehensive set of management skills through targeted coursework in the Faculty of Management, complemented by an array of related courses in the Faculty of Arts.

The minor concentration also involves hands-on experience, either through an experiential learning course requiring students to create an entrepreneurial business plan, or through an internship at an NGO or other social enterprise. All Arts students in existing majors and minors with a minimum GPA of 3.0 may apply for the Minor Concentration in Social Entrepreneurship after completing at least one year of academic studies at the university.

Further information is available at mcgill.ca/socent.

## 3.10.35.3 Social Entrepreneurship Faculty

### **Program Committee Chair**

O. Dyens

## **Program Committee**

F. Amodio; P. Perez-Aleman; I. Vaccaro

### 3.10.35.4 Bachelor of Arts (B.A.) - Minor Concentration Social Entrepreneurship (18 credits)

This Minor Concentration is a collaboration of the Faculty of Arts and the Desautels Faculty of Management and is designed to provide Arts (B.A.) students with an understanding of how to conceptualize, develop, and manage successful new ventures—including social enterprises, not-for-profit organizations, and cooperatives. The program covers the essentials of management and is interdisciplinary and integrative. Many courses in the Minor Concentration will address a mix of students from across multiple McGill faculties.

This Minor Concentration is restricted to students who have completed one year of university studies with a minimum CGPA of 3.0. The Minor Concentration Social Entrepreneurship has limited enrolment; students should contact the Program Director to apply for admission.

Students in this Minor Concentration are not permitted to take the Joint Honours Economics/Finance, Joint Honours Economics/Accounting or Desautels Minors in Management, Marketing, Finance, or Operations Management (for Non-Management Students).

## Required Courses (12 credits)

INTG 201	(3)	Integrated Management Essentials 1
INTG 202	(3)	Integrated Management Essentials 2
MGPO 362	(3)	Fundamentals of Entrepreneurship
MGPO 438	(3)	Social Entrepreneurship and Innovation

## **Complementary Courses (6 credits)**

#### 3 - 6 credits from the following:

ECON 310

MGPO 364	(3)	Entrepreneurship in Practice
SENT 499	(3)	Internship: Social Entrepreneurship
0 - 3 credits from the	following:	
COMS 355	(3)	Media Governance
COMS 492	(3)	Power, Difference and Justice

(3)

Introduction to Behavioural Economics

The Minor Concentration in Social Studies of Medicine presents medicine as a complex network of institutions, cultures, and political relations embedded in the institutions, cultures, and political relations of the larger society. Courses are divided into three groups: History of Medicine, Anthropology of Medicine, and Sociology of Medicine.

The Minor Concentration consists of 18 credits. Students are required to take at least one course in each of the three groups.



Note: No overlap is permitted with courses counting toward the student's Major Concentration.

## 3.10.36.3 Social Studies of Medicine Faculty

### Chair

Thomas Schlich

### **E**meritus Professors

Margaret Lock; Allan Y

# **Anthropology of Medicine**

ANTH 227	(3)	Medical Anthropology
ANTH 302	(3)	New Horizons in Medical Anthropology
ANTH 314	(3)	Psychological Anthropology 01
ANTH 325	(3)	Anthropology of the Self
ANTH 407	(3)	Anthropology of the Body
ANTH 408	(3)	Sensory Ethnography
ANTH 423	(3)	Mind, Brain and Psychopathology
ANTH 438	(3)	Topics in Medical Anthropology
ANTH 480	(3)	Special Topic 5
ANTH 481	(3)	Special Topic 6

# **Sociology of Medicine**

SOCI 225	(3)	Medicine and Health in Modern Society
SOCI 309	(3)	Health and Illness
SOCI 310	(3)	Sociology of Mental Health
SOCI 365	(3)	Health and Development
SOCI 390	(3)	Gender and Health
SOCI 508	(3)	Medical Sociology and Social Psychiatry
SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge
SOCI 588	(3)	Biosociology/Biodemography

# 3.10.37 Social Work

# 3.10.37.1 Location

School of Social Work 550 Sherbrooke Ouest, Suite 100 Montreal QC H3A 1B9

Telephone: 514-398-7070 Fax: 514-398-4760 Email: *underunderEmail:*  The School of Social Work aims to ensure that social work

Anti-Oppression Social Work Practice

855 Sherbrooke Street West Montreal QC H3A 2T7

Undergraduate Program Information: 514-398-6868

Fax: 514-398-7476

Email: giovanna.terrasi@mcgill.ca Website: mcgill.ca/sociology

### 3.10.38.2 About Sociology

Sociology is commonly defined as the scientific study of society. It offers the student an educational experience which is both intellectually rewarding and practically useful as a preparation for future career opportunities. It provides the student with the theoretical and analytical tools to better understand the complex social forces which affect our lives, contributing in this way to personal enrichment and more effective citizenship. It is also valuable preparation for advanced study in the social sciences, as well as for careers in management; education; law; medicine and health-related areas; social work; and communications in both the public sector and private industry.

The Department offers a Minor Concentration, a Major Concentration, an Honours, and a Joint Honours program in Sociology. Although a student from outside the Department may take courses in the Department without having taken SOCI 210 Sociological Perspectives (except where noted otherwise), the course is recommended. The purpose of the Minor Concentration is to give the student a basic understanding of the field of Sociology, while the Major Concentration will provide a more comprehensive co

## 3.10.38.5 Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)

The purpose of the Minor Concentration Sociology is to give the student a basic understanding of the field of sociology. This Minor concentration may be expanded to the Major Concentration Sociology.

# **U1 Required Courses (6 credits)**

SOCI 210	(3)	Sociological Perspectives
SOCI 211	(3)	Sociological Inquiry

# **Complementary Courses (12 credits)**

3 credits from the following:

SOCI 330 (3) Sociological Theory SOCI 350 (3) Statistics in Social Research

9 credits of complementary courses chosen from the list of courses of

SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 535	(3)	Sociology of the Family
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge
SOCI 571	(3)	Deviance and Social Control
Politics and Social Ch	ange	
SOCI 212	(3)	International Migration
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 245	(3)	The Sociology of Emotions
SOCI 254	(3)	Development and Underdevelopment
SOCI 255	(3)	Gender and the State
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 326	(3)	Political Sociology 01
SOCI 345	(3)	Topics in Sociology
SOCI 354	(3)	Dynamics of Industrial Societies
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 400	(3)	Comparative Migration and Citizenship
SOCI 424	(3)	Networks and Social Structures
SOCI 430	(3)	Sociology of Citizenship
SOCI 446	(3)	Colonialism and Society
SOCI 455	(3)	Post-Socialist Societies
SOCI 484	(3)	Emerging Democratic States
SOCI 495	(3)	Social Problems and Conflicts
SOCI 507	(3)	Social Change
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 545	(3)	Sociology of Population
SOCI 550	(3)	Developing Societies
Social Stratification: 0	Class, Ethnicity	, and Gender
SOCI 227	(3)	Jews in North America
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 255	(3)	Gender and the State
SOCI 270	(3)	Sociology of Gender
SOCI 321	(3)	Gender and Work
SOCI 333	(3)	Social Stratification

SOCI 335	(3)	Sociology of Aging and the Life Course
SOCI 355	(3)	Rural Life in a Global Society
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 375	(3)	Suspect Minorities in Canada
SOCI 410	(3)	Urban Ethnography
SOCI 415	(3)	Education and Inequality
SOCI 430	(3)	Sociology of Citizenship
SOCI 475	(3)	Canadian Ethnic Studies Seminar
SOCI 510	(3)	Seminar in Social Stratification
SOCI 512	(3)	Ethnicity and Public Policy
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 526	(3)	Indigenous Women's Health and Healthcare
SOCI 530	(3)	Sex and Gender
SOCI 555	(3)	Comparative Historical Sociology

# Work, Organizations, and the Economy

SOCI 235	(3)	Technology and Society
SOCI 304	(3)	Sociology of the Welfare State
	(3)	Sociology of Work and Industry

SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 245	(3)	The Sociology of Emotions
SOCI 254	(3)	Development and Underdevelopment
SOCI 255	(3)	Gender and the State
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 326	(3)	Political Sociology 01
SOCI 345	(3)	Topics in Sociology
SOCI 354	(3)	Dynamics of Industrial Societies
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 400	(3)	Comparative Migration and Citizenship
SOCI 424	(3)	Networks and Social Structures
SOCI 430	(3)	Sociology of Citizenship
SOCI 446	(3)	Colonialism and Society
SOCI 455	(3)	Post-Socialist Societies
SOCI 484	(3)	Emerging Democratic States
SOCI 495	(3)	Social Problems and Conflicts
SOCI 507	(3)	Social Change
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 545	(3)	Sociology of Population
SOCI 550	(3)	Developing Societies
SOCI 595	(3)	Immigration Control and The State

# Social Stratification: Class, Ethnicity, and Gender

SOCI 227	(3)	Jews in North America
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 255	(3)	Gender and the State
SOCI 270	(3)	Sociology of Gender
SOCI 321	(3)	Gender and Work
SOCI 333	(3)	Social Stratification
SOCI 335	(3)	Sociology of Aging and the Life Course
SOCI 355	(3)	Rural Life in a Global Society
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 375	(3)	Suspect Minorities in Canada
SOCI 410	(3)	Urban Ethnography
SOCI 415	(3)	Education and Inequality
SOCI 430	(3)	Sociology of Citizenship

Social Stratification: Class, Ethnicity, and Gender

Work, Organizations, and the Economy

The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses.

The 500-level seminars in each substantive area are open to social science major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

## Institutions, Deviance, and Culture

(3) Deviance

SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 400	(3)	Comparative Migration and Citizenship
SOCI 424	(3)	Networks and Social Structures
	(3)	Colonialism and Society

SOCI 312	(3)	Sociology of Work and Industry
SOCI 325	(3)	Sociology of Science
SOCI 420	(3)	Organizations
SOCI 445	(3)	Readings: Sociological Theory
SOCI 470	(3)	Topics in Economic Sociology

### 3.10.38.8 Bachelor of Arts (B.A.) - Joint Honours Component Sociology (36 credits)

The Joint Honours Component Sociology provides a greater focus on Sociology with substantial breadth and depth. The completion of a Joint Honours program is an asset when applying to graduate or profession schools.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Students may register for Joint Honours at the beginning of their second year (U2).

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable). Joint Honours students must maintain a GPA of 3.50 in their program courses, and according to Faculty regulations, a minimum CGPA of 3.00 in general.

## Required Courses (18 credits)

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.

SOCI 210	(3)	Sociological Perspectives
SOCI 211	(3)	Sociological Inquiry
		Sociological Theory

SOCI 309	(3)	Health and Illness
SOCI 310	(3)	Sociology of Mental Health
SOCI 318	(3)	Sociology of the Media
SOCI 322	(3)	Sociology of Literature
SOCI 325	(3)	Sociology of Science
SOCI 388	(3)	Crime
SOCI 488	(3)	Punishment and Prisons
SOCI 489	(3)	Gender, Deviance and Social Control
SOCI 495	(3)	Sacallep964n615.54-47447.5 Em
SOCI 503	(3)	Surveillance in Modern Society
SOCI 508	(3)	Medical Sociology and Social Psychiatry
SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 535	(3)	Sociology of the Family
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge
SOCI 571	(3)	Deviance and Social Control
SOCI 595	(3)	Immigration Control and The State

Politics and Social ChangThe State

SOCI 519	(3)	Gender and Globalization
SOCI 545	(3)	Sociology of Population
SOCI 550	(3)	Developing Societies
SOCI 595	(3)	Immigration Control and The State

## Social Stratification: Class, Ethnicity, and Gender

SOCI 227	(3)	Jews in North America
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 255	(3)	Gender and the State
SOCI 270	(3)	Sociology of Gender
SOCI 321	(3)	Gender and Work
SOCI 333	(3)	Social Stratification
SOCI 335	(3)	Sociology of Aging and the Life Course
SOCI 355	(3)	Rural Life in a Global Society
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 375	(3)	Suspect Minorities in Canada
SOCI 415	(3)	Education and Inequality
SOCI 475	(3)	Canadian Ethnic Studies Seminar
SOCI 510	(3)	Seminar in Social Stratification
SOCI 512	(3)	Ethnicity and Public Policy
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 526	(3)	Indigenous Women's Health and Healthcare
SOCI 530	(3)	Sex and Gender
SOCI 555	(3)	Comparative Historical Sociology
SOCI 595	(3)	Immigration Control and The State

## Work, Organizations, and the Economy

SOCI 235	(3)	Technology and Society
SOCI 304	(3)	Sociology of the Welfare State
SOCI 312	(3)	Sociology of Work and Industry
SOCI 325	(3)	Sociology of Science
SOCI 420	(3)	Organizations
SOCI 470	(3)	Topics in Economic Sociology

# 4 Bachelor of Arts and Science

# 4.1 About the Faculties

The B.A. & Sc. is an interdisciplinary degree intended for students who want to pursue simultaneously a program offered by Arts and one offered by Science. The B.A. & Sc. is intended for students with well-defined interdisciplinary interests, and is not meant as a 'compromise' between a B.A. and a B.Sc. degree.

If you are more interested in Arts, but would like to study some Science, you can do so within the B.A. degree. Similarly, if you are more interested in Science, but would like to study some Arts, you can do so within the B.Sc. degree.

To learn more about the Faculty of Arts, see Faculty of Arts > The Faculty > section 3.1: About the Faculty of Arts. To learn more about the Faculty of Science, see Faculty of Science

## 4.5.4.2 Joint Honours Program

If students want to study at the honours level in two disciplines, they can combine a joint honours program component from an Arts discipline with one from a Science discipline; see *section 4.10.4: Joint Honours Programs* for a list of available programs. Each joint honours component consists of a maximum of 36 required and complementary credits (not including program prerequisites). In cases where a minimum of 24 credits are in courses normally restricted to

#### Regulations

- Students must complete at least 21 credits in the Faculty of Arts and at least 21 credits in the Faculty of Science as part of the interfaculty program
  and minor concentration or minor program.
- · No course may fulfil the requirements for more than one program.

To choose the Honours option, you students must meet the GPA/cGPA requirements set out in *University Regulations and Resources > Undergraduate > Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. & Sc.).* 

## 4.6 Course Requirements

All required and complementary courses used to fulfil program requirements, including the Freshman program, must be completed with a grade of C or better. If you fail to obtain a satisfactory grade in a required course, you must either pass the supplemental examination in the course or do additional work for a supplemental grade, if these options are available, or repeat the course. Course substitution will be allowed only in special cases; students should consult their *academic adviser*.

Normally, you are permitted to repeat a failed course only once. (Failure is considered to be a grade of less than C or the administrative f

#### 4.6.2 Courses Outside the Faculties of Arts and of Science

The following regulations apply to students in the B.A. & Sc. who want to take courses outside the Faculties of Arts and of Science:

- Regardless of your minimum credit requirement toward your B.A. & Sc., you are allowed a maximum of 12 credits in ELECTIVE and/or COMPLEMENTARY courses taken in faculties other than the Faculties of Arts and of Science.
- Students in certain designated programs that include a number of REQUIRED and COMPLEMENTARY courses in other faculties are permitted a maximum of 30 credits outside the Faculties of Arts and of Science. These programs are the Interfaculty and Honours programs in Environment, the Minor concentration in Environment, the Interfaculty and Honours programs in Sustainability, Science and Society, and the Major concentration in Geograph

 $Advising for all \ returning \ students \ takes \ place \ in \ March for \ the \ upcoming \ academic \ year. \ For \ more \ information, \ refer \ to \ \textit{mcgill.ca/science/undergraduate/advice}.$ 

# 4.7.1 Choosing a B.A. & Sc. Program

#### Honours

To choose the Honours option, you must meet the GPA/CGPA requirements set out in *University Regulations and Resources > Undergraduate > Graduation > Graduation Honours > section 1.9.3.4: Honours and First-Class Honours for Faculties of Arts and Science (including B.A. & Sc.).* 

## 4.7.2 Preparation for Graduate School

Any choice of undergraduate degree and program constrains options for graduate school. The B.A. & Sc. provides good preparation for graduate degrees in integrated disciplines such as Cognitive or Environmental Science as well as in the Sustainability, Science and Society program. Depending on the Arts or Science specific program you want to enter in graduate school, the B.A. & Sc. may or may not be adequate preparation. If you Tmet the GP

### **Faculty of Arts Minor Concentrations or Minors**

Russian – section 4.11.25.6: Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)

Russian Culture - section 4.11.25.7: Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)

Social Studies of Medicine – section 4.11.33.1: Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)

**Sociology** – section 4.11.34.1: Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)

South Asian Studies - section 3.10.18.12: Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)

World Cinemas - section 4.11.13.11: Bachelor of Arts (B.A.) - Minor Concentration World Cinemas (18 credits)

World Islamic and Middle East Studies - section 4.11.36.3: Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits), section

# **Faculty of Arts Major Concentrations**

East Asian Studies – section 4.11.11.4: Bachelor of Arts (B.A.) - Major Concentration East Asian Studies (36 credits)

**Economics** – section 4.11.12.2: Bachelor of Arts (B.A.) - Major Concentration Economics (36 credits)

English - Cultural Studies

# 4.10.3 Honours Programs

The Honours programs available to B.A. & Sc. students are listed here.

# Honours Programs open to B.A. & Sc. students

section 4.11.8: Cognitive Science – section 4.11.8.3: Bachelor of Arts and Science (B.A. & Sc.) - Honours Cognitive Science (60 credits)

Environment-see Bieler School of Environment > Undergraduate > Browse Academic Programs > Honours Program in Environment

## 4.10.4.2 Faculty of Science

There are currently only two Science Joint Honours components available to B.A. & Sc. students, which are listed here.

## **Faculty of Science Joint Honours Programs**

**Mathematics** – section 4.11.27.4: Bachelor of Arts (B.A.) - Joint Honours Component Mathematics (36 credits)

Psychology – section 4.11.31.3: Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)

# 4.10.5 Interfaculty Programs

The Interfaculty programs available to B.A. & Sc. students are listed here.

## Interfaculty programs open to B.A. & Sc. students

Cognitive Science – section 4.11.8.4: Bachelor of Arts and Science (B.A. & Sc.) - Interfaculty Program Cognitive Science (54 credits)

Environmento

The Freshman Program requirements include foundational courses in both Science and Arts which must be selected as follows:

MATH

At least two mathematics courses:

MATH 139	(4)	Calculus 1 with Precalculus
MATH 140	(3)	Calculus 1
MATH 150	(4)	Calculus A

At most one of a Second Calculus:

At most one of a First Calculus:

MATH 141	(4)	Calculus 2
MATH 151	(4)	Calculus B

At most one of a Linear Algebra course:

MATH 133 (3) Linear Algebra and Geometry

### **SCIENCE**

At least three foundational science courses:

Any number of:

BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology
CHEM 110	(4)	General Chemistry 1
CHEM 120*	(4)	General Chemistry 2

 $<sup>\</sup>ensuremath{^{*}}$  Note: CHEM 120 is not open to students who have taken CHEM 115.

At most one of a First Physics:

PHYS 101 (4) Introductory Physics - Mechanics
PHYS 131 (4) Mechanics and Waves

At most one of a Second Physics:

Note: PHYS 101 is a prerequisite for PHYS 102; and PHYS 131 is a prerequisite for PHYS 142.

PHYS 102 (4) Introductory Physics - Electromagnetism
PHYS 142 (4) Electromagnetism and Optics

At most two of another Foundational Science:

COMP 202\* (3) Foundations of Programming ESYS 104 (3) The Earth System PSYC 100\* (3) Introduction to Psychology

<sup>\*</sup> Note: Students in a 1 S)3)3)

At least three Arts courses (or 9 credits) to be chosen in two of the following three categories: Humanities, Languages, and Social Sciences.

A maximum of two courses (or 6 credits) may be chosen from one category, and no more than two courses (or 6 credits) can be taken in any one department.

Note: No course may fulfil the requirements for more than one program, including the B.A. & Sc. Freshman Program.

## **Humanities (Literature and Civilization):**

Courses selected from the following subjects:

- Art History and Communications Studies (ARTH and COMS)
- Classics (CLAS)
- East Asian Studies (EAST)
- English (ENGL)
- French Language and Literature (FREN)
- German Studies (GERM)
- Hispanic Studies (HISP)
- Islamic Studies (ISLA)
- Italian studies (ITAL)
- Jewish Studies (JWST)
- Music for Arts (MUAR only)
- Philosophy (PHIL)
- Religious Studies (RELG)
- Russian Studies (RUSS)

#### Languages:

Courses may be taken in this category to improve language skills.

Languages include:

- Classics (Latin, Ancient Greek, Modern Greek) (CLAS)
- East Asian Studies (Chinese, Japanese, Korean) (EAST)
- English as a Second Language (CEAP, CESL)
- French as a Second Language (FRSL)
- French Language and Literature (FREN)
- German Studies (GERM)
- Hispanic Studies (Spanish) (HISP)
- Islamic Studies (Arabic, Persian, Turkish, Urdu) (ISLA)
- Italian (ITAL)
- Jewish Studies (Hebrew, Yiddish) (JWST)
- Russian and Slavic Studies (Polish, Russian, Armenian, Czech) (RUSS)

#### **Social Sciences:**

Courses selected from the following subjects:

- Anthropology (ANTH)
- Economics (ECON)
- History (HIST)
- Linguistics (LING)
- Political Science (POLI)
- Sociology (SOCI)

# **Advanced Standing/Transfer Credits**

Students who have completed the Diploma of Collegial Studies, Advanced Placement exams, Advanced Levels, the International Baccalaureate, the French Baccalaureate, or McGill placement examinations may recei

as well as exemption from all or part of the Arts courses requirement of the Freshman Program. Similarly, students who have completed courses at other universities or colleges may receive exemptions and/or credits.

Advanced Placement Examination results with a score of 4 or 5 must be declared by the student at the time of initial registration at the University.

For more information about advanced standing, please consult: http://www.mcgill.ca/students/transfercredit/. Students must carefully select their mathematics and science Freshman courses so that they have all the required prerequisites for their intended departmental programs.

### 4.11.3 Anthropology (ANTH)

The Department of Anthropology, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.4: Anthropology.

#### 4.11.3.1 Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)

The Minor Concentration Anthropology permits students to explore the development and diversity of human beings and human society and culture through courses in human evolution, prehistoric archaeology, and socio-cultural anthropology. Students may include courses in all of these fields, or may focus on one or two.

This program may be expanded to the Major Concentration Anthropology.

### Complementary Courses (18 credits)

6-9 credits from 200-level courses in Anthropology.

9-12 credits from any 300-, or 400-, or 500-level courses in Anthropology (only 3 credits of which can be at the 400 or 500 level. Only 1 Special Topic course can be taken.)

#### 4.11.3.2 Bachelor of Arts (B.A.) - Major Concentration Anthropology (36 credits)

The Major concentration is especially appropriate for students who aim to take courses across several sub-disciplinary or topical concentrations, and for whom specialization is premature. There are no prerequisites for admission to the Major Concentration Anthropology. Students are encouraged to take a course in quantitative methods (listed under the Honours program), but this course cannot count as part of this concentration.

Complementar 1 233.151 515.602 Tm(.)Toin432.6opology (36 credits)4.11.3.2 carefuods9 credits from 200-le

Joint Honours students must maintain a GPA of 3.50 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

## Required Course (3 credits)

The Joint Honours thesis should be determined in consultation with advisers from both Joint Honours components programs. Normally, the thesis is 6 credits of coursew

ARTH 205	(3)	Introduction to Modern Art
ARTH 207	(3)	Introduction Early Modern Art 1400-1700
ARTH 209	(3)	Introduction to Ancient Art and Architecture
ARTH 215	(3)	Introduction to East Asian Art
ARTH 223	(3)	Introduction Italian Renaissance Art 1300-1500
ARTH 225	(3)	Introduction to Seventeenth - Century Art
ARTH 226	(3)	Introduction to Eighteenth-Century Art and Architecture
ARTH 300	(3)	Canadian Art to 1914
ARTH 302	(3)	Aspects of Canadian Art
ARTH 305	(3)	Methods in Art History
ARTH 310	(3)	Postcolonialism
ARTH 314	(3)	The Medieval City
ARTH 315	(3)	Indigenous Art and Culture
ARTH 321	(3)	Visual Culture of the Dutch Republic
ARTH 323	(3)	Realism and Impressionism
ARTH 324	(3)	Sixteenth-Century Art in Italy
ARTH 325	(3)	Visual Culture Renaissance Venice
ARTH 326	(3)	Studies in Manuscript and Print Culture
ARTH 334	(3)	Eighteenth Century European Art
ARTH 335	(3)	Art in the Age of Revolution
ARTH 336	(3)	Art Now
ARTH 337	(3)	Modern Art and Theory to WWI
ARTH 338	(3)	Modern Art and Theory: WWI - WWII
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 340	(3)	The Gothic Cathedral
ARTH 351	(3)	Vision and Visuality in Art History
ARTH 352	(3)	Feminism in Art and Art History
ARTH 353	(3)	Selected Topics in Art History 1
ARTH 354	(3)	Selected Topics Art History 2
ARTH 356	(3)	Modern and Contemporary Chinese Art
ARTH 357	(3)	Early Chinese Art
ARTH 358	(3)	Later Chinese Art (960-1911)
ARTH 360	(3)	Studies in the Photographic
ARTH 366	(3)	Italian Renaissance Art 1
ARTH 367	(3)	Italian Renaissance Art 2
ARTH 368	(3)	Studies in Northern Renaissance Art 01
ARTH 411	(3)	Canadian Art and Race
ARTH 420	(3)	Selected Topics in Art and Architecture 1
ARTH 421	(3)	Selected Topics in Art and Architecture 2
ARTH 422	(3)	Selected Topics in Art and Architecture 3
ARTH 425	(3)	Arts of Medieval Spain
ARTH 430	(3)	Concepts - Discipline Art History
ARTH 435	(3)	Early Modern Visual Culture

ARTH 440	(3)	The Body and Visual Culture
ARTH 447	(3)	Independent Research Course
ARTH 457	(3)	Brushwork in Chinese Painting
ARTH 466	(3)	Studies in Italian Renaissance Art 01
ARTH 473	(3)	Studies in 17th and Early 18th Century Art 04
ARTH 474	(3)	Studies in Later 18th and 19th Century Art 03
ARTH 479	(3)	Studies: Modern Art and Theoretical Problems 04
ARTH 490	(3)	Museum Internship
ARTH 501	(3)	Advanced Topics in Art History and Visual Culture
ARTH 502	(3)	Advanced Topics in Art and Architectural History

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

ARCH 250	(3)	Architectural History 1
ARCH 251	(3)	Architectural History 2
PHIL 336	(3)	Aesthetics
PHIL 436	(3)	Aesthetics 2

#### 4.11.4.2 Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)

The Minor Concentration Communication Studies provides undergraduate students with a critical understanding of the role that communications media and communication technologies play in a society. It offers students intellectually challenging and innovative instruction in key traditions of Communications and Media Studies and new theoretical and methodological practices being developed in the field. The courses included in the program focus on issues of the relationship between communication, democracy and urban life, the social life of communication technologies, the historical development and transformation of media and communication forms, institutions, practices and technologies, and the mass media representation and mobilization of social difference.

#### Required Course (3 credits)

COMS 210 (3) Introduction to Communication Studies

#### **Complementary Courses (15 credits)**

Five courses in Communication Studies selected from:

COMS 200	(3)	History of Communication
COMS 230	(3)	Communication and Democracy
COMS 300	(3)	Media and Modernity in the 20th Century
COMS 301	(3)	Core Concepts in Critical Theory
COMS 310	(3)	Media and Feminist Studies
COMS 320	(3)	Media and Empire
COMS 330	(3)	Media in Cultural Life
COMS 340	(3)	New Media
COMS 350	(3)	Sound Culture
COMS 354	(3)	Media Studies of Crime
COMS 355	(3)	Media Governance
COMS 361	(3)	Selected Topics Communication Studies 1
COMS 362	(3)	Selected Topics Communication Studies 2
COMS 400	(3)	Critical Theory Seminar

COMS 410	(3)	Cultures in Visualization
COMS 411	(3)	Disability, Technology and Communication
COMS 425	(3)	Urban Culture and Everyday Life
COMS 435	(3)	Advanced Issues in Media Governance
COMS 490	(3)	Special Topics in History and Theory of Media
COMS 491	(3)	Special Topics in Communications Studies
COMS 492	(3)	Power, Difference and Justice
COMS 495	(3)	Directed Reading
COMS 497	(3)	Independent Study
COMS 510	(3)	Canadian Broadcasting Policy

#### 4.11.4.3 Bachelor of Arts (B.A.) - Major Concentration Art History (36 credits)

The Major Concentration in Art History concentrates on analysis of forms of visual and material culture from ancient to contemporary times. It provides a grounding in diverse fields and methods of the discipline.

#### **Complementary Courses (36 credits)**

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:

ARTH 302	(3)	Aspects of Canadian Art
ARTH 305	(3)	Methods in Art History
ARTH 315	(3)	Indigenous Art and Culture
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 357	(3)	Early Chinese Art

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Note: Courses in studio practice c.301 Tm(TH 490 Museum IAlist, as an in.041 Tm((3)2n(3 1 253.239 340.04145ice c.301 Tmw1 253.239 340.601 tice c.301 Tmardv)'

<sup>-</sup>A maximum of 12 credits may be at the 200 level.

<sup>-</sup>A minimum of 3 credits must be at the 400 level or above (excluding ARTH 490 Museum Internship).

ARTH 321	(3)	Visual Culture of the Dutch Republic
ARTH 323	(3)	Realism and Impressionism
ARTH 324	(3)	Sixteenth-Century Art in Italy
ARTH 325	(3)	Visual Culture Renaissance Venice
ARTH 326	(3)	Studies in Manuscript and Print Culture
ARTH 334	(3)	Eighteenth Century European Art
ARTH 335	(3)	Art in the Age of Revolution
ARTH 336	(3)	Art Now
ARTH 337	(3)	Modern Art and Theory to WWI
ARTH 338	(3)	Modern Art and Theory: WWI - WWII
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 340	(3)	The Gothic Cathedral
ARTH 351	(3)	Vision and Visuality in Art History
ARTH 352	(3)	Feminism in Art and Art History
ARTH 353	(3)	Selected Topics in Art History 1
ARTH 354	(3)	Selected Topics Art History 2
ARTH 356	(3)	Modern and Contemporary Chinese Art
ARTH 357	(3)	Early Chinese Art
ARTH 358	(3)	Later Chinese Art (960-1911)
ARTH 360	(3)	Studies in the Photographic
ARTH 366	(3)	Italian Renaissance Art 1
ARTH 367	(3)	Italian Renaissance Art 2
ARTH 368	(3)	Studies in Northern Renaissance Art 01
ARTH 411	(3)	Canadian Art and Race
ARTH 420	(3)	Selected Topics in Art and Architecture 1
ARTH 421	(3)	Selected Topics in Art and Architecture 2
ARTH 422	(3)	Selected Topics in Art and Architecture 3
		Arts of Mediev

ARCH 250	(3)	Architectural History 1
ARCH 251	(3)	Architectural History 2
PHIL 336	(3)	Aesthetics
PHIL 436	(3)	Aesthetics 2

#### 4.11.4.4 Bachelor of Arts (B.A.) - Joint Honours Component Art History (36 credits)

The Joint Honours Component Art History is a flexible program that emphasizes breadth, depth as well as art historical methods and research. It is designed especially for students who anticipate pursuing graduate studies and careers in art history or related disciplines.

Students are encouraged to apply for admission to the Joint Honours program after their first year of study at the University and after completion of no less than 12 credits in Art History. Admission is on a competitive basis. While the Faculty of Arts regulations require a minimum CGPA of 3.0 for Honours programs, the Department requires in addition a program GPA of 3.50 for admission into the program and the awarding of Honours

#### Required Courses (6 credits)

ARTH 400	(3)	Selected Methods in Art History
ARTH 401	(3)	Honours Research Paper

#### Complementary Courses (30 credits)

3-15 credits from the following list, as an introduction to methods, theories, and practices in diverse fields of the discipline:

Introduction to Art History 1

ARTH 302	(3)	Aspects of Canadian Art
ARTH 305	(3)	Methods in Art History
ARTH 315	(3)	Indigenous Art and Culture
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 357	(3)	Early Chinese Art

15-27 credits chosen from among departmental course offerings as follows:

A DTII 200

<sup>-</sup>A minimum of 3 credits must be at the 400 level or above (other than ARTH 490 Museum Internship).

ARTH 200	(3)	Introduction to Art History 1
ARTH 202	(3)	Introduction to Contemporary Art
ARTH 204	(3)	Introduction to Medieval Art and Architecture
ARTH 205	(3)	Introduction to Modern Art
ARTH 207	(3)	Introduction Early Modern Art 1400-1700
ARTH 209	(3)	Introduction to Ancient Art and Architecture
ARTH 215	(3)	Introduction to East Asian Art
ARTH 223	(3)	Introduction Italian Renaissance Art 1300-1500
ARTH 225	(3)	Introduction to Seventeenth - Century Art
ARTH 226	(3)	Introduction to Eighteenth-Century Art and Architecture
ARTH 300	(3)	Canadian Art to 1914
ARTH 302	(3)	Aspects of Canadian Art
ARTH 305	(3)	Methods in Art History
ARTH 310	(3)	Postcolonialism
ARTH 314	(3)	The Medieval City
ARTH 315	(3)	Indigenous Art and Culture
ARTH 321	(3)	Visual Culture of the Dutch Republic

<sup>-</sup>A maximum of 12 credits may be at the 200 level.

ARTH 323	(3)	Realism and Impressionism
ARTH 324	(3)	Sixteenth-Century Art in Italy
ARTH 325	(3)	Visual Culture Renaissance Venice
ARTH 326	(3)	Studies in Manuscript and Print Culture
ARTH 334	(3)	Eighteenth Century European Art
ARTH 335	(3)	Art in the Age of Revolution
ARTH 336	(3)	Art Now
ARTH 337	(3)	Modern Art and Theory to WWI
ARTH 338	(3)	Modern Art and Theory: WWI - WWII
ARTH 339	(3)	Critical Issues - Contemporary Art
ARTH 340	(3)	The Gothic Cathedral
ARTH 351	(3)	Vision and Visuality in Art History
ARTH 352	(3)	Feminism in Art and Art History
ARTH 353	(3)	Selected Topics in Art History 1
ARTH 354	(3)	Selected Topics Art History 2
ARTH 356	(3)	Modern and Contemporary Chinese Art
ARTH 357	(3)	Early Chinese Art
ARTH 358	(3)	Later Chinese Art (960-1911)
ARTH 360	(3)	Studies in the Photographic
ARTH 366	(3)	Italian Renaissance Art 1
ARTH 367	(3)	Italian Renaissance Art 2
ARTH 368	(3)	Studies in Northern Renaissance Art 01
ARTH 411	(3)	Canadian Art and Race
ARTH 420	(3)	Selected Topics in Art and Architecture 1
ARTH 421	(3)	Selected Topics in Art and Architecture 2
ARTH 422	(3)	Selected Topics in Art and Architecture 3
ARTH 425	(3)	Arts of Medieval Spain
ARTH 430	(3)	Concepts - Discipline Art History
ARTH 435	(3)	Early Modern Visual Culture
ARTH 440	(3)	The Body and Visual Culture
ARTH 447	(3)	Independent Research Course
ARTH 457	(3)	Brushwork in Chinese Painting
ARTH 466	(3)	Studies in Italian Renaissance Art 01
ARTH 473	(3)	Studies in 17th and Early 18th Century Art 04
ARTH 474	(3)	Studies in Later 18th and 19th Century Art 03
ARTH 479	(3)	Studies: Modern Art and Theoretical Problems 04
ARTH 490	(3)	Museum Internship
ARTH 501	(3)	Advanced Topics in Art History and Visual Culture
ARTH 502	(3)	Advanced Topics in Art and Architectural History

Note: In addition to architectural courses given by the Department, program students are encouraged to consider courses given in the School of Architecture and the Departments of East Asian Studies and Philosophy which may, upon consultation with the Department, be regarded as fulfilling part of the requirements.

ARCH 250 (3) Architectural History 1

ARCH 251	(3)	Architectural History 2
PHIL 336	(3)	Aesthetics
PHIL 436	(3)	Aesthetics 2

# 4.11.5 Atmospheric and Oceanic Sciences (ATOC)

The Department of Atmospheric and Oceanic Sciences, the programs, and specific courses are described in Faculty of Science > Undergraduate > Browse

The minimum freshman science requirements in the B.A. & Sc. may not satisfy the introductory science requirements of all medical/dental schools. Please see your departmental adviser for more information.

#### 4.11.6.1 Bachelor of Arts and Science (B.A. & Sc.) - Minor Concentration Biology - Cell/Molecular (19 credits)

The Minor Concentration Biology - Cell/Molecular, is restricted to students in the B.A. & Sc. It is a sequence of courses designed to yield a broad introduction to cell/molecular biology.

Advising Note: Students interested in a Biology minor concentration must choose either the Cell/Molecular option or the Organismal option, but may not take both. Students interested in a more in-depth program in Biology should consider the Major concentration.

Students may complete this program with a minimum of 18 credits or a maximum of 19 credits depending if they are exempt from taking CHEM 212 and their choice of complementary courses.

#### Required Courses\* (13 credits)

- \* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. & Sc. must be replaced by approved complementary courses. Regardless of the substitution, students must take at least 18 credits in this program.
- \*\* Students who have already taken CHEM 212 or its equivalent will choose another appropriate complementary course, to be approved by the Biology Adviser.

BIOL 200	(3)	Molecular Biology
BIOL 201	(3)	Cell Biology and Metabolism
BIOL 202	(3)	Basic Genetics
CHEM 212**	(4)	Introductory Organic Chemistry 1

#### **Complementary Courses (6 credits)**

Any 6 credits of biology courses at the 300 lev

#### **Required Courses (18 credits)**

Students must take at least 36 new credits in this program.

BIOL 200	(3)	Molecular Biology
BIOL 201	(3)	Cell Biology and Metabolism
BIOL 205	(3)	Functional Biology of Plants and Animals
BIOL 206	(3)	Methods in Biology
BIOL 215	(3)	Introduction to Ecology and Evolution
BIOL 216	(3)	Biology of Behaviour

# **Complementary Courses (18 credits)**

3-4 credits from CHEM block:

CHEM 204	(3)	Physical Chemistry/Biological Sciences 1
CHEM 212*	(4)	Introductory Organic Chemistry 1

<sup>\*</sup>Students who have already taken CHEM 212 or its equivalent as advance credits may choose to substitute CHEM 204, or CHEM 222, or a 300-500 levels complementary Biology course, to be approved by the Biology

#### 4.11.7.1 Bachelor of Science (B.Sc.) - Minor Chemistry (20 credits)

#### Required Courses (13 credits)

If any of the required courses are part of your primary program or were taken at CEGEP, then they must be substituted by courses from the minor options list that are not part of your primary program. The total number of credits exclusive to the minor is at least 19.

CHEM 204	(3)	Physical Chemistry/Biological Sciences 1
CHEM 212*	(4)	Introductory Organic Chemistry 1
CHEM 267	(3)	Introductory Chemical Analysis
CHEM 281	(3)	Inorganic Chemistry 1

#### **Complementary Courses**

6-7 credits **		
CHEM 214	(3)	Physical Chemistry/Biological Sciences 2
CHEM 219	(3)	Introduction to Atmospheric Chemistry
CHEM 222*	(4)	Introductory Organic Chemistry 2
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 319	(3)	Chemistry of Energy, Storage and Utilization
CHEM 334	(3)	Advanced Materials
CHEM 381	(3)	Inorganic Chemistry 2
CHEM 462	(3)	Green Chemistry

<sup>\*\*</sup> Any level 300-500 CHEM course can be substituted for courses within this list.

#### 4.11.7.2 Bachelor of Arts and Science (B.A. & Sc.) - Major Concentration Chemistry (36 credits)

The Major Concentration Chemistry is not certified by the Ordre des Chimistes du Québec. Students interested in pursuing a career in Chemistry in Quebec are advised to take an appropriate B.Sc. program in Chemistry.

The Major Concentration Chemistry, which is restricted to students in the B.A. & Sc. or B.Sc./B.Ed., is a planned sequence of courses designed to permit a degree of specialization in this discipline.

### Required Courses\* (21 credits)

\* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. & Sc. or B.Sc./B.Ed. must be replaced by courses from the Complementary Course List equal to or exceeding their credit value. Regardless of the substitution, students must take at least 36 credits in this program.

CHEM 204	(3)	Physical Chemistry/Biological Sciences 1
CHEM 212	(4)	Introductory Organic Chemistry 1
CHEM 214	(3)	Physical Chemistry/Biological Sciences 2
CHEM 222	(4)	Introductory Organic Chemistry 2
CHEM 253	(1)	Introductory Physical Chemistry Laboratory
CHEM 267	(3)	Introductory Chemical Analysis
CHEM 281	(3)	Inorganic Chemistry 1

#### **Complementary Courses (15 credits)**

15 credits selected from:

CHEM 219	(3)	Introduction to Atmospheric Chemistry
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 332	(3)	Biological Chemistry

<sup>\*</sup> Denotes courses with CEGEP equivalents.

Algorithms and Data Structures

PHIL 361	(3)	18th Century Philosophy
PHIL 367	(3)	19th Century Philosophy
PHIL 411	(3)	Topics in Philosophy of Logic and Mathematics
PHIL 415	(3)	Philosophy of Language
PHIL 419	(3)	Epistemology
PHIL 421	(3)	Metaphysics
PHIL 441	(3)	Philosophy of Science 2
PHIL 470	(3)	Topics in Contemporary Analytic Philosophy
PHIL 474	(3)	Phenomenology
Psychology		
ANTH 440	(3)	Cognitive Anthropology
MUMT 250	(3)	Music Perception and Cognition

Introduction to Psychological Statistics

cal Statistics

PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYC 531	(3)	Structural Equation Models
PSYC 537	(3)	Advanced Seminar in Psychology of Language
PSYC 538	(3)	Categorization, Communication and Consciousness
PSYC 541	(3)	Multilevel Modelling
PSYC 545	(3)	Topics in Language Acquisition

#### Neuroscience

 $\ensuremath{^{*}}$  Students select either NSCI 200 or PHGY 209, but not both.

ANAT 321	(3)	Circuitry of the Human Brain
BIOL 200	(3)	Molecular Biology
BIOL 201	(3)	Cell Biology and Metabolism
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 307	(3)	Behavioural Ecology
BIOL 320	(3)	Evolution of Brain and Behaviour
BIOL 414	(3)	Invertebrate Brain Circuits and Behaviours
BIOL 506	(3)	Neurobiology of Learning
BIOL 507	(3)	Animal Communication
BIOL 517	(3)	Cognitive Ecology
BIOL 530	(3)	Advances in Neuroethology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 580	(3)	Genetic Approaches to Neural Systems
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
CHEM 212	(4)	Introductory Organic Chemistry 1
NEUR 310	(3)	Cellular Neurobiology
NEUR 503	(3)	Computational Neuroscience
NEUR 507	(3)	Topics in Radionuclide Imaging
NSCI 200*	(3)	Introduction to Neuroscience 1
NSCI 300	(3)	Neuroethics
PHGY 209*	(3)	Mammalian Physiology 1
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 314	(3)	Integrative Neuroscience
PHGY 556	(3)	Topics in Systems Neuroscience
PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 302	(3)	The Psychology of Pain
PSYC 311	(3)	Human Cognition and the Brain
PSYC 317	(3)	Genes and Behaviour
PSYC 318	(3)	Behavioural Neuroscience 2
PSYC 342	(3)	Hormones and Behaviour
PSYC 410	(3)	Special Topics in Neuropsychology
PSYC 427	(3)	Sensorimotor Neuroscience

PSYC 433	(3)	Cognitive Science
PSYC 443	(3)	Affective Neuroscience
PSYC 444	(3)	Sleep Mechanisms and Behaviour
PSYC 502	(3)	Psychoneuroendocrinology
PSYC 506	(3)	Cognitive Neuroscience of Attention
PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYT 301	(3)	Issues in Drug Dependence
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders
PSYT 515	(3)	Advanced Studies in Addiction

#### **Research Course**

COGS 401 (6) Research Cognitive Science 1

#### 4.11.8.4 Bachelor of Arts and Science (B.A. & Sc.) - Interfaculty Program Cognitive Science (54 credits)

The Interfaculty Program Cognitive Science, which is restricted to students in the B.A. & Sc., is designed to allow students to explore the multidisciplinary study of cognition in humans and machines. The goal is to understand the principles of intelligence and thought with the hope that this will lead to a better understanding of the mind and of learning, and to the development of intelligent devices.

Note: B.A. & Sc. students who take interfaculty programs must take at least 21 credits in Arts and 21 credits in Science across their interfaculty program and their minor or minor concentration.

#### Required Course (3 credits)

NSCI 201 (3) Introduction to Neuroscience 2

#### Core Complementary Courses (21 credits)

3 credits from the following logic courses:

COMP 230	(3)	Logic and Computability
MATH 318	(3)	Mathematical Logic
PHIL 210	(3)	Introduction to Deductive Logic 1

3 credits from the following statistics courses:

MATH 203	(3)	Principles of Statistics 1
MATH 323	(3)	Probability
PSYC 204	(3)	Introduction to Psychological Statistics

3 credits from the following computer science courses:

COMP 202	(3)	Foundations of Programming
COMP 204	(3)	Computer Programming for Life Sciences
COMP 250	(3)	Introduction to Computer Science

3 credits from the following linguistics courses:

LING 201	(3)	Introduction to Linguistics
LING 210	(3)	Introduction to Speech Science
LING 260	(3)	Meaning in Language

3 credits from the following philosophy courses:

PHIL 200	(3)	Introduction to Philosophy 1
PHIL 201	(3)	Introduction to Philosophy 2
PHIL 221	(3)	Introduction to History and Philosophy of Science 2

3 credits from the following neuroscience courses:

NSCI 200*	(3)	Introduction to Neuroscience 1
PSYC 211	(3)	Introductory Behavioural Neuroscience

3 credits from the following psychology courses:

PSYC 212	(3)	Perception
PSYC 213	(3)	Cognition

## **Complementary Courses**

30 credits are selected as follows

 $18\ credits\ from\ one\ of\ the\ following\ lists:\ Computer\ Science,\ Linguistics,\ Neuroscience,\ Philosophy,\ or\ Psychology.$ 

12 credits from any of the five lists.

Of the 30 Complementary Course credits, 15 credits taken must be at the 400 level or higher.

#### **Computer Science**

COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 280	(3)	History and Philosophy of Computing
COMP 302	(3)	Programming Languages and Paradigms
COMP 330	(3)	Theory of Computation
COMP 345	(3)	From Natural Language to Data Science
COMP 360	(3)	Algorithm Design
COMP 400	(4)	Project in Computer Science
COMP 409	(3)	Concurrent Programming
COMP 417	(3)	Introduction Robotics and Intelligent Systems
COMP 421	(3)	Database Systems
COMP 424	(3)	Artificial Intelligence
COMP 445	(3)	Computational Linguistics
COMP 451	(3)	Fundamentals of Machine Learning
COMP 523	(3)	Language-based Security
COMP 527	(3)	Logic and Computation
COMP 531	(3)	Advanced Theory of Computation

COMP 546	(4)	Computational Perception
COMP 549	(3)	Brain-Inspired Artificial Intelligence
COMP 550	(3)	Natural Language Processing

PSYC 213	(3)	Cognition
PSYC 301	(3)	Animal Learning and Theory
PSYC 302	(3)	The Psychology of Pain
PSYC 304	(3)	Child Development
PSYC 305	(3)	Statistics for Experimental Design
PSYC 310	(3)	Intelligence
PSYC 311	(3)	Human Cognition and the Brain
PSYC 315	(3)	Computational Psychology
PSYC 317	(3)	Genes and Behaviour
PSYC 318	(3)	Behavioural Neuroscience 2
PSYC 319	(3)	Computational Models - Cognition
PSYC 340	(3)	Psychology of Language
PSYC 341	(3)	The Psychology of Bilingualism
PSYC 342	(3)	Hormones and Behaviour
PSYC 352	(3)	Cognitive Psychology Laboratory
PSYC 406	(3)	Psychological Tests
PSYC 410	(3)	Special Topics in Neuropsychology
PSYC 413	(3)	Cognitive Development
PSYC 427	(3)	Sensorimotor Neuroscience
PSYC 433	(3)	Cognitive Science
PSYC 439	(3)	Correlational Techniques
PSYC 443	(3)	Affective Neuroscience
PSYC 470	(3)	Memory and Brain
PSYC 506	(3)	Cognitive Neuroscience of Attention
PSYC 513	(3)	Human Decision-Making
PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYC 531	(3)	Structural Equation Models
PSYC 537	(3)	Advanced Seminar in Psychology of Language

BIOL 414	(3)	Invertebrate Brain Circuits and Behaviours
BIOL 506	(3)	Neurobiology of Learning
BIOL 507	(3)	Animal Communication
BIOL 517	(3)	Cognitive Ecology
BIOL 530	(3)	Advances in Neuroethology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 580	(3)	Genetic Approaches to Neural Systems
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
CHEM 212	(4)	Introductory Organic Chemistry 1
NEUR 310	(3)	Cellular Neurobiology
NEUR 503	(3)	Computational Neuroscience
NEUR 507	(3)	Topics in Radionuclide Imaging
NSCI 200*	(3)	Introduction to Neuroscience 1
NSCI 300	(3)	Neuroethics
PHGY 209*	(3)	Mammalian Physiology 1
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 314	(3)	Integrative Neuroscience
PHGY 556	(3)	Topics in Systems Neuroscience
PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 302	(3)	The Psychology of Pain
PSYC 311	(3)	Human Cognition and the Brain
PSYC 317	(3)	Genes and Behaviour
		Beha

# 4.11.9 Computer Science (COMP)

The School of Computer Science and the discipline are described in

COMP 273	(3)	Introduction to Computer Systems
MATH 240	(3)	Discrete Structures
Complementary C	Courses (18 cred	lits)
18 credits selected as	follows:	
3 credits from each o	f the groups A, B, C	C, and D:
Group A:		
MATH 222	(3)	Calculus 3
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
Group B:		

Linear

(3)

#### 4.11.11 East Asian Studies (EAST)

East Asian Studies, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.9: East Asian Studies.

#### 4.11.11.1 Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies (18 credits)

This program may be expanded to the Major Concentration East Asian Studies.

#### Introduction to East Asian Culture

6 credits, two of the following courses:

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: East Asian Culture: Korea

## East Asian Literature, Culture and Society

12 credits of courses in East Asian Literature, Culture and Society selected from the list below.

## East Asian Studies (EAST)

EAST 215	(3)	Introduction to East Asian Art
EAST 250	(3)	Introduction to Asian Media Studies
EAST 279	(3)	Introduction to Film History
EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
		Women

EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel

HIST 208	(3)	Introduction to East Asian History
HIST 218	(3)	Modern East Asian History
HIST 308	(3)	Formation of Chinese Tradition
HIST 338	(3)	Twentieth-Century China
HIST 358	(3)	China's Middle Empires
HIST 439	(3)	History of Women in China
HIST 441	(3)	Topics: Culture and Ritual in China
HIST 442	(3)	Asian Diaspora: Chinese Overseas
HIST 443	(3)	Topics: Modern Japan
HIST 445	(3)	Late Imperial China
HIST 508	(3)	The Art of War in China
HIST 568D1	(3)	Topics in Chinese History
HIST 568D2	(3)	Topics in Chinese History
HIST 578D1	(3)	Seminar in Japanese History
HIST 578D2	(3)	Seminar in Japanese History

#### Management (ORGB)

ORGB 380 (3) Cross Cultural Management

## Political Science (POLI)

POLI 349 (3) Foreign Policy: Asia

## **Religious Studies (RELG)**

RELG 253	(3)	Religions of East Asia
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 344	(3)	Mahayana Buddhism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 354	(3)	Chinese Religions
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 442	(3)	Pure Land Buddhism
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 549	(3)	Japanese Buddhism in Historical Context

# 4.11.11.2 Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)

This program may be expanded to the Major Concentration East Asian Studies.

#### **Complementary Courses (18 credits)**

18 credits selected as specified below.

## **Introduction to East Asian Culture**

3 credits from the following:

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: East Asian Culture: Korea

# East Asian Language

## East Asian Studies (EAST)

 $6\ credits$  at the  $300\ level$  or above in East Asian Studies (EAST) courses selected from:

EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture
EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 462	(3)	Japan in Asia
EAST 464	(3)	Image, Text, Performance
EAST 467	(3)	Topics: Japanese Cinema
EAST 468	(3)	Science and Technology: Asia
EAST 477	(3)	Media and Environment in Asia
EAST 478	(3)	Topics: Korean Film and Media
EAST 491	(3)	Tutorial: East Asian Languages and Literatures 1
EAST 492	(3)	Tutorial: East Asian Languages and Literatures 2
EAST 493	(3)	Special Topics: East Asian Studies 1
EAST 494	(3)	Special Topics: East Asian Studies 2
EAST 501	(3)	Advanced Topics in Japanese Studies 1

EAST 502	(3)	Advanced Topics in Japanese Studies 2
EAST 503	(3)	Advanced Topics in Chinese Studies 1
EAST 504	(3)	Advanced Topics in Chinese Studies 2
EAST 505	(3)	Advanced Topics in Korean Studies
EAST 515	(3)	Seminar: Beyond Orientalism
EAST 525	(3)	Critical Area Studies in Asia
EAST 527	(3)	Culture and Capital in Asia
EAST 550	(3)	Classical Chinese Poetry Themes and Genres
EAST 551	(3)	Technologies of Self in Early China
EAST 559	(3)	Advanced Topics: Chinese Literature
EAST 562	(3)	Japanese Literary Theory and Practice

EAST 230D1	(4.5)	First Level Chinese
EAST 230D2	(4.5)	First Level Chinese
EAST 240D1	(4.5)	First Level Japanese
EAST 240D2	(4.5)	First Level Japanese
EAST 241	(3)	Japanese Writing Beginners 1
EAST 242	(3)	Japanese Writing Beginners 2
EAST 320D1	(4.5)	Second Level Korean
EAST 320D2	(4.5)	Second Level Korean
EAST 330D1	(4.5)	Second Level Chinese
EAST 330D2	(4.5)	Second Level Chinese
EAST 340D1	(4.5)	Second Level Japanese
EAST 340D2	(4.5)	Second Level Japanese
EAST 341	(3)	Japanese Writing Intermediate 1
EAST 342	(3)	Japanese Writing Intermediate 2
EAST 420	(3)	Third Level Korean 1
EAST 421	(3)	Third Level Korean 2
EAST 430D1	(3)	Third Level Chinese
EAST 430D2	(3)	Third Level Chinese
EAST 440D1	(3)	Third Level Japanese
EAST 440D2	(3)	Third Level Japanese
EAST 530D1	(3)	Fourth Level Chinese
EAST 530D2	(3)	Fourth Level Chinese
EAST 533	(3)	Classical Chinese 1
EAST 534	(3)	Classical Chinese 2
EAST 535	(3)	Chinese for Business 1
EAST 536	(3)	Chinese for Business 2
EAST 540D1	(3)	Fourth Level Japanese
EAST 540D2	(3)	Fourth Level Japanese
EAST 544	(3)	Classical Japanese 2

#### East Asian Literature, Culture and Society

21-24 credits of courses in East Asian Literature, Culture and Society selected from the list below. At least 6 credits must be taken at the 400 or 500 level.

# East Asian Studies (EAST)

EAST 215	(3)	Introduction to East Asian Art
EAST 250	(3)	Introduction to Asian Media Studies
EAST 279	(3)	Introduction to Film History
EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2

EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 328	(3)	Archaeology East Asian Empires
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture
EAST 385	(3)	Global Korea
EAST 388	(3)	Asian Migrations and Diasporas
EAST 389	(3)	Global Cinema and Media Asia
EAST 390	(3)	The Chinese Family in History
EAST 453	(3)	Topics: Chinese Literature
EAST 454	(3)	Topics: Chinese Cinema
EAST 461	(3)	Inventing Modern Japanese Novel
EAST 462	(3)	Japan in Asia
EAST 464	(3)	Image, Text, Performance
EAST 467	(3)	Topics: Japanese Cinema
EAST 468	(3)	Science and Technology: Asia
EAST 477	(3)	Media and Environment in Asia
EAST 478	(3)	Topics: Korean Film and Media
EAST 491	(3)	Tutorial: East Asian Languages and Literatures 1
EAST 492	(3)	Tutorial: East Asian Languages and Literatures 2
EAST 493	(3)	Special Topics: East Asian Studies 1
EAST 494	(3)	Special Topics: East Asian Studies 2
EAST 501	(3)	Advanced Topics in Japanese Studies 1
EAST 502	(3)	Advanced Topics in Japanese Studies 2
EAST 503	(3)	Advanced Topics in Chinese Studies 1
EAST 504	(3)	Advanced Topics in Chinese Studies 2
EAST 505	(3)	Advanced Topics in Korean Studies
EAST 515	(3)	Seminar: Beyond Orientalism
EAST 525	(3)	Critical Area Studies in Asia
EAST 527	(3)	Culture and Capital in Asia
EAST 550	(3)	Classical Chinese Poetry Themes and Genres

EAST 551	(3)	Technologies of Self in Early China
EAST 559	(3)	Advanced Topics: Chinese Literature
EAST 562	(3)	Japanese Literary Theory and Practice
EAST 564	(3)	Structures of Modernity: Asia
EAST 569	(3)	Advanced Topics: Japanese Literature
LLCU 279	(3)	Introduction to Film History
Anthropology (ANTH)		
ANTH 331	(3)	Prehistory of East Asia
ANTH 500	(3)	Chinese Diversity and Diaspora
Economics (ECON)		
ECON 335	(3)	The Japanese Economy
ECON 411	(3)	Economic Development: A World Area
Geography (GEOG)		
GEOG 408	(3)	Geography of Development
	. ,	
History (HIST)		
HIST 208	(3)	Introduction to East Asian History
HIST 218	(3)	Modern East Asian History
HIST 308	(3)	Formation of Chinese Tradition
HIST 338	(3)	Twentieth-Century China
HIST 358	(3)	China's Middle Empires
HIST 439	(3)	History of Women in China
HIST 441	(3)	Topics: Culture and Ritual in China
HIST 442	(3)	Asian Diaspora: Chinese Overseas
HIST 443	(3)	Topics: Modern Japan
HIST 445	(3)	Late Imperial China
HIST 508	(3)	The Art of War in China
HIST 568D1	(3)	Topics in Chinese History
HIST 568D2	(3)	Topics in Chinese History
HIST 578D1	(3)	Seminar in Japanese History
HIST 578D2	(3)	Seminar in Japanese History
Management (ORGB)		
ORGB 380	(3)	Cross Cultural Management
Political Science (POLI)	)	
POLI 349	(3)	Foreign Policy: Asia

# Religious Studies (RELG)

RELG 253	(3)	Religions of East Asia
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 844	(3)	Mahayana Buddhism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 354	(3)	Chinese Religions
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 442	(3)	Pure Land Buddhism
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
RELG 549	(3)	Japanese Buddhism in Historical Context

# 11.11.5 Bachelor of Arts (B.A.) - Joint Honours Component East Asian Studies (36 credits)

students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00. In addition, Joint Honours students must maintain a minimum GPA of 3.30 in program courses.

#### Required Course (3 credits)

EAST 495D1	(1.5)	Joint Honours Thesis: East Asian Studies
EAST 495D2	(1.5)	Joint Honours Thesis: East Asian Studies

## **Complementary Courses (33 credits)**

#### **Introduction to East Asian Culture**

3-6 credits from:

EAST 211	(3)	Introduction: East Asian Culture: China
EAST 212	(3)	Introduction: East Asian Culture: Japan
EAST 213	(3)	Introduction: East Asian Culture: Korea

0-3 credits selected from:

EAST 215	(3)	Introduction to East Asian Art
EAST 250	(3)	Introduction to Asian Media Studies

#### East Asian Language

18 credits in an East Asian language above the introductory level selected from the following courses:

EAST 320D1	(4.5)	Second Level Korean
EAST 320D2	(4.5)	Second Level Korean
EAST 330D1	(4.5)	Second Level Chinese

EAST 340D1	(4.5)	Second Level Japanese
EAST 340D2	(4.5)	Second Level Japanese
EAST 341	(3)	Japanese Writing Intermediate 1
EAST 342	(3)	Japanese Writing Intermediate 2
EAST 420	(3)	Third Level Korean 1
EAST 421	(3)	Third Level Korean 2
EAST 430D1	(3)	Third Level Chinese
EAST 430D2	(3)	Third Level Chinese
EAST 440D1	(3)	Third Level Japanese
EAST 440D2	(3)	Third Level Japanese
EAST 530D1	(3)	Fourth Level Chinese
EAST 530D2	(3)	Fourth Level Chinese
EAST 533	(3)	Classical Chinese 1
EAST 534	(3)	Classical Chinese 2
EAST 540D1	(3)	Fourth Level Japanese
EAST 540D2	(3)	Fourth Level Japanese
EAST 544	(3)	Classical Japanese 2

## East Asian Studies (EAST)

9 credits chosen from the following East Asian Studies courses, at least 3 credits must be at the 400-level or above.

EAST 303	(3)	Current Topics: Chinese Studies 1
EAST 304	(3)	Current Topics: Chinese Studies 2
EAST 305	(3)	Current Topics: Japanese Studies 1
EAST 306	(3)	Current Topics: Japanese Studies 2
EAST 307	(3)	Topics: East Asian Language and Literature 1
EAST 308	(3)	Topics: East Asian Language and Literature 2
EAST 313	(3)	Current Topics: Korean Studies 1
EAST 314	(3)	Current Topics: Korean Studies 2
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 352	(3)	Critical Approaches to Chinese Literature
EAST 353	(3)	Approaches to Chinese Cinema
EAST 356	(3)	Modern and Contemporary Chinese Art
EAST 358	(3)	Later Chinese Art (960-1911)
EAST 361	(3)	Animation and New Media
EAST 362	(3)	Japanese Cinema
EAST 363	(3)	Early and Medieval Japan
EAST 364	(3)	Mass Culture and Postwar Japan
EAST 369	(3)	Gender and Sexuality in Asian Media
EAST 370	(3)	History of Sexuality in Japan
EAST 372	(3)	Topics in Television: Asia
EAST 375	(3)	Korean Media and Popular Culture
EAST 377	(3)	Topics: Transnational Asian Culture

EAST 385 (3) Global Korea

EAST 388 (3) Asian Migrations and Diasporas

#### 4.11.12.3 Bachelor of Arts (B.A.) - Joint Honours Component Economics (30 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two approved disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs" on the Economics Department webiste.

Joint Honours students should consult an adviser in each of the relevant departments to discuss their course selection and their interdisciplinary research project (if applicable) in each year of their program.

For the Economics component of this program, Joint Honours students should consult: http://www.mcgill.ca/economics/undergraduates/honours. For the current list of advisers in Economics and their advising times, see the website of the Department of Economics.

Continuation in the Economic component of this program from one year to the next requires a minimum grade of B- in ECON 250D1/D2, and a minimum B- average in the required and complementary Honours Economics courses. Students failing to meet these requirements must switch out of the Honours program. If they continue to register in Honours, they will not be allowed to graduate with Honours. Note that graduation with Honours has more stringent requirements (see below) than these.

For graduation with the Economics component, a student must also obtain a 3.00 GPA in the required courses, a 3.00 average in the required and complementary credits in Economics, and a CGPA of 3.00. For a First Class Honours degree, the minimum requirements are a 3.50 program GPA in the required courses, a 3.50 average in the required and complementary credits in Economics, and a CGPA of 3.50. In cases where a student takes a Supplemental Exam in an Economics course, both the original and the Supplemental Exam grades will be counted in the calculation of the GPA and CGPA averages.

Students also have to meet the requirements of the other component of this program and of the relevant Faculty for Honours and First Class Honours.

## Program Prerequisites (0-10 credits)

For entering the program:

MATH 133*	(3)	Linear Algebra and Geometry
MATH 140**	(3)	Calculus 1
MATH 141**	(4)	Calculus 2

<sup>\*</sup> Or equivalent (to be completed prior to U2)

#### Required Courses (27 credits)

Please refer to the Department's document "Rules on Stats Courses for Economics Students" available at: http://www.mcgill.ca/economics/undergraduates/courses/. Students who have taken equivalent statistics courses may be waived the ECON 257D1/ECON 257D2 requirement. These students will normally be required to take ECON 469 in addition to ECON 468.

ECON 250D1	(3)	Introduction to Economic Theory: Honours
ECON 250D2	(3)	Introduction to Economic Theory: Honours
ECON 257D1	(3)	Economic Statistics - Honours
ECON 257D2	(3)	Economic Statistics - Honours
ECON 352D1	(3)	Macroeconomics - Honours
ECON 352D2	(3)	Macroeconomics - Honours
ECON 450	(3)	Advanced Economic Theory 1 - Honours
ECON 452	(3)	Advanced Economic Theory 2 - Honours
		Econometrics 1 - Honours

<sup>\*\*</sup> Or equivalent

## 4.11.13 English (ENGL)

The Department of English, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.13: English.

## 4.11.13.1 Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)

The Minor Concentration English - Cultural Studies may be expanded to the Major Concentration English - Cultural Studies.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses (6 credits)

ENGL 275	(3)	Introduction to Cultural Studies
ENGL 277	(3)	Introduction to Film Studies

## **Complementary Courses (12 credits)**

12 credits selected as described below.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

## **Major Figures**

3 credits from a list of courses on Major Figures in Cultural Studies:

ENGL 315	(3)	Shakespeare
ENGL 381	(3)	A Film-Maker 1
ENGL 418	(3)	A Major Modernist Writer
ENGL 481	(3)	A Film-Maker 2

## **Historical Dimension**

3 credits from a list of courses in Cultural Studies with an historical dimension:

ENGL 350	(3)	Studies in the History of Film 1
ENGL 351	(3)	Studies in the History of Film 2
ENGL 363	(3)	Studies in the History of Film 3
ENGL 374	(3)	Film Movement or Period
ENGL 451	(3)	A Period in Cinema
ENGL 480	(3)	Studies in History of Film 1

#### **Additional Cultural Studies**

6 additional credits from the option's offerings which include 000 rlle optrses in cific yerllyst ofin

ENGL 382	(3)	International Cinema 1
ENGL 383	(3)	Studies in Communications 1
ENGL 385	(3)	Topics in Literature and Film
ENGL 386	(3)	Fans, Celebrities, Audiences
ENGL 388	(3)	Studies in Popular Culture
ENGL 389	(3)	Studies in Popular Culture
ENGL 390	(3)	Political and Cultural Theory
ENGL 391	(3)	Special Topics: Cultural Studies 1
ENGL 395	(3)	Cultural and Theatre Studies
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 476	(3)	Alternative Approaches to Media 1
ENGL 482	(3)	International Cinema 2

Bachelor of Arts (B.A.) - Minor Concentration English - Drama and Theatre (18 credits)

ENGL 358	(3)	Chaucer - Troilus and Criseyde
ENGL 400	(3)	Earlier English Renaissance
ENGL 401	(3)	Studies in the 17th Century
ENGL 403	(3)	Studies in the 18th Century
ENGL 416	(3)	Studies in Shakespeare
ENGL 452	(3)	Studies in Old English
ENGL 456	(3)	Middle English

#### **Additional Literature**

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories for the Major Concentration in English - Literature program and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count.

ENGL 199	(3)	FYS: Form and Representation
ENGL 204	(3)	English Literature and the Bible
ENGL 237	(3)	Introduction to Study of a Literary Form
ENGL 297	(3)	Special Topics of Literary Study
ENGL 338	(3)	Short Story
ENGL 343	(3)	Literature and Science 1
ENGL 345	(3)	Literature and Society
ENGL 354	(3)	Sexuality and Representation
ENGL 364	(3)	Creative Writing: Fiction 2
ENGL 369	(3)	Creative Writing: Playwriting
ENGL 385	(3)	Topics in Literature and Film
ENGL 394	(3)	Popular Literary Forms
ENGL 421	(3)	African Literature
ENGL 424	(3)	Irish Literature
ENGL 437	(3)	Studies in Literary Form
ENGL 438	(3)	Studies in Literary Form
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 447	(3)	Crosscurrents/English Literature and European Literature 1
ENGL 460	(3)	Studies in Literary Theory
ENGL 461	(3)	Studies in Literary Theory 2
ENGL 464	(3)	Creative Writing: Poetry

#### 4.11.13.4 Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)

The Cultural Studies option concentrates on analysis of forms of cultural expression and symbolic interaction, and of the various media through which these may be disseminated and transformed. Such study concerns symbolic form, aesthetically based forms of analysis, and the various modes of criticism and theory relevant to media which contain both verbal and non-verbal elements. The aim is above all to hone students' analytical and interpretive skills while introducing them to specific critical approaches to cultural studies. This is not a major in journalism or communications; and while many of our graduates go on to do creative work in a variety of media, instruction in film and video production is not part of the curriculum.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## **Required Courses (9 credits)**

These courses should be taken in the first two terms of the program.

ENGL 275 (3) Introduction to Cultural Studies

ENGL 277 (3) Introduction to Film Studies
ENGL 359 (3) The Poetics of the Image

## **Complementary Courses (27 credits)**

27 credits selected as described below.

Note on

9 additional credits from the option's offerings which includes all the courses specifically listed in the Cultural Studies categories above and the courses listed below. Any ENGL course not on these Cultural Studies lists, such as courses in Literature, may not count toward the Major Concentration English - Cultural Studies.

(3)	Introduction to Film as Mass Medium
(3)	Sexuality and Representation
(3)	Film Genre
(3)	Media and Culture
(3)	Film Theory
(3)	Non-Fiction Media: Cinema, Television, Radio
(3)	International Cinema 1
(3)	Studies in Communications 1
(3)	Topics in Literature and Film
(3)	Fans, Celebrities, Audiences
(3)	Studies in Popular Culture
(3)	Studies in Popular Culture
(3)	Political and Cultural Theory
(3)	Special Topics: Cultural Studies 1
(3)	Cultural and Theatre Studies
(3)	Alternative Approaches to Media 1
(3)	International Cinema 2
	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)

#### Other Departments

Students are normally permitted to count 6 credits from other departments toward their English programs. In exceptional circumstances, an adviser who is approached by a student with strong academic grounds for including a third such course may grant permission (to a maximum of 9 extra-departmental credits) and must so indicate in advance by signing the departmental program audit sheet.

## 4.11.13.5 Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre (36 credits)

The Drama and Theatre option tries to place its subject in as broad a social and philosophical context as possible. The Drama and Theatre program is not designed to provide professional theatre training. The aim is rather to encourage students to explore the subject as a liberal arts discipline.

For the most up-to-date information on Department requirements and detailed course descriptions, please see the English Department Handbook at http://www.mcgill.ca/english/.

## Required Courses (6 credits)

6 credits to be taken in the first two terms of the program

ENGL 230	(3)	Introduction to Theatre Studies
ENGL 355	(3)	The Poetics of Performance

## **Complementary Courses (30 credits)**

30 credits selected as described below.

3 credits from the following practice-based courses:

ENGL 269	(3)	Introduction to Performance
ENGL 365	(3)	Costuming for the Theatre 1
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 377	(3)	Costuming for the Theatre 2

## **Performance-Oriented Courses**

3 credits from the list of Performance-Oriented Courses:

ENGL 365	(3)	Costuming for the Theatre 1
ENGL 367	(3)	Acting 2
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 376	(3)	Scene Study
ENGL 377	(3)	Costuming for the Theatre 2
ENGL 396	(3)	Theatre Practicum 1
ENGL 397	(3)	Theatre Practicum 2
ENGL 465D1	(4.5)	Theatre Laboratory
ENGL 465D2	(4.5)	Theatre Laboratory
ENGL 466D1	(3)	Directing for the Theatre
ENGL 466D2	(3)	Directing for the Theatre
ENGL 469	(3)	Acting 3

## Drama and/or Theatre Courses with a Canadian Component

3 credits from the list of Drama and/or Theatre courses with a Canadian component:

ENGL 313	(3)	Canadian Drama and Theatre
ENGL 413	(3)	Special Topics in Canadian Drama and Theatre

## **Theory or Criticism Courses**

3 credits from the list of Theory or Criticism courses:

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text
ENGL 352	(3)	Theories of Difference

## **Theatre History Courses**

3 credits from the list of Theatre History courses:

ENGL 306	(3)	Theatre History: Medieval and Early Modern
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 312	(3)	Victorian and Edwardian Drama 1
ENGL 370	(3)	Theatre History: The Long Eighteenth Century
ENGL 371	(3)	Theatre History: 19th to 21st Centuries
ENGL 467	(3)	Advanced Studies in Theatre History
ENGL 486	(3)	Special Topics in Theatre History After 1900

## **Drama and Theatre Before 1900 Courses**

3 credits from the list of courses in Drama and Theatre before 1900:

Departmental Surve

ENGL 337	(3)	Theme or Genre in Medieval Literature
ENGL 349	(3)	English Literature and Folklore 1
ENGL 356	(3)	Middle English
ENGL 357	(3)	Chaucer - Canterbury Tales
ENGL 358	(3)	Chaucer - Troilus and Criseyde
ENGL 456	(3)	Middle English

## Renaissance

The SeRenaissance

ENGL 334	(3)	Victorian Poetry
ENGL 404	(3)	Studies in 19th Century Literature 1
ENGL 405	(3)	Studies in 19th Century Literature 2
19th Century American		

(3)

(3)

# Areas of English Literature

3 credits from one of the following areas: Early 20th Century, Modernist, Post-modernist, Contemporary:

19th Century American Prose

Studies in 19th Century American Literature

## Early 20th Century

ENGL 361	(3)	Poetry of the 20th Century 1
ENGL 414	(3)	Studies in 20th Century Literature 1

#### Modernist

ENGL 326

ENGL 422

ENGL 335	(3)	The 20th Century Novel 1
ENGL 361	(3)	Poetry of the 20th Century 1
ENGL 414	(3)	Studies in 20th Century Literature 1
ENGL 418	(3)	A Major Modernist Writer

#### Post-modernist

ENGL 320	(3)	Postcolonial Literature
ENGL 339	(3)	Canadian Prose Fiction 2
ENGL 443	(3)	Contemporary Women's Fiction

## Contemporary

ENGL 320	(3)	Postcolonial Literature
ENGL 333	(3)	Development of Canadian Poetry 2
ENGL 336	(3)	The 20th Century Novel 2
ENGL 339	(3)	Canadian Prose Fiction 2
ENGL 362	(3)	Poetry of the 20th Century 2
ENGL 407	(3)	The 20th Century
ENGL 408	(3)	The 20th Century
ENGL 419	(3)	Studies in 20th Century Literature
ENGL 443	(3)	Contemporary Women's Fiction

## **Additional Literature**

6 additional credits from ENGL offerings in Literature which includes all the courses specifically listed in the Literature categories above and the courses listed below. Any ENGL course not on these Literature lists, such as courses in Cultural Studies, may not count toward the Major Concentration in English - Literature.

ENGL 199	(3)	FYS: Form and Representation
ENGL 204	(3)	English Literature and the Bible

ENGL 237	(3)	Introduction to Study of a Literary Form
ENGL 297	(3)	Special Topics of Literary Study
ENGL 338	(3)	Short Story
ENGL 343	(3)	Literature and Science 1
ENGL 345	(3)	Literature and Society
ENGL 354	(3)	Sexuality and Representation
ENGL 364	(3)	Creative Writing: Fiction 2
ENGL 369	(3)	Creative Writing: Playwriting
ENGL 385	(3)	Topics in Literature and Film
ENGL 394	(3)	Popular Literary Forms
ENGL 421	(3)	African Literature
ENGL 424	(3)	Irish Literature
ENGL 437	(3)	Studies in Literary Form
ENGL 438	(3)	Studies in Literary Form
ENGL 440	(3)	First Nations and Inuit Literature and Media
ENGL 447	(3)	Crosscurrents/English Literature and European Literature 1
ENGL 460	(3)	Studies in Literary Theory
ENGL 461	(3)	Studies in Literary Theory 2
ENGL 464	(3)	Creative Writing: Poetry

#### **Major Author**

3 credits on a Major Author must be included in the 27 complementary course credits.

ENGL 315	(3)	Shakespeare
ENGL 316	(3)	Milton
ENGL 357	(3)	Chaucer - Canterbury Tales
ENGL 409	(3)	Studies in a Canadian Author
ENGL 416	(3)	Studies in Shakespeare
ENGL 417	(3)	A Major English Poet
ENGL 418	(3)	A Major Modernist Writer

## 4.11.13.7 Bachelor of Arts (B.A.) - Joint Honours Component English - Cultural Studies (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs". Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) Applications will be considered by the Department's Honours Committee on the basis of the student's program GPA, at a minimum of 3.50. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00, a minimum program GPA of 3.50, and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50, a minimum program GPA of 3.70, and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

## Required Courses (9 credits)

#### **Historical Dimension**

3 credits from a list of courses in Cultural Studies with an historical dimension:

ENGL 350	(3)	Studies in the History of Film 1
ENGL 351	(3)	Studies in the History of Film 2
ENGL 363	(3)	Studies in the History of Film 3
ENGL 374	(3)	Film Movement or Period
ENGL 451	(3)	A Period in Cinema
ENGL 480	(3)	Studies in History of Film 1

## 400-Level Theory

3 credits from a list of 400-level courses in Cultural Studies with a theoretical component:

ENGL 454	(3)	Topics in Cultural Studies and Gender
ENGL 479	(3)	Philosophy of Film
ENGL 483	(3)	Seminar in the Film
ENGL 484	(3)	Seminar in the Film
ENGL 488	(3)	Special Topics / Communications and Mass Media 2
ENGL 489	(3)	Culture and Critical Theory 1
ENGL 490	(3)	Culture and Critical Theory 2
ENGL 492	(3)	Image and Text

#### **Departmental Offerings**

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

#### 4.11.13.8 Bachelor of Arts (B.A.) - Joint Honours Component English - Drama and Theatre (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs." Applications to do a Joint Honours program in English and another subject in the Faculty of Arts should be submitted once a minimum of 9 credits, and no more than 18 credits, have been completed in English. There are normally two possible application dates for Joint Honours in English: either by the end of January (by which time first-term courses are completed and the grades are available), or at the same time as the Honours application date, typically in mid-April. (Only students who will have completed more than 18 credits in English by the end of January may apply in the Fall.) The minimum CGPA for application to the Joint Honours program is 3.30. Students with a CGPA lower than 3.3 and at or above 3.0 (but with the requisite 3.5 program GPA) may consult the Director of the Honours program for special permission to apply. Students with a program GPA lower than 3.5 and at or above 3.3 (but with the requisite CGPA of 3.3) may also consult the Director of the Honours program for special permission to apply. The application form is available in the Department's General Office (Arts 155), and the specific submission requirements are described by that form.

The maintenance of a 3.50 program GPA is required for continuation in Joint Honours. Graduation with Joint Honours requires a minimum CGPA of 3.00, a minimum program GPA of 3.50, and a minimum mark of B+ on the Honours Essay. Graduation with First Class Joint Honours in English requires a minimum CGPA of 3.50, a minimum program GPA of 3.70, and a minimum mark of A on the Honours Essay.

Each academic year, there is a special adviser for Joint Honours students, and the receptionist in the General Office can provide their name and contact information. The Department's website http://www.mcgill.ca/english/ provides additional information on the Joint Honours program and applications, and this website should also be consulted prior to contacting the Adviser.

## Required Courses (6 credits)

ENGL 230	(3)	Introduction to Theatre Studies
ENGL 355	(3)	The Poetics of Performance

## **Complementary Courses (30 credits)**

30 credits selected as described below. In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. In addition to the Advanced Study requirement, 3 of the remaining 24 Complementary Course credits must be completed at the 500 level. A maximum of 9 of the 30 credits are allowed at the 200 level, none in the final year of the program.

## **Advanced Study**

6 credits of advanced study, in one of the following two forms A or B, in order of preference:

ENGL 371	(3)	Theatre History: 19th to 21st Centuries
ENGL 416	(3)	Studies in Shakespeare
ENGL 467	(3)	Advanced Studies in Theatre History
ENGL 486	(3)	Special Topics in Theatre History After 1900
ENGL 516	(3)	Shakespeare
ENGL 566	(3)	Special Studies in Drama 1

## **Performance-Oriented Courses**

3 credits from the list of Performance-Oriented courses:

ENGL 365	(3)	Costuming for the Theatre 1
ENGL 367	(3)	Acting 2
ENGL 368	(3)	Stage Scenery and Lighting 1
ENGL 372	(3)	Stage Scenery and Lighting 2
ENGL 376	(3)	Scene Study
ENGL 377	(3)	Costuming for the Theatre 2
ENGL 396	(3)	Theatre Practicum 1
ENGL 397	(3)	Theatre Practicum 2
ENGL 465D1*	(4.5)	Theatre Laboratory
ENGL 465D2*	(4.5)	Theatre Laboratory
ENGL 466D1**	(3)	Directing for the Theatre
ENGL 466D2**	(3)	Directing for the Theatre
ENGL 469	(3)	Acting 3
ENGL 565	(3)	Drama Workshop

<sup>\*, \*\*</sup> Note: Spanned credits. The amount over 3 credits can be attributed to Departmental Offerings credits.

## **Departmental Offerings**

9 additional credits of English (ENGL) courses, preferably courses at the 300 level or above.

## 4.11.13.9 Bachelor of Arts (B.A.) - Joint Honours Component English - Literature (36 credits)

Students who wish to study at the Honours le

ENGL 311	(3)	Poetics
ENGL 360	(3)	Literary Criticism

#### Complementary Courses (24 credits)

24 credits selected as described below.

In addition to the 6-credit requirement for Advanced Study described below, all Joint Honours students' programs of study shall include 6 credits of study at the 400 level or above. Students are encouraged to take courses at the 300 level and above. At least 3 of the 24 credits must be devoted to a course on a Major Author as indicated under the rubrics dedicated to these offerings in each year's list of Complementary Courses on the Department of English website (http://www.mcgill.ca/english). In addition to the Advanced Study requirement, 3 of the remaining 18 Complementary Courses credits must be completed at the 500 level. A maximum of 9 of the 24 credits are allowed at the 200 level, none in the final year of the program.

Note on Topics Courses: The Department of English offers courses which change topic from academic year to academic year. Depending on the topic in a specific year, these courses may count toward different program requirements. At the time they register for a topics course, students should confirm with their program adviser the program requirement it fulfils for that academic year.

#### **Advanced Study**

6 credits of advanced study, in one of the following two forms A or B, in order of preference:

A) 6-credits of honours essay:

ENGL 491D1	(3)	Honours Essay	
ENGL 491D2	(3)	Honours Essay	

B) Two 3-credit 500-level courses selected in consultation with the student's adviser(s).

(In very rare cases, a third alternative may be approved at the discretion of the Joint Honours Adviser, but only when it is formally recommended for the joint subject according to the description of that Joint Honours program found in the Arts section of the eCalendar. For example, Joint Honours with Anthropology allows the option of combining 3 credits of essay work with 3 credits in the joint subject to create a joint essay.)

#### Areas of English Literature

3 credits from one of the following areas: Backgrounds of English Literature, Old English, Medieval, Renaissance.

## **Backgrounds of English Literature**

ENGL 347	(3)	Great Writings of Europe 1
ENGL 348	(3)	Great Writings of Europe 2
ENGL 349	(3)	English Literature and Folklore 1
ENGL 447	(3)	Crosscurrents/English Literature and European Literature 1
Old English		
ENGL 342	(3)	Introduction to Old English
ENGL 452	(3)	Studies in Old English
ENGL 553	(3)	Old English Literature
Medieval		
ENGL 337	(3)	Theme or Genre in Medieval Literature
ENGL 349	(3)	English Literature and Folklore 1
ENGL 356	(3)	Middle English
ENGL 357	(3)	Chaucer - Canterbury Tales
ENGL 358	(3)	Chaucer - Troilus and Criseyde

(3)	Middle English
(3)	Middle English
(3)	The Seventeenth Century
(3)	Renaissance English Literature 1
(3)	Renaissance English Literature 2
(3)	English Renaissance Drama 1
(3)	English Renaissance Drama 2
(3)	Shakespeare
(3)	Milton
(3)	English Literature and Folklore 1
(3)	Earlier English Renaissance
(3)	Studies in the 17th Century
(3)	Studies in Shakespeare
(3)	16th Century
(3)	Shakespeare
	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)

## Areas of English Literature

3 credits from one of the following areas: Restoration, 18th Century, Romantic, Victorian, 19th Century American.

es			

**ENGL 329** 

ENGL 330

ENGL 302	(3)	Restoration and 18th C. English Literature 1
ENGL 303	(3)	Restoration and 18th C. English Literature 2
ENGL 310	(3)	Restoration and 18th Century Drama
18th Century		
ENGL 301	(3)	Earlier 18th Century Novel
ENGL 302	(3)	Restoration and 18th C. English Literature 1
ENGL 303	(3)	Restoration and 18th C. English Literature 2
ENGL 304	(3)	Later Eighteenth Century Novel
ENGL 310	(3)	Restoration and 18th Century Drama
ENGL 403	(3)	Studies in the 18th Century
ENGL 503	(3)	18th Century
Romantic		
ENGL 331	(3)	Literature Romantic Period 1
ENGL 332	(3)	Literature Romantic Period 2
Victorian		

(3)

(3)

English Novel: 19th Century 1

English Novel: 19th Century 2

ENGL 334	(3)	Victorian Poetry
ENGL 404	(3)	Studies in 19th Century Literature 1
ENGL 405	(3)	Studies in 19th Century Literature 2
ENGL 423	(3)	Studies in 19th Century Literature
ENGL 504	(3)	19th Century

## 19th Century American

ENGL 326	(3)	19th Century American Prose
ENGL 422	(3)	Studies in 19th Century American Literature

## Areas of English Literature

 $3\ credits\ from\ one\ of\ the\ following\ areas:\ Early\ 20th\ Century,\ Modernist,\ Post-modernist,\ Contemporary.$ 

## Early 20th Century

ENGL 327	(3)	Canadian Prose Fiction 1
ENGL 328	(3)	Development of Canadian Poetry 1
ENGL 361	(3)	Poetry of the 20th Century 1
ENGL 414	(3)	Studies in 20th Century Literature 1

## Modernist

ENGL 327	(3)	Canadian Prose Fiction 1
ENGL 328	(3)	Development of Canadian Poetry 1
ENGL 335	(3)	The 20th Century Novel 1
ENGL 361	(3)	Poetry of the 20th Century 1
ENGL 414	(3)	Studies in 20th Century Literature 1
ENGL 418	(3)	A Major Modernist Writer
ENGL 309ENCentur	(3)	20th Century

## Post-modernist

ENGL 320	(3)	Postcolen Rad (A) En Gre 320
ENGL 333	(3)	Development of Canadian Poetry 2
ENGL 339	(3)	Canadian Prose Fiction 2
		Contemporary Women's Fiction(343

ENGL 419	(3)	Studies in 20th Century Literature
ENGL 421	(3)	African Literature
ENGL 443	(3)	Contemporary Women's Fiction

## Theory

3 credits from a list of courses on Theory:

ENGL 317	(3)	Theory of English Studies 1
ENGL 318	(3)	Theory of English Studies 2
ENGL 319	(3)	Theory of English Studies 3
ENGL 322	(3)	Theories of the Text
ENGL 346	(3)	Materiality and Sociology of Text
ENGL 352 <b>EN2rENGL 352</b> (3)		Theories of Difference

<sup>\*</sup> Note: When content relates to Medieval Studies.

History	and	Classical	Studies

CLAS 419	(3)	Advanced Latin: Post-Classical
HIST 194	(3)	FYS: Jewish Concepts of Others
HIST 319	(3)	The Scientific Revolution
HIST 323	(3)	History and Sexuality 1
HIST 356	(3)	Medicine in the Medieval West
HIST 358	(3)	China's Middle Empires
HIST 380	(3)	The Medieval Mediterranean
HIST 401	(3)	Topics: Medieval Culture and Society
HIST 567D1	(3)	Seminar: Medieval Medicine
HIST 567D2	(3)	Seminar: Medieval Medicine

## **Islamic Studies**

ISLA 325	(3)	Introduction to Shi'i Islam
ISLA 345	(3)	Science and Civilization in Islam
ISLA 350	(3)	From Tribe to Dynasty
ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 430	(3)	Islamdom: Baghdad to Cordoba
ISLA 516	(3)	Medieval Islam, 13th-15th Century

## **Jewish Studies**

JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 337	(3)	Jewish Philosophy and Thought 1

## Languages, Literatures, and Cultures

ITAL 355	(3)	Dante and the Middle Ages
ITAL 356	(3)	Medieval Discourses on Love
ITAL 465	(3)	Religious Identities in Italy

## Langue et littérature françaises

FREN 455*	(3)	La littérature médiévale 1
FREN 456*	(3)	La littérature médiévale 2

<sup>\*\*</sup> Note: Course taught and all coursework done in French.

## **Philosophy**

PHIL 344	(3)	Medieval and Renaissance Political Theory
PHIL 356	(3)	Early Medieval Philosophy

## **Religious Studies**

RELG 322 (3) Church and Empire to 1300

ENGL 479	(3)	Philosophy of Film
ENGL 480	(3)	Studies in History of Film 1
ENGL 481	(3)	A Film-Maker 2
ENGL 482	(3)	International Cinema 2
ENGL 483	(3)	Seminar in the Film
ENGL 484	(3)	Seminar in the Film
ENGL 492	(3)	Image and Text
ENGL 585	(3)	Cultural Studies: Film
FILM 499	(3)	Internship: World Cinemas
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois

Consultation with the Program Adviser for approval of course selection to meet program requirements is obligatory. No overlap is allowed between this program and the student's major program or concentration, or a second minor program.

For more information, contact:

Ms. Kathy Roulet, Program Adviser

Email: kathy.roulet@mcgill.ca Telephone: 514-398-4306

#### **Complementary Courses (18 credits)**

18 credits of complementary courses, all of which must fall outside the discipline or field of the student's major program or concentration, and which must be 200-level or above, selected as follows:

#### 12 credits of MSE core courses:

The core ENVR courses are taught at both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought

6 credits of environmentally related courses selected with the approval of the Program Adviser (at least 3 credits must be in natural sciences). A list of Suggested Courses is given below.

## **Suggested Course List**

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.

Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.

This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.

Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students. If in doubt, ask the Program Adviser.

## **Location Note:**

When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

#### **Social Sciences and Policy**

AGEC 231	(3)	Economic Systems of Agriculture
AGEC 333	(3)	Resource Economics
		Agriculture, F

ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
EDER 494	(3)	Human Rights and Ethics in Practice
ENVB 437	(3)	Assessing Environmental Impact
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geography
GEOG 301	(3)	Geography of Nunavut
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 370	(3)	Protected Areas
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 423	(3)	Dilemmas of Development
GEOG 530	(3)	Global Land and Water Resources
HIST 249	(3)	Health and the Healer in Western History
HIST 292	(3)	History and the Environment
NRSC 221	(3)	Environment and Health
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 237	(3)	Contemporary Moral Issues
PHIL 334	(3)	Ethical Theory
PHIL 341	(3)	Philosophy of Science 1
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
POLI 212	(3)	Government and Politics - Developed World
POLI 227	(3)	Developing Areas/Introduction
POLI 345	(3)	International Organizations
POLI 350	(3)	Global Environmental Politics
POLI 412	(3)	Canadian Voting/Public Opinion
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 474	(3)	Inequality and Development
PSYC 215	(3)	Social Psychology
RELG 270	(3)	Religious Ethics and the Environment
RELG 370	(3)	Religion and Human Rights

SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 235	(3)	Technology and Society
SOCI 254	(3)	Development and Underdevelopment
		Globalization

COMP 204**	(3)	Computer Programming for Life Sciences
ENVB 210	(3)	The Biophysical Environment
ENVB 301	(3)	Meteorology
ENVB 305**	(3)	Population and Community Ecology
ENVB 410	(3)	Ecosystem Ecology
ENVB 415	(3)	Ecosystem Management
ENVB 529**	(3)	GIS for Natural Resource Management
ENVR 200	(3)	The Global Environment
ENVR 202	(3)	The Evolving Earth
ENVR 422	(3)	Montreal Urban Sustainability Analysis

 $R~422 Comps 6 ((3)) Tj 6~Tm (R~42) 2 dcoyo*Po.~1~\textit{Unfi2estateOffije}~\textit{Rlanet}~22 decoyo*Po.~1~\textit{Unfi2estateOffije}~\textit{Rlanet}~22 decoyo*Po.~1~\textit{Unfi2estateOffije}~\textit{Unfi2esta$ 

## 4.11.16 French Language and Literature (FREN)

Le Département des littératures de langue française, de traduction et de création, les programmes et les cours offerts sont décrits à *Faculty of Arts* (Faculté des arts) > *Undergraduate* (programmes de premier cycle) > *Browse Academic Units & Programs* (programmes d'études) > *section 3.10.8: Le Département des littératures de langue française, de traduction et de création* (langue et littérature françaises).

## 4.11.16.1 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et littérature françaises - Études et pratiques littéraires (18 crédits)

Ce programme offre une introduction aux études littéraires de langue française et aux différentes pratiques littéraires que sont la création, la traduction et l'édition. Il vise également à fournir à chaque étudiant(e) les moyens de bien maîtriser l'écriture critique et les ressources de la langue. Il est possible de s'inscrire d'abord à ce programme et de le convertir par la suite en concentration majeure, moyennant l'ajout des cours requis pour répondre aux e

FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
FREN 472	(3)	Enjeux littéraires et culturels 2
FREN 480	(3)	Littérature québécoise contemporaine
FREN 482	(3)	La littérature du 19e siècle 2
FREN 485	(3)	Littérature française contemporaine
FREN 498	(3)	Questions de littérature 3
FREN 499	(3)	Questions de littérature 4
(b) Série « Langue fran	ıçaise »	
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
	(-)	88
(c) Série « Théorie »		
,		
CCTR 331 *1	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1
FREN 337	(3)	Textes, imaginaires, sociétés
FREN 375	(3)	Théories littéraires 2
FREN 391	(3)	Savoirs de la littérature 1
FREN 394 *1	(3)	Théories de la traduction
FREN 420	(3)	Enjeux de l'écriture littéraire
FREN 422	(3)	Le métier d'écrivain-e
FREN 425 *1	(3)	Traduction et culture
FREN 496	(3)	Savoirs de la littérature 2

<sup>\*1</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

## II) BLOC: PRATIQUES

Liste des cours

(a) Série « Création »

FREN 240	(3)	Atelier d'écriture poétique
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 340	(3)	Atelier d'écriture narrative
FREN 440	(3)	Atelier d'écriture dramatique
FREN 460	(3)	Atelier d'écriture
(b) Série « Édition »		
FREN 376	(3)	Correction et révision
FREN 377	(3)	Pratiques de l'édition littéraire
FREN 476	(3)	Le livre
11	(5)	26 11.10
(c) Série « Traduction »		
CCTR 219 *2	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *3	(3)	Introduction to Translation (English to French)
CCTR 325 *4	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *5	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *6	(3)	Traduction Littéraire-Français
CCTR 453 *7	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *7	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *7	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *7	(1.5)	Transcreation (English to French)
CCTR 507 *8	(3)	Editing and Revising (French)
CCTR 535 *9	(3)	Introduction to Language Technologies
FREN 239 *2	(3)	Stylistique comparée
FREN 244 *3	(3)	Traduction générale
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *6	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 346 *4	(3)	Traduction avancée
FREN 347 *9	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2
FREN 431 *8	(3)	Traduction et révision
FREN 441 *5	(3)	Traduction français-anglais
FREN 443 *6	(3)	Traduction littéraire 2
FREN 492	(3)	Histoire de la traduction
FREN 494 *7	(3)	Traduction spécialisée

<sup>\*2</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

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<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.

\*8 L'étudiant(e) peut sui

FREN 245	(3)	Grammaire normative
FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 346 *3	(3)	Traduction avancée
FREN 441 *5	(3)	Traduction français-anglais

<sup>++</sup> Pour s'inscrire aux cours FREN 201 ou FREN 203, l'étudiant(e) s'assurera d'avoir réussi le FRSL 431 ou d'avoir réussi ou être inscrit(e) à au moins un des cours suivants : FRSL 445, FRSL 446, FRSL 449 ou FRSL 455.

## 4.11.16.3 Baccalauréat ès Arts (B.A.) - Concentration mineure Langue et litt. françaises - Traduction (18 crédits)

Le programme de « Concentration mineure en Langue et littérature françaises (option « Traduction ») » offre une introduction à la traduction de l'anglais vers le français. Il favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français. Il est possible de s'inscrire d'abord à ce programme et de le convertir par la suite en concentration majeure, moyennant l'ajout des cours requis pour répondre aux exigences de ce dernier programme. L'admission nécessite une bonne connaissance du français et de l'anglais lus et écrits, ainsi que du français parlé; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 (« Stylistique comparée ») ou son équivalent, le CCTR 219 (« Fundamentals of Comparative Stylistics & Writing (French) »), à la session d'automne de U1.

#### **COURS OBLIGATOIRES (6 crédits)**

CCTR 225 *1	(3)	Introduction to Translation (English to French)
CCTR 325 *2	(3)	Semi-Specialized Translation (English to French)
FREN 244 *1	(3)	Traduction générale
FREN 346 *2	(3)	Traduction avancée

<sup>\*1</sup> L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.

## **COURS COMPLÉMENTAIRES (12 crédits)**

6 à 9 crédits choisis parmi les cours suivants :

CCTR 219 *3	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 326 *4	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *5	(3)	Traduction Littéraire-Français
CCTR 453 *6	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *6	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *6	(1.5)	Financial Translation: Investments (English to French)
CCTR 459* 6	(1.5)	Transcreation (English to French)
CCTR 507 *7	(3)	Editing and Revising (French)
CCTR 535 *8	(3)	Introduction to Language Technologies
FREN 239 *3	(3)	Stylistique comparée
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *5	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 347 *8	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2

<sup>\*1</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

<sup>\*2</sup> L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*2</sup> L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

FREN 431 *7	(3)	Traduction et révision
FREN 441 *4	(3)	Traduction français-anglais
FREN 443 *5	(3)	Traduction littéraire 2
FREN 494 *6	(3)	Traduction spécialisée

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

#### 3 à 6 crédits choisis parmi les cours suivants :

CCTR 331 *9	(3)	Current Trends in Translation Studies
FREN 201	(3)	Le français littéraire (français langue seconde)
FREN 203	(3)	Analyse de textes (français langue seconde)
FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 394 *9	(3)	Théories de la traduction
FREN 425 *9	(3)	Traduction et culture
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
FREN 492	(3)	Histoire de la traduction

<sup>\*9</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

NOTE: les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

## 4.11.16.4 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)

Ce programme offre une formation générale qui inclut l'histoire des littératures d'expression française, l'analyse critique des œuvres et la théorie littéraire. Cette formation vise également à fournir aux étudiant(e)s les moyens de bien maîtriser l'écriture critique et les ressources de la langue. L'étude de la littérature s'y fait à travers les différentes pratiques que sont la création, la traduction et l'édition. Tou(te)s les étudiant(e)s sont amené(e)s à suivre aussi bien des cours portant sur les études littéraires que des cours portant sur les pratiques littéraires ; ils et elles doivent cependant choisir une majorité de cours dans l'un ou l'autre grand domaine. L'inscription au programme présuppose une très bonne connaissance du français lu, écrit et parlé.

## **COURS OBLIGATOIRES (12 crédits)**

FREN 222	(3)	Introduction aux études littéraires
FREN 333	(3)	Questions de littérature du Moyen Âge et de l'Ancien Régime
FREN 444	(3)	Questions de littérature moderne
FREN 450	(3)	Questions de littérature québécoise

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

<sup>\*8</sup> L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.

### **COURS COMPLÉMENTAIRES (24 crédits)**

24 crédits répartis de la façon suivante, selon l'orientation choisie (« A : Études littéraires » ou « B : Pratiques littéraires ») :

#### ORIENTATION A - « Études littéraires »

de 3 à 9 crédits choisis parmi les cours de la série « Langue française » avec l'obligation de suivre au moins l'un des deux cours suivants :

FREN 245 (3) Grammaire normative

FREN 356 (3) Grammaire du texte littéraire

de 9 à 15 crédits choisis parmi les cours de la série « Œuvres et courants » (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800) ;

de 3 à 9 crédits choisis parmi les cours de la série « Théorie » ;

de 3 à 9 crédits choisis parmi les cours du bloc « Pratiques ».

### ORIENTATION B - « Pratiques littéraires »

de 3 à 6 crédits choisis parmi les cours de la série « Langue française » avec l'obligation de suivre l'un des cours suivants :

FREN 245 (3) Grammaire normative

FREN 356 (3) Grammaire du texte littéraire

au moins 6 crédits choisis parmi les cours du bloc « Études » ;

de 3 à 6 crédits choisis parmi les cours suivants :

FREN 420 (3) Enjeux de l'écriture littéraire

FREN 422 (3) Le métier d'écrivain-e

au moins 6 crédits choisis parmi les cours de la série « Création » ;

0 à 6 crédits choisis parmi les cours du bloc « Pratiques ».

I) BLOC : É

FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
FREN 472	(3)	Enjeux littéraires et culturels 2
FREN 480	(3)	Littérature québécoise contemporaine
FREN 482	(3)	La littérature du 19e siècle 2
FREN 485	(3)	Littérature française contemporaine
FREN 498	(3)	Questions de littérature 3
FREN 499	(3)	Questions de littérature 4

# (b) Série « Langue française »

FREN 231	(3)	Linguistique française
FREN 245	(3)	Grammaire normative
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2

# (c) Série « Théorie »

CCTR 331 *1	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1
FREN 337	(3)	Textes, imaginaires, sociétés
FREN 375	(3)	Théories littéraires 2
FREN 391	(3)	Savoirs de la littérature 1
FREN 394 *1	(3)	Théories de la traduction
	t	Enieux de l'écriture littéraire

FREN 340	(3)	Atelier d'écriture narrative
FREN 440	(3)	Atelier d'écriture dramatique
FREN 460	(3)	Atelier d'écriture
(b) Série « Édition »		
FREN 376	(3)	Correction et révision
FREN 377	(3)	Pratiques de l'édition littéraire
FREN 476	(3)	Le livre
(c) Série « Traduction »		
CCTR 219 *2	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *3	(3)	Introduction to Translation (English to French)
CCTR 325 *4	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *5	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *6	(3)	Traduction Littéraire-Français
CCTR 453 *7	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *7	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *7	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *7	(1.5)	Transcreation (English to French)
CCTR 507 *8	(3)	Editing and Revising (French)
CCTR 535 *9	(3)	Introduction to Language Technologies
FREN 239 *2	(3)	Stylistique comparée
FREN 244 *3	(3)	Traduction générale
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *6	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 346 *4	(3)	Traduction avancée
FREN 347 *9	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2
FREN 431 *8	(3)	Traduction et révision
FREN 441 *5	(3)	Traduction français-anglais
FREN 443 *6	(3)	Traduction littéraire 2
FREN 492	(3)	Histoire de la traduction
FREN 494 *7	(3)	Traduction spécialisée

<sup>\*2</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 244 ou le CCTR 225.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 346 ou le CCTR 325.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.

<sup>\*8</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

<sup>\*9</sup> L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.

 $NOTE: Les \ chiffres\ 1\ et\ 2\ n'indiquent\ pas\ des\ s\'equences\ ;\ ils\ servent\ \grave{a}\ d\'esigner\ des\ cours\ \grave{a}\ contenu\ variable.$ 

#### 4.11.16.5 Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)

Le programme de « Concentration majeure en Langue et littérature françaises (option « Traduction ») » offre une formation générale en traduction de l'anglais vers le français. D'abord pratique, cette formation fournit également des assises théoriques sur le fonctionnement de la langue ou les enjeux de la traduction. Elle favorise l'amélioration de la compréhension de l'anglais et des compétences rédactionnelles en français, compétences que l'étude de la littérature de langue française viendra renforcer. L'admission au programme nécessite une bonne connaissance du français et de l'anglais lus et écrits, de même que du français parlé ; cette connaissance est vérifiée à l'aide d'un test de classement, à la suite duquel l'étudiant(e) peut se voir imposer de suivre le cours FREN 239 (« Stylistique comparée ») ou son équivalent, le CCTR 310 (« Comparative Stylistics 2 ») à la session d'automne de U1.

### **COURS OBLIGATOIRES (12 crédits)**

CCTR 225 *1	(3)	Introduction to Translation (English to French)
CCTR 325 *2	(3)	Semi-Specialized Translation (English to French)
FREN 222	(3)	Introduction aux études littéraires
FREN 244 *1	(3)	Traduction générale
FREN 245	(3)	Grammaire normative
FREN 346 *2	(3)	Traduction avancée

<sup>\*1</sup> L'étudiant(e) doit suivre le FREN 244 ou le CCTR 225.

### **COURS COMPLÉMENTAIRES (24 crédits)**

De 12 à 15 crédits choisis parmi les cours suivants :

GGTTD 210 III

CCTR 219 *3	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 326 *4	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *5	(3)	Traduction Littéraire-Français
CCTR 453 *6	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *6	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *6	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *6	(1.5)	Transcreation (English to French)
CCTR 507 *7	(3)	Editing and Revising (French)
CCTR 535 *8	(3)	Introduction to Language Technologies
FREN 239 *3	(3)	Stylistique comparée
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *5	(3)	Traduction littéraire 1
FREN 341	(3)	Traduction et recherche 1
FREN 347 *8	(3)	Terminologie générale
FREN 349	(3)	Traduction et recherche 2
FREN 431 *7	(3)	Traduction et révision
FREN 441 *4	(3)	Traduction français-anglais
FREN 443 *5	(3)	Traduction littéraire 2
FREN 494 *6	(3)	Traduction spécialisée

<sup>\*3</sup> L'étudiant(e) peut suivre le FREN 239 ou le CCTR 219.

<sup>\*2</sup> L'étudiant(e) doit suivre le FREN 346 ou le CCTR 325.

<sup>\*4</sup> L'étudiant(e) peut suivre le FREN 441 ou le CCTR 326.

<sup>\*5</sup> L'étudiant(e) peut suivre le FREN 324 et/ou le FREN 443 ou le CCTR 441.

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 494 ou deux demi-cours parmi les suivants : CCTR 453, CCTR 455, CCTR 457 et CCTR 459.

<sup>\*7</sup> L'étudiant(e) peut suivre le FREN 431 ou le CCTR 507.

<sup>\*8</sup> L'étudiant(e) peut suivre le FREN 347 ou le CCTR 535.

De 3 à 6 crédits choisis parmi les cours suivants:

CCTR 331 *9	(3)	Current Trends in Translation Studies
FREN 231	(3)	Linguistique française
FREN 313	(3)	Langage et littérature 1
FREN 336	(3)	Histoire de la langue française
FREN 356	(3)	Grammaire du texte littéraire
FREN 394 *9	(3)	Théories de la traduction
FREN 425 *9	(3)	Traduction et culture
FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
FREN 492	(3)	Histoire de la traduction

<sup>\*9</sup> L'étudiant(e) peut suivre FREN 394 et/ou le FREN 425 ou le CCTR 331.

6 à 9 crédits choisis parmi les cours du bloc « Études » (au moins 3 de ces crédits doivent porter sur la littérature avant 1800 et 3 autres sur la littérature depuis 1800).

0 à 3 crédits choisis parmi les séries « Création » et « Édition » du bloc « Pratiques ».

## I) BLOC: ÉTUDES

Liste de cours

(a) Série « Œuvres et courants »

FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 253	(3)	Oeuvres culture occidentale
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2

	FREN 461	(3)	Enjeux littéraires et culturels 1
	FREN 472	(3)	Enjeux littéraires et culturels 2
31	FREN 480	<b>(</b> 3)	Littérature québécoise contemporaine
	FREN 482	( <b>%</b> )p1 8e18ul15;s	Let Il thándiqu (d) S 9e siècle 2
	FREN 485	(3)	Littérature française contemporaine
	FREN 498	(3)	Questions de littérature 3
	FREN 499	(3)	Questions de littérature 4

## II) BLOC: PRATIQUES

(a) Série « Création »	
FREN 240	

A)சில் இரு மேல் முன்று முக்கார் முன்று முக்கார் (re) Tj 1 0 0 1 165.864 432.081 Tm sh9.322138.10 403383288619

FREN 320 Traduire, écrire, expérimenter. (3) FREN 340 (3) Atelier d'écriture narrative

(3) FREN 460 Atelier d'écriture (3)

(3)

(b) Série: « Édition »

FREN 440

FREN 376 (3) Correction et révision FREN 377 Pratiques de l'édition littéraire (3) FREN 476 (3) Le livre

Note : les chiffres 1 et 2 n'indiquent pas des séquences; ils servent à désigner des cours à contenu variable.

Atelier d'écriture dramatique

Baccalauréat ès Arts (B.A.) - Double Spécialisation Langue & littérature françaises - Étud.96 Tmranrature française

au moins 3 crédits choisis parmi les cours de la série « Thé

\*6 L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

# I) BLOC : ÉTUDES

Liste de cours

(a) Série « Œuvres et coura	ints	\$ 3	>>
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FREN 250	(3)	Littérature française avant 1800
FREN 251	(3)	Littérature française depuis 1800
FREN 252	(3)	Littérature québécoise
FREN 253	(3)	Oeuvres culture occidentale
FREN 310	(3)	Cinéma français
FREN 311	(3)	Cinéma francophone
FREN 315	(3)	Cinéma québécois
FREN 329	(3)	Civilisation québécoise
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 372	(3)	Littérature québécoise 1
FREN 380	(3)	Littératures francophones 1
FREN 381	(3)	Littératures francophones 2
FREN 382	(3)	Littérature québécoise 2
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 461	(3)	Enjeux littéraires et culturels 1
	7sq62	Enjeux littéraires et culturels 2

FREN 434	(3)	Sociolinguistique du français
FREN 491	(3)	Langage et littérature 2
(c) Série « Théorie »		
CCTR 331 *6	(3)	Current Trends in Translation Studies
FREN 334	(3)	L'oeuvre au miroir de la critique
FREN 335	(3)	Théories littéraires 1
FREN 337	(3)	Textes, imaginaires, sociétés
FREN 375	(3)	Théories littéraires 2
FREN 391	(3)	Savoirs de la littérature 1
FREN 394 *6	(3)	Théories de la traduction
FREN 420	(3)	Enjeux de l'écriture littéraire
FREN 422	(3)	Le métier d'écrivain-e
FREN 425 *6	(3)	Traduction et culture
FREN 496	(3)	Savoirs de la littérature 2

<sup>\*6</sup> L'étudiant(e) peut suivre le FREN 394 et/ou le FREN 425 ou le CCTR 331.

# II) BLOC: PRATIQUES

# (a) Série « Création »

FREN 240	(3)	Atelier d'écriture poétique
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 340	(3)	Atelier d'écriture narrative
FREN 440	(3)	Atelier d'écriture dramatique
FREN 460	(3)	Atelier d'écriture

# (b) Série « Édition »

FREN 376	(3)	Correction et révision
FREN 377	(3)	Pratiques de l'édition littéraire
FREN 476	(3)	Le livre

## (c) Série « Traduction »

CCTR 219 *7	(3)	Fundamentals of Comparative Stylistics and Writing (French)
CCTR 225 *1	(3)	Introduction to Translation (English to French)
CCTR 325 *2	(3)	Semi-Specialized Translation (English to French)
CCTR 326 *3	(3)	Semi-Specialized Translation (French to English)
CCTR 441 *5	(3)	Traduction Littéraire-Français
CCTR 453 *8	(1.5)	Technical Translation: Information Technology (English to French)
CCTR 455 *8	(1.5)	Technical Translation: Transportation (English to French)
CCTR 457 *8	(1.5)	Financial Translation: Investments (English to French)
CCTR 459 *8	(1.5)	Transcreation (English to French)
CCTR 507 *4	(3)	Editing and Revising (French)
CCTR 535 *9	(3)	Introduction to Language Technologies

FREN 239 *7	(3)	Stylistique comparée
FREN 244 *1	(3)	Traduction générale
FREN 320	(3)	Traduire, écrire, expérimenter.
FREN 324 *5	(3)	Traduction littéraire 1
		T

GSFS 307 (3) Indigenous Feminisms

GSFS 308inisms (3) Sex and Gender Minority Cultures

ENGL 320	(3)	Postcolonial Literature
ENGL 371*	(3)	Theatre History: 19th to 21st Centuries
ENGL 388*	(3)	Studies in Popular Culture
ENGL 413*	(3)	Special Topics in Canadian Drama and Theatre
ENGL 418*	(3)	A Major Modernist Writer
ENGL 440*	(3)	First Nations and Inuit Literature and Media
ENGL 443	(3)	Contemporary Women's Fiction
ENGL 444	(3)	Studies: Women's Writing and Feminist Theory
ENGL 489*	(3)	Culture and Critical Theory 1
ENGL 516*	(3)	Shakespeare
GEOG 331*	(3)	Urban Social Geography
GEOG 507*	(3)	Advanced Social Geography
GERM 364	(3)	Gender and Society in German Literature and Culture
GSFS 200	(3)	Feminist and Social Justice Studies
GSFS 250	(3)	Sexual and Gender Diversity Studies
GSFS 300	(3)	Research Inquiry in GSFS
GSFS 301	(3)	Current Topics 1
GSFS 302	(3)	Current Topics 2
GSFS 303	(3)	Gender and Disability
GSFS 304	(3)	Postcolonial Feminist Theories
GSFS 305	(3)	Critical Race and Social Justice Theories
GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures

 $GSFS~4426.88~Tm (Theories) \cite{T3.SFS}~4426.88~T\&E \cite{T4.E4.88}~E \cite{T4.E4$ 

HIST 382*	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 412	(3)	Women and Gender in Modern Britain
HIST 424	(3)	Gender, Sexuality and Medicine
HIST 433	(3)	British Queer History
HIST 525	(3)	Women, Work and Family in Global History
HIST 526	(3)	Women and War
HSEL 308	(3)	Issues in Women's Health
HSEL 309	(3)	Women's Reproductive Health
INDG 401*	(3)	Interdisciplinary Seminar in Indigenous Studies
ISLA 310	(3)	Women in Islam
ISLA 585	(3)	Arab Women's Literature
ITAL 375*	(3)	Cinema and Society in Modern Italy
ITAL 383	(3)	Women's Writing since 1880
ITAL 477*	(3)	Italian Cinema and Video
MUAR 250	(3)	Women Making Music
		Music and Queer Identity

Note: Courses marked with and asterisk (\*) count toward Gender, Sexuality, Feminist, and Social Justice Studies when the course centrally engages with at least two of the following themes: gender, sexuality, feminism, and social justice.

Bachelor of Arts (B.A.) - Major Con.84Gionard Gender, Se

Additions may be made during a particular calendar year depending on the central focus of the courses. For final updates, see: http://www.mcgill.ca/igsf.

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ANTH 227	(3)	Medical Anthropology
ANTH 327	(3)	Anthropology of South Asia
ANTH 381*	(3)	Special Topic 2
ANTH 407	(3)	Anthropology of the Body
ANTH 413	(3)	Gender in Archaeology
ANTH 480*	(3)	Special Topic 5
ANTH 555*	(3)	Advanced Topics in Ethnology
ARCH 533*	(3)	New Approaches to Architectural History
ARTH 205*	(3)	Introduction to Modern Art
ARTH 353*	(3)	Selected Topics in Art History 1
ARTH 354*	(3)	Selected Topics Art History 2
ARTH 421*	(3)	Selected Topics in Art and Architecture 2
ARTH 440*	(3)	The Body and Visual Culture
CANS 405*	(3)	Canadian Studies Seminar 5
CLAS 308	(3)	Gender in the Ancient World
COMS 310	(3)	Media and Feminist Studies
COMS 400*	(3)	Critical Theory Seminar
COMS 490*	(3)	Special Topics in History and Theory of Media
COMS 492	(3)	Power, Difference and Justice
COMS 541*	(3)	Cultural Industries
EAST 313*	(3)	Current Topics: Korean Studies 1
EAST 350	(3)	Gender and Sexuality in Chinese Literature
EAST 351	(3)	Women Writers of China
EAST 370	(3)	History of Sexuality in Japan
EAST 390	(3)	The Chinese Family in History
EAST 453*	(3)	Topics: Chinese Literature
ENGL 275	(3)	Introduction to Cultural Studies
ENGL 320	(3)	Postcolonial Literature
ENGL 371*	(3)	Theatre History: 19th to 21st Centuries
ENGL 388*	(3)	Studies in Popular Culture
ENGL 413*	(3)	Special Topics in Canadian Drama and Theatre
ENGL 418*	(3)	A Major Modernist Writer
ENGL 440*	(3)	First Nations and Inuit Literature and Media
ENGL 443	(3)	Contemporary Women's Fiction
ENGL 444	(3)	Studies: Women's Writing and Feminist Theory
ENGL 489*	(3)	Culture and Critical Theory 1
ENGL 516*	(3)	Shakespeare
GEOG 331*	(3)	Urban Social Geography
GEOG 507*	(3)	Advanced Social Geography

GSFS 300	(3)	Research Inquiry in GSFS	
GSFS 301	(3)	Current Topics 1	
GSFS 302	(3)	Current Topics 2	
GSFS 303	(3)	Gender and Disability	
GSFS 304	(3)	Postcolonial Feminist Theories	
		Critical Race and Social Justice	

MUAR 250	(3)	Women Making Music
MUAR 399	(3)	Music and Queer Identity
	(3)	Introduction to Feminist Theory

GSFS 495D1	(1.5)	Honours/Joint Honours Colloquium
GSFS 495D2	(1.5)	Honours/Joint Honours Colloquium
GSFS 497D1	(1.5)	Joint Honours Thesis
GSFS 497D2	(1.5)	Joint Honours Thesis

## Complementary Courses (21 credits)

9 credits selected from the GSFS Course List, 3 credits of which must be at the 400 or 500 level.

12 credits selected from the Complementary Course List. Three credits minimum must be at the 400 or 500 level and 9 credits maximum may be at the 200 level.

Complementary courses must centrally engage with at least two of the following themes: gender, sexuality, feminism, and social justice. Courses are offered by a range of faculties and disciplines.

Maximum of 12 transfer credits may be accepted by approved exchange programs, subject to University approval.

### Gender, Sexuality, Feminist, and Social Justice Studies (GSFS)

9 credits from the following:

GSFS 301	(3)	Current Topics 1
GSFS 302	(3)	Current Topics 2
GSFS 303	(3)	Gender and Disability
GSFS 304	(3)	Postcolonial Feminist Theories
GSFS 305	(3)	Critical Race and Social Justice Theorie
GSFS 306	(3)	Queer Theory
GSFS 307	(3)	Indigenous Feminisms
GSFS 308	(3)	Sex and Gender Minority Cultures
GSFS 401	(3)	Special Topics 1
GSFS 402	(3)	Special Topics 2
GSFS 403	(3)	Feminisms and the Law
GSFS 404	(3)	Politics of Identity
GSFS 405	(3)	Social Justice and Activism
GSFS 406	(3)	Trans*Feminisms
GSFS 407	(3)	Sexuality and Gender: New Directions

Any credits taken above the 9 credits of complementary GSFS courses may count as credit in the following Complementary Course List.

### 12 credits from the following:

Additions may be made during a particular calendar year depending on the central focus of the courses. For final updates, see: http://www.mcgill.ca/igsf.

ANTH 227	(3)	Medical Anthropology
ANTH 327	(3)	Anthropology of South Asia
ANTH 381*	(3)	Special Topic 2
ANTH 407	(3)	Anthropology of the Body
ANTH 413	(3)	Gender in Archaeology
ANTH 480*	(3)	Special Topic 5
ANTH 555*	(3)	Advanced Topics in Ethnology
ARCH 533*	(3)	New Approaches to Architectural History
ARTH 205*	(3)	Introduction to Modern Art
ARTH 353*	(3)	Selected Topics in Art History 1

ARTH 354*	(3)	Selected Topics Art History 2
ARTH 421*	(3)	Selected Topics in Art and Architecture 2
ARTH 440*	(3)	The Body and Visual Culture
CANS 405*	(3)	Canadian Studies Seminar 5
		Gender in the Ancient W

## Required (3 credits)

GEOG 216 (3) Geography of the World Economy

### Complementary Courses (15 credits)

6 credits selected from:

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 203	(3)	Environmental Systems
GEOG 210	(3)	Global Places and Peoples
GEOG 217	(3)	Cities in the Modern World
GEOG 221	(3)	Environment and Health
GEOG 272	(3)	Earth's Changing Surface

<sup>9</sup> credits from Geography (GEOG) courses at the 300 level or above.

# 4.11.18.2 Bachelor of Arts (B.A.) - Minor Concentration Geography (Urban Studies) (18 credits)

This interdisciplinary program introduces students in the Faculty of Arts to a range of urban dynamics and the challenges facing contemporary cities around the world. Students should observe the levels indicated by course numbers: 200-level are first year (U1); 300-level, second year (U2); 400- or 500-level, third year (U3).

## Required (3 credits)

GEOG 217 (3) Cities in the Modern World

### **Complementary Courses (15 credits)**

15 credits selected from the following lists. At least 9 credits must be completed at the 300-level or above:

### Group A

6-9 credits selected from:

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 311	(3)	Economic Geography
GEOG 314	(3)	Geospatial Analysis
GEOG 315	(3)	Urban Transportation Geography
GEOG 316	(3)	Political Geography
GEOG 325	(3)	New Master-Planned Cities
GEOG 331	(3)	Urban Social Geography
GEOG 333	(3)	Introduction to Programming for Spatial Sciences
GEOG 408	(3)	Geography of Development
GEOG 409	(3)	Geographies of Developing Asia
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 417	(3)	Urban Geography
GEOG 418	(3)	Geographies of Race

**GEOG 420** (3) Memory, Place, and Power **Group B** 6-9 credits selected from: **Architecture** Although Architecture courses have prerequisites, they are waived for Urban Studies students, but courses at the 500-level may not be taken before U3. ARCH 528 (3) History of Housing **Art History and Communication Studies ARTH 204** (3) Introduction to Medieval Art and Architecture **COMS 425** (3) Urban Culture and Everyday Life Civil Engineering **CIVE 540** (3) Urban Transportation Planning History **HIST 353** History of Montreal (3) **HIST 397** (3) Canada: Ethnicity, Migration Management **FINE 445** (3) Real Estate Finance **Political Science POLI 318** (3) Comparative Local Government POLI 321 (3) Issues: Canadian Public Policy **Quebec Studies** QCST 200 (3) Introduction to the Study of Quebec Sociology SOCI 222 (3) Urban Sociology SOCI 230 (3) Sociology of Ethnic Relations SOCI 333 (3) Social Stratification SOCI 366 (3) Neighborhoods and Inequality **SOCI 388** (3) Crime **Urban Planning URBP 201** (3) Planning the 21st Century City **URBP 501** (2) Principles and Practice 1 URBP 504 (3) Planning for Active Transportation

GEOG 221	(3)	Environment and Health
GEOG 303	(3)	Health Geography
GEOG 403	(3)	Global Health and Environmental Change

## **Complementary Courses (6 credits)**

3 credits from:		
ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 203	(3)	Environmental Systems
GEOG 210	(3)	Global Places and Peoples
GEOG 217	(3)	Cities in the Modern World
3 credits from:		
GEOG 503	(3)	Advanced Topics in Health Geography
PPHS 501*	(3)	Population Health and Epidemiology
PPHS 511*	(3)	Fundamentals of Global Health
PPHS 525*+	(3)	Health Care Systems in Comparative Perspective
PPHS 529*	(3)	Global Environmental Health and Burden of Disease
SOCI 309	(3)	Health and Illness
SOCI 365*	(3)	Health and Development
SOCI 525*+	(3)	Health Care Systems in Comparative Perspective

<sup>+</sup> Students can take PPHS 525 OR SOCI 525

## 4.11.18.5 Bachelor of Science (B.Sc.) - Minor Geography (18 credits)

The Minor Geography is expandable into the B.Sc. Major Geography.

The Minor Geography is designed to provide students in the Faculty of Science with an overview of basic elements of geography at the introductory and advanced level.

This Minor permits no overlap with any other programs.

# Required Courses (6 credits)

GEOG 203	(3)	Environmental Systems
GEOG 272	(3)	Earth's Changing Surface

### **Complementary Courses (12 credits)**

3 credits of Geography courses at the 200 level below.

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 217	(3)	Cities in the Modern World
GEOG 221	(3)	Environment and Health

9 credits from any Geography course at the 300 level or above.

<sup>\*</sup> These courses may have additional prerequisites or restrictions.

# 4.11.18.6 Bachelor of Science (B.Sc.) - Minor GIS & Remote Sensing (18 credits)

The Minor GIS & Remote Sensing program provides B.Sc. students with the fundamentals of geospatial tools and technologies.

# Required Course (6 credits)

GEOG 201 (3) Introductory Geo-Information Science

GEOG 314 (3) Geospatial Analysis

# **Complementary Courses (12 credits)**

3 credits selected from:

COMP 202 (3) Foundations of Programming

Introduction to Programming 9 5:

GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 314	(3)	Geospatial Analysis
GEOG 351	(3)	Quantitative Methods
GEOG 414	(3)	Advanced Geospatial Analysis

### 3 credits of field courses selected from:

GEOG 495	(3)	Field Studies - Physical Geography
GEOG 496	(3)	Geographical Excursion
GEOG 499	(3)	Subarctic Field Studies

#### 9-15 credits in systematic physical geography selected from:

GEOG 305	(3)	Soils and Environment
GEOG 321	(3)	Climatic Environments
GEOG 322	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments
GEOG 470	(3)	Wetlands

### 0-6 credits in integrative and advanced topics selected from:

GEOG 302	(3)	Environmental Management 1
GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation
GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 536	(3)	Geocryology
GEOG 537	(3)	Advanced Fluvial Geomorphology
GEOG 550	(3)	Historical Ecology Techniques
GEOG 555	(3)	Ecological Restoration

### 4.11.18.8 Bachelor of Arts (B.A.) - Major Concentration Geography (37 credits)

The B.A.; Major Concentration in Geography focuses on the interactions among people, places, and the environment. It includes coursework in human and physical Geography, methodological techniques, and field.

## **Required Courses (7 credits)**

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 216	(3)	Geography of the World Economy
GEOG 290	(1)	Local Geographical Excursion

## Complementary Courses (30 credits)

## **Physical Geography**

3	credits	from

GEOG 203	(3)	Environmental Systems
GEOG 272	(3)	Earth's Changing Surface

### **Statistics**

3 credits from:

Note: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

BIOL 373	(3)	Biometry
GEOG 202	(3)	Statistics and Spatial Analysis
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics
SOCI 350	(3)	Statistics in Social Research

## **Field Courses**

3 credits from:

Note: Field course offerings are determined each year in February.

GEOG 425	(3)	Southeast Asia Urban Field Studies
GEOG 494	(3)	Urban Field Studies
GEOG 495	(3)	Field Studies - Physical Geography
GEOG 496	(3)	Geographical Excursion
GEOG 499	(3)	Subarctic Field Studies

## **Analysis and Methodology**

3 credits fr
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GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 314	(3)	Geospatial Analysis
GEOG 333	(3)	Introduction to Programming for Spatial Sciences
GEOG 351	(3)	Quantitative Methods
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 512	(3)	Advanced Quantitative Methods in Social Field Research

### Geography

The remaining 18 credits are to be selected from Geography (GEOG) courses excluding GEOG 200 and GEOG 205. Of these 18 credits, at least 3 credits must be at the 400 lev

## **Complementary Courses (27 credits)**

#### **Statistics**

3 credits from:

NOTE: Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

BIOL 373	(3)	Biometry
GEOG 202	(3)	Statistics and Spatial Analysis
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics
SOCI 350	(3)	Statistics in Social Research

#### **Field Course**

3 credits selected from:

\*NOTE: Students may take either GEOG 425 or GEOG 494, but not both.

GEOG 425 (3) Southeast Asia Urban Field Studies GEOG 494 (3) Urban Field Studies

## **Remaining Courses**

21 credits selected from the course lists below. Of these 21 credits, at least 15 credits must be at the 300-level or above. At least 6 credits must also be taken outside of Geography.

## Geography

GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 311	(3)	Economic Geography
GEOG 314	(3)	Geospatial Analysis
GEOG 315	(3)	Urban Transportation Geography
GEOG 316	(3)	Political Geography
GEOG 325	(3)	New Master-Planned Cities
GEOG 331	(3)	Urban Social Geography
GEOG 333	(3)	Introduction to Programming for Spatial Sciences
GEOG 408	(3)	Geography of Development
GEOG 409	(3)	Geographies of Developing Asia
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 417	(3)	Urban Geography
GEOG 418	(3)	Geographies of Race
GEOG 420	(3)	Memory, Place, and Power
GEOG 503	(3)	Advanced Topics in Health Geography
GEOG 504	(3)	Advanced Economic Geography
GEOG 507	(3)	Advanced Social Geography

GEOG 511	(3)	Advanced Political Geography
GEOG 525	(3)	Asian Cities in the 21st Century
Architecture		
Although Architecture	courses have pre-	requisites, they are waived for Urban Studies students, but 500-level courses may not be taken before the U3.
ARCH 517	(3)	Sustainable Residential Development
ARCH 528	(3)	History of Housing
Art History and Co	mmunication S	Studies
ARTH 204	(3)	Introduction to Medieval Art and Architecture
COMS 425	(3)	Urban Culture and Everyday Life
Civil Engineering		
CIVE 540	(3)	Urban Transportation Planning
History		
HIST 353	(3)	History of Montreal
HIST 397	(3)	Canada: Ethnicity, Migration
Management		
FINE 445	(3)	Real Estate Finance
	,	
Political Science		
POLI 318	(3)	Comparative Local Government
POLI 321	(3)	Issues: Canadian Public Policy
	(-)	
Quebec Studies		
QCST 200	(3)	Introduction to the Study of Quebec
QC51 200	(3)	introduction to the study of Queoce
Sociology		
SOCI 222	(3)	Urban Sociology
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 333	(3)	Social Stratification
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 388	(3)	Crime
	. ,	
Urban Planning		
URBP 201	(3)	Planning the 21st Century City
URBP 501	(2)	Principles and Practice 1
URBP 504	(3)	Planning for Active Transportation
URBP 506	(3)	Environmental Policy and Planning
	* *	. •

GEOG 492D2 (1.5) Joint Honours Research

# Geography

12-15 credits from a coherent set of Geography (GEOG) courses excluding GEOG 200 and GEOG 205, approved by the Program Adviser. Including a field course is desirable. No more than 6 credits may be taken from 200-level courses.

# 4.11.19 History and Classical Studies (HIST & CLAS)

History and Classical Studies information, programs, and courses are described in

### 4.11.19.2 Bachelor of Arts (B.A.) - Minor Concentration History (18 credits)

The Minor Concentration History introduces students to the study of diverse cultures and societies around the world from antiquity to contemporary times. It is an excellent complement to the major concentrations offered in the Faculty of Arts. The Minor Concentration History is expandable to a Major Concentration History.

Students wishing to complete a history program are encouraged to consult a Program Adviser at the beginning of their first year, and to fill out a departmental program advising/audit form. For more information about the undergraduate programs in history, and for advising information and forms, visit the program's website at http://www.mcgill.ca/history/undergraduate.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs.

## **Complementary Courses (18 credits)**

18 credits of history courses (HIST courses or selected courses offered in other units - see list below), of which no more than 6 credits may be at the 100-or 200-level.

All undergraduate-level HIST courses.

#### **Courses Offered by Other Units**

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

CLAS 304	(3)	Ancient Greek Democracy
CLAS 345	(3)	Study Tour: Greece
CLAS 406	(3)	Greek and Roman Historiography
ISLA 315	(3)	Ottoman State and Society to 1839
JWST 240	(3)	The Holocaust
JWST 245	(3)	Jewish Life in the Islamic World
JWST 303	(3)	The Soviet Jewish Experience
JWST 311	(3)	Gender in Jewish History
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 366	(3)	History of Zionism

### 4.11.19.3 Bachelor of Arts (B.A.) - Major Concentration Classics (36 credits)

The Major Concentration in Classical Studies is an in-depth study of ancient Greece and Rome. Two Streams are offered. The Classical Languages stream 0 1 353.089 (

Group A:		
HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 211	(3)	American History to 1865
HIST 212	(3)	Medieval Europe
HIST 214	(3)	Early Modern Europe
HIST 215	(3)	Modern Europe
HIST 216	(3)	Introduction to Russian History
HIST 221	(3)	United States since 1865
HIST 226	(3)	East Central and Southeastern Europe in 20th Century
HIST 250	(3)	Making Great Britain and Ireland
Group B:		
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 205	(3)	Ancient Mediterranean History
HIST 206	(3)	Indian Ocean World History
HIST 208	(3)	Introduction to East Asian History
HIST 209	(3)	Introduction to South Asian History
HIST 210	(3)	Introduction to Latin American History
HIST 218	(3)	Modern East Asian History
HIST 275	(3)	Ancient Roman History
Group C:		
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 213	(3)	World History, 600-2000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 222	(3)	History of Pandemics
HIST 223	(3)	Indigenous Peoples and Empires
HIST 224	(3)	Introduction to the African Diaspora
HIST 238	(3)	Histories of Science
HIST 240	(3)	Modern History of Islamic Movements
HIST 249	(3)	Health and the Healer in Western History
HIST 262	(3)	Mediterranean and European Interconnections
HIST 292	(3)	History and the Environment
HIST 298	(3)	Topics in History
HIST 299	(3)	The Historian's Craft

## Courses offered by other units

The following non-HIST courses may be counted as complementary courses toward a history program. Faculty regulations stipulate that a course may not be counted toward more than one program.

CLAS 303 (3) Ancient Greek Religion

CLAS 304	(3)	Ancient Greek Democracy
CLAS 305	(3)	Roman Religion
CLAS 345	(3)	Study Tour: Greece
CLAS 406	(3)	Greek and Roman Historiography
ISLA 305	(3)	Topics in Islamic History
ISLA 315	(3)	Ottoman State and Society to 1839
ISLA 350	(3)	From Tribe to Dynasty
ISLA 355	(3)	Modern History of the Middle East
ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 511	(3)	Medieval Islam, 10th-12th Century
ISLA 516	(3)	Medieval Islam, 13th-15th Century
JWST 240	(3)	The Holocaust
JWST 245	(3)	Jewish Life in the Islamic World
JWST 303	(3)	The Soviet Jewish Experience
JWST 311	(3)	Gender in Jewish History
JWST 312	(3)	Modern Jewish History
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 348	(3)	Modern Jewish Studies
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 371	(3)	Jews and the City

Bachelor of Arts (B.A.) - Joint Honour

CLAS 422 (3) Advanced Ancient Greek: Themes

CLAS 429 (3) Medieval Greek

NOTE: Maximum 15 credits complementary courses at the 200 level.

NOTE: Maximum 9 credits of non-CLAS courses.

Note: students may count a maximum total of 12 credits of non-CLAS McGill courses and/or classics courses not taken at McGill (transfer credits) toward the program.

#### 4.11.19.6 Bachelor of Arts (B.A.) - Joint Honours Component History (36 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. The Joint Honours Component History is a flexible program that emphasizes breadth, depth as well as historical methods and research.

Students wishing to complete the Joint Honours History Component should consult a Program Adviser at the beginning of their first year to map out a course of study, and fill out a departmental program advising/audit form. For more information, visit the program's website: http://www.mcgill.ca/history/undergraduate. Students must also fulfill program requirements in the second honours component and should consult an adviser in that program.

Important note: Advanced Placement or International Baccalaureate credits may not be included in the overall credit requirement for history programs.

#### Required Course (3 credits)

HIST 399 (3) History and Historiography

### Complementary Courses (33 credits)

33 credits of HIST courses or cognate courses (see list below) according to the following requirements.

Distribution requirement:

- -3 credits from Group A
- -3 credits from Group B
- -3 credits from Group C

Temporal Breadth requirement:

- At least 3 credits focused on the period before 1800
- At least 3 credits focused on the period after 1800

Notes: The same course may be used to satisfy both a Distribution and Temporal Breadth requirement. HIST 299 and HIST 399 may not be used to satisfy Temporal Breadth requirements.

Level requirement:

- Minimum 6 credits honours seminar (500-level D1/D2 courses)
- Minimum 6 additional credits 400-level or higher HIST courses. A second honours seminar may be used to fulfill this requirement.
- Maximum 18 credits complementary courses at 200-level

GPA requirements - 3.30 in program courses, 3.0 (B) or higher in each program course, CGPA 3.0 or higher.

#### Group A:

HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 211	(3)	American History to 1865
HIST 212	(3)	Medieval Europe
HIST 214	(3)	Early Modern Europe
HIST 215	(3)	Modern Europe
HIST 216	(3)	Introduction to Russian History
HIST 221	(3)	United States since 1865
HIST 226	(3)	East Central and Southeastern Europe in 20th Century
HIST 250	(3)	Making Great Britain and Ireland

ISLA 516	(3)	Medieval Islam, 13th-15th Century
JWST 240	(3)	The Holocaust
JWST 245	(3)	Jewish Life in the Islamic World
JWST 303	(3)	The Soviet Jewish Experience
JWST 311	(3)	Gender in Jewish History
JWST 312	(3)	Modern Jewish History
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 348	(3)	Modern Jewish Studies
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 371	(3)	Jews and the City

#### 4.11.19.7 Bachelor of Arts (B.A.) - Minor Concentration South Asian Studies (18 credits)

The B.A.: Minor Concentration in South Asian Studies offers breadth and depth on the history, literature, languages, politics, religions, cultures, and societies of South Asia. The minor concentration is divided into two streams, "Culture and Civilization" and "Languages." An interdisciplinary curriculum is collaboratively offered by the Department of Anthropology, English, History and Classical Studies, Political Science, and Sociology, the Institute of Islamic Studies, and the School of Religious Studies, and is complemented by language instruction in Persian, Sanskrit, Tibetan, and Urdu-Hindi.

#### **Complementary Courses (18 credits)**

18 credits from one of the following streams:

#### **Stream 1: Culture and Civilization**

Note: As course content may change according to the offering unit's yearly curriculum, all classes listed must be approved in consultation with the South Asian Studies adviser as relevant to the Minor Concentration. Students should refer to the eCalendar to confirm any prerequisites for the following courses.

## **Introductory Curriculum**

6 credits from the following:

ANTH 327	(3)	Anthropology of South Asia
ANTH 361	(3)	Archaeology of South Asia
ENGL 297	(3)	Special Topics of Literary Study
HIST 209	(3)	Introduction to South Asian History
ISLA 330	(3)	Islamic Mysticism: Sufism
POLI 322	(3)	Political Change in South Asia
RELG 252	(3)	Hinduism and Buddhism
RELG 254	(3)	Introduction to Yoga Traditions

## Intermediate and Advanced Curriculum

12 credits from the following:

ANTH 308	(3)	Political Anthropology 01
ANTH 510	(3)	Advanced Problems in Anthropology of Religion
ENGL 336	(3)	The 20th Century Novel 2
ENGL 404	(3)	Studies in 19th Century Literature 1
ENGL 408	(3)	The 20th Century
HIST 341	(3)	Themes in South Asian History
HIST 435	(3)	Topics in South Asian History
HIST 481	(3)	History of Bangladesh and Pakistan

ISLA 305	(3)	Topics in Islamic History
ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ISLA 489	(3)	Special Topics 6
ISLA 555	(3)	Urdu Poetry
ISLA 581	(3)	Special Topics 1
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
RELG 344	(3)	Mahayana Buddhism
RELG 348	(3)	Classical Hinduism
RELG 350	(3)	Bhakti Hinduism
RELG 353	(3)	Gandhi: His Life and Thought
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 369	(3)	Tibetan Buddhism
RELG 372	(3)	Hindu Goddesses
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
	(3)	Introduction to Sikhism

ISLA 241D1	(3)	Introductory Persian
ISLA 241D2	(3)	Introductory Persian
ISLA 342D1	(3)	Lower Intermediate Persian
ISLA 342D2	(3)	Lower Intermediate Persian
ISLA 443D1	(3)	Upper Intermediate Persian
ISLA 443D2	(3)	Upper Intermediate Persian
ISLA 545	(3)	Advanced Persian 1
ISLA 546	(3)	Advanced Persian 2
SANSKRIT		
RELG 257D1	(3)	Introductory Sanskrit
RELG 257D2	(3)	Introductory Sanskrit
RELG 357D1	(3)	Sanskrit 2
RELG 357D2	(3)	Sanskrit 2
RELG 457D1	(3)	Advanced Sanskrit
RELG 457D2	(3)	Advanced Sanskrit
TIBETAN		
RELG 264	(3)	Introductory Tibetan 1
RELG 265	(3)	Introductory Tibetan 2
RELG 364	(3)	Intermediate Tibetan 1
RELG 365	(3)	Intermediate Tibetan 2
RELG 464	(3)	Advanced Tibetan 1
RELG 465	(3)	Advanced Tibetan 2
URDU-HINDI		
ISLA 251D1	(3)	Introductory Urdu-Hindi
ISLA 251D2	(3)	Introductory Urdu-Hindi
ISLA 352D1	(3)	Intermediate Urdu-Hindi
ISLA 352D2	(3)	Intermediate Urdu-Hindi
ISLA 553	(3)	Advanced Urdu-Hindi 1
ISLA 554	(3)	Advanced Urdu-Hindi 2

Additions may be made during a particular calendar year depending on the central focus of the courses, subject to adviser approval.

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CANS 200	(3)	Understanding Canada
CANS 420	(3)	Shaping Public Affairs in Canada

## **Complementary Courses (12 credits)**

ECON 219	(3)	Current Economic Problems: Topics
ENGL 228	(3)	Canadian Literature 1
ENGL 229	(3)	Canadian Literature 2
FREN 252	(3)	Littérature québécoise
HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
INDG 200	(3)	Introduction to Indigenous Studies
POLI 221	(3)	Government of Canada
POLI 222	(3)	Political Process and Behaviour in Canada
QCST 200	(3)	Introduction to the Study of Quebec
SOCI 230	(3)	Sociology of Ethnic Relations

## 3-9 credits in interdisciplinary Canadian Studies (CANS) courses from the following:

CANS 300	(3)	Topics in Canadian Studies 1
CANS 301	(3)	Topics in Canadian Studies 2
CANS 306	(3)	Topics in Indigenous Public Affairs
CANS 307	(3)	Canada in the World
CANS 308	(3)	Sex and Gender in Canada
CANS 310	(3)	Canadian Cultures: Context and Issues
CANS 311	(3)	Topics in Canadian Public Affairs 1
CANS 312	(3)	Topics in Canadian Public Affairs 2
CANS 315	(3)	Indigenous Art and Culture
CANS 401	(3)	Canadian Studies Seminar 1
CANS 402	(3)	Canadian Studies Seminar 2
CANS 404	(3)	Canadian Studies Seminar 4
CANS 405	(3)	Canadian Studies Seminar 5
CANS 406	(3)	Canadian Studies Seminar 6
CANS 412	(3)	Canada and Americas Seminar
CANS 413	(3)	Canada and Quebec Seminar
CANS 499	(3)	Internship - Canadian Studies

#### 0-6 credits chosen from:

ANTH 338	(3)	Indigenous Studies of Anthropology
ARTH 302	(3)	Aspects of Canadian Art
ECON 303	(3)	Canadian Economic Policy
ECON 305	(3)	Industrial Organization

ENGL 297	(3)	Special Topics of Literary Study
ENGL 440	(3)	First Nations and Inuit Literature and Media
Gender, Sexuality, and F	eminist Studie	es
GSFS 307	(3)	Indigenous Feminisms
Geography		
GEOG 301	(3)	Geography of Nunavut
History		
HIST 202	(3)	Survey: Canada to 1867
HIST 223	(3)	Indigenous Peoples and Empires
HIST 303	(3)	History of Quebec
HIST 309	(3)	History of Latin America to 1825
HIST 333	(3)	Indigenous Peoples and French
HIST 361	(3)	Topics in Canadian Regional History
HIST 363	(3)	Canada 1870-1914
HIST 408	(3)	Selected Topics in Indigenous History
Indigenous Studies		
INDG 202	(3)	Topics in Indigenous Studies 1
INDG 300	(3)	Topics in Indigenous Studies 2
INDG 301	(3)	Indigenous Contemporary Resistance
INDG 302	(3)	Introduction to Kanien'ké:ha
INDG 400	(3)	Seminar: Indigenous Studies
INDG 420	(3)	Indigenous Food Sovereignty
INDG 450	(3)	Rotinonhsón:ni Land-Based Pedagogy
Interdisciplinary Field C	ourse	
IDFC 500	(3)	Indigenous Field Studies
Law		
CMPL 500	(3)	Indigenous Peoples and the State
CMPL 500D1	(1.5)	Indigenous Peoples and the State
CMPL 500D2	(1.5)	Indigenous Peoples and the State
Linguistics		
LING 211	(3)	Introduction to Indigenous Languages
LING 411	(3)	Structure of an Indigenous Language

## **Political Science**

POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 436	(3)	Aboriginal Rights in the Canadian Constitution

# 4.11.20.3 Bachelor of Arts (B.A.) - Minor Concentration Quebec Studies & Community-Engaged Learning/ La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire (18 credits)

La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire a pour but de donner à l'étudiant(e) une connaissance interdisciplinaire des réalités historiques et contemporaines du Québec en complémentarité à sa propre discipline de spécialisation tout en misant sur un apprentissage par engagement communautaire en milieu montréalais. En collaboration avec le Social Equity and Diversity Education (SEDE) Office, les étudiants ont ainsi la possibilité, grâce a un stage, de mettre en pratique le contenu d'enseignement des cours au sein d'un organisme communautaire montréalais. Enjeux liés à l'équité, à la diversité et a l'inclusion en contexte montréalais.

The goal of the Minor Concentration Quebec Studies and Community-Engaged Learning is to give students an interdisciplinary overview of Quebec historical and contemporary realities that is complementary to their degree by taking advantage of a community engagement learning approach within the Montreal community. With the collaboration of the Social Equity and Diversity Education (SEDE) Office, students have the possibility to link the academic course content with a hands-on experience within a Montreal community organization. Equity, diversity and inclusion issues within the Montreal context.

## Required Courses / Cours Obligatoires (9 credits)

De façon usuelle, les cours obligatoires (9 crédits) sont complétés selon la séquence suivante : QCST 200 (3 crédits) en U0 ou U1, QCST 300 (3 crédits) en U1 et QCST 440 (3 crédits) en U2 ou en U3. Les cours complémentaires (9 crédits) peuvent être complétés en U1, U2 ou en U3.

Normally, the required courses (9 credits) are completed in the f 0 68.44 Tm(v)Tnte©

ing Canada			
anadian Studies 2			
digenous Public Affairs			
tudies Seminar 5			
rama and Theatre			
nvironment 1			
French Language and Literature / Langue et littérature françaises			
québécoise			
t t			

FREN 252	(3)	Littérature québécoise
FREN 315	(3)	Cinéma québécois
FREN 450	(3)	Questions de littérature québécoise
FREN 595	(3)	Séminaire avancé de recherche

## **History / Histoire**

HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 223	(3)	Indigenous Peoples and Empires
HIST 333	(3)	Indigenous Peoples and French
HIST 335	(3)	Science and Medicine in Canada
HIST 353	(3)	History of Montreal
HIST 364	(3)	Canada 1914-1945
HIST 367	(3)	Canada since 1945
HIST 580D1	(3)	European and Native-American Encounters
HIST 580D2	(3)	European and Native-American Encounters

## Political Science / Science politique

POLI 221	(3)	Government of Canada
POLI 222	(3)	Political Process and Behaviour in Canada
POLI 226	(3)	La vie politique québécoise
POLI 326	(3)	Provincial Politics
POLI 336	(3)	Le Québec et le Canada
POLI 342	(3)	Canadian Foreign Policy
POLI 378	(3)	The Canadian Judicial Process
POLI 417	(3)	Health Care in Canada
POLI 426	(3)	Partis politiques et comportements électoraux au Québec

## Sociology / Sociologie

SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 475	(3)	Canadian Ethnic Studies Seminar

## 4.11.21 Interdisciplinary Life Sciences Minor

Interdisciplinary Life Sciences Minor, the program, and specific courses are described in F

BIOL 306	(3)	Neural Basis of Behaviour
BIOL 314	(3)	Molecular Biology of Cancer
BIOL 320	(3)	Evolution of Brain and Behaviour
BIOL 370	(3)	Human Genetics Applied
CHEM 212	(4)	Introductory Organic Chemistry 1
CHEM 222	(4)	Introductory Organic Chemistry 2
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 502	(3)	Advanced Bio-Organic Chemistry
CHEM 503	(3)	Drug Discovery
EXMD 401	(3)	Physiology and Biochemistry Endocrine Systems
MIMM 211	(3)	Introductory Microbiology
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology
MIMM 387	(3)	The Business of Science
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis
NSCI 201	(3)	Introduction to Neuroscience 2
NUTR 307	(3)	Metabolism and Human Nutrition
PATH 300	(3)	Human Disease
PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHAR 303	(3)	Principles of Toxicology
PHAR 503	(3)	Drug Discovery and Development 1
PHAR 504	(3)	Drug Discovery and Development 2
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience
PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 311	(3)	Human Cognition and the Brain
PSYC 317	(3)	Genes and Behaviour
PSYC 318	(3)	Behavioural Neuroscience 2
PSYC 342	(3)	Hormones and Behaviour

#### **Health Social Science**

At least 3 credits from:

ANTH 204	(3)	Anthropology of Meaning
ANTH 227	(3)	Medical Anthropology
ANTH 302	(3)	New Horizons in Medical Anthropology

ANTH 314	(3)	Psychological Anthropology 01
ECON 440	(3)	Health Economics
GEOG 221	(3)	Environment and Health
GEOG 303	(3)	Health Geography
HIST 249	(3)	Health and the Healer in Western History
HIST 335	(3)	Science and Medicine in Canada
HIST 350	(3)	Science and the Enlightenment
HIST 381	(3)	Colonial Africa
HIST 424	(3)	Gender, Sexuality and Medicine
HSEL 308	(3)	Issues in Women's Health
HSEL 309	(3)	Women's Reproductive Health
PHIL 237	(3)	Contemporary Moral Issues
PHIL 343	(3)	Biomedical Ethics
POLI 417	(3)	Health Care in Canada
PSYC 215	(3)	Social Psychology
PSYC 304	(3)	Child Development
PSYC 333	(3)	Personality and Social Psychology
PSYC 412	(3)	Child Development: Psychopathology
PSYC 413	(3)	Cognitive Development
PSYC 414	(3)	Social Development
SOCI 225	(3)	Medicine and Health in Modern Society
SOCI 309	(3)	Health and Illness
SOCI 310	(3)	Sociology of Mental Health
SOCI 365	(3)	Health and Development
SOCI 390	(3)	Gender and Health
SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge

MATH 323	(3)	Probability
MATH 324*	(3)	Statistics
PSYC 204	(3)	Introduction to Psychological Statistics
PSYC 305	(3)	Statistics for Experimental Design

#### 4.11.22 International Development

McGill's Institute for the Study of International Development (ISID), its programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.21: International Development.

#### 4.11.22.1 Bachelor of Arts (B.A.) - Minor Concentration International Development Studies (18 credits)

The B.A.; Minor Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, and key development-related themes.

At least 9 of the 18 credits must be at the 300 level or above.

Students who are pursuing a Field Studies program can have a portion of their Field Studies courses count towards their IDS program. See Adviser in office for details.

#### Required Courses (9 credits)

ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
INTD 200	(3)	Introduction to International Development

#### Complementary Courses (9 credits)

#### Thematic

9 credits from the following:

## Agriculture

AGRI 411 (3) Global Issues on Development, Food and Agriculture
---

## **Agricultural Economics**

AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development

#### Anthropology

ANTH 202	(3)	Socio-Cultural Anthropology
ANTH 206	(3)	Environment and Culture
ANTH 209	(3)	Anthropology of Religion
ANTH 212	(3)	Anthropology of Development
ANTH 222	(3)	Legal Anthropology
ANTH 227	(3)	Medical Anthropology
ANTH 308	(3)	Political Anthropology 01
ANTH 318	(3)	Globalization and Religion
ANTH 322	(3)	Social Change in Modern Africa
ANTH 326	(3)	Anthropology of Latin America

ANTH 327	(3)	Anthropology of South Asia
ANTH 338	(3)	Indigenous Studies of Anthropology
ANTH 339	(3)	Ecological Anthropology
ANTH 343	(3)	Anthropology and the Animal
ANTH 418	(3)	Environment and Development
ANTH 422	(3)	Contemporary Latin American Culture and Society
ANTH 436	(3)	North American Native Peoples
ANTH 500	(3)	Chinese Diversity and Diaspora
ANTH 512	(3)	Political Ecology
Business Adminis	stration	
BUSA 433*	(3)	Topics in International Business 1
* When topic is releva	ant to IDS.	
Canadian Studies		
CANS 315	(3)	Indigenous Art and Culture
East Asian Studie	S	
EAST 211	(3)	Introduction: East Asian Culture: China
EAST 213	(3)	Introduction: East Asian Culture: Korea
Economics		
ECON 205	(3)	An Introduction to Political Economy
ECON 209	(3)	Macroeconomic Analysis and Applications
ECON 223	(3)	Political Economy of Trade Policy
ECON 314	(3)	Economic Development 2
ECON 326	(3)	Ecological Economics
ECON 336	(3)	The Chinese Economy
ECON 347	(3)	Economics of Climate Change
ECON 411	(3)	Economic Development: A World Area
ECON 416	(3)	Topics in Economic Development 2
ECON 473	(3)	Income Distribution
English		
ENGL 440	(3)	First Nations and Inuit Literature and Media
Geography		
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography

GEOG 310	(3)	Development and Livelihoods
GEOG 325	(3)	New Master-Planned Cities
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 425	(3)	Southeast Asia Urban Field Studies
GEOG 510	(3)	Humid Tropical Environments

## History

Students may count either HIST 339 or POLI 347 towards their program but not both.

HIST 197	(3)	FYS: Race in Latin America
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 208	(3)	Introduction to East Asian History
HIST 209	(3)	Introduction to South Asian History
HIST 213	(3)	World History, 600-2000
HIST 218	(3)	Modern East Asian History
HIST 223	(3)	Indigenous Peoples and Empires
HIST 309	(3)	History of Latin America to 1825
HIST 317	(3)	Themes in Indian Ocean World History
HIST 333	(3)	Indigenous Peoples and French
HIST 338	(3)	Twentieth-Century China
HIST 340	(3)	History of Modern Egypt
HIST 341	(3)	Themes in South Asian History
HIST 360	(3)	Latin America since 1825
HIST 361	(3)	Topics in Canadian Regional History
HIST 363	(3)	Canada 1870-1914
HIST 366	(3)	Themes in Latin American History
HIST 382	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 528	(3)	Indian Ocean World Slave Trade

## **International Development Studies**

INTD 350	(3)	Culture and Development
INTD 352	(3)	Disasters and Development
INTD 354	(3)	Civil Society and Development
		Quantitati

INTD 398	(3)	Topics in Conflict and Development
INTD 490	(3)	Development Research Project
INTD 499	(3)	Internship: International Development Studies
Islamic Studies		
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 310	(3)	Women in Islam
ISLA 345	(3)	Science and Civilization in Islam
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 365	(3)	Middle East Since the 1970's
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
	(3)	Islamic Culture - Indian Subcontinent

POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa
POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 345	(3)	International Organizations
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime
POLI 359	(3)	Topics in International Politics 1
POLI 369	(3)	Politics of Southeast Asia
POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
POLI 441	(3)	IPE: Trade
POLI 442	(3)	International Relations of Ethnic Conflict
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 450	(3)	Peacebuilding
POLI 474	(3)	Inequality and Development
POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
Religious Studies		
RELG 331	(3)	Religion and Globalization
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 375	(3)	Religion, Politics and Society
Sociology		
SOCI 234	(3)	Population and Society
SOCI 254	(3)	Development and Underdevelopment
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 309	(3)	Health and Illness
SOCI 365	(3)	Health and Development

SOCI 370	(3)	Sociology: Gender and Development
SOCI 446	(3)	Colonialism and Society
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 550	(3)	Developing Societies
SOCI 555	(3)	Comparative Historical Sociology
Social Work		
SWRK 400	(3)	Policy and Practice for Refugees

## 4.11.22.2 Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)

The B.A.; Major Concentration in International Development Studies focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research TT, and trainA4dTj-0.337 conial De

## Thematic

12-15 credits from the following:

## Agriculture

ECON 209	(3)	Macroeconomic Analysis and Applications
ECON 223	(3)	Political Economy of Trade Policy
ECON 314	(3)	Economic Development 2
ECON 326	(3)	Ecological Economics
ECON 336	(3)	The Chinese Economy
ECON 347	(3)	Economics of Climate Change
ECON 411	(3)	Economic Development: A World Area
ECON 416	(3)	Topics in Economic Development 2
ECON 473	(3)	Income Distribution
ECOIV 475	(3)	meone Distribution
English		
ENGL 440	(3)	First Nations and Inuit Literature and Media
Geography		
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 325	(3)	New Master-Planned Cities
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 425	(3)	Southeast Asia Urban Field Studies
GEOG 510	(3)	Humid Tropical Environments
History		
HIST 197	(3)	FYS: Race in Latin America
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 208	(3)	Introduction to East Asian History
HIST 209	(3)	Introduction to South Asian History
HIST 213	(3)	World History, 600-2000
HIST 218	(3)	Modern East Asian History
HIST 223	(3)	Indigenous Peoples and Empires
HIST 309	(3)	History of Latin America to 1825
HIST 317	(3)	Themes in Indian Ocean World History
HIST 333	(3)	Indigenous Peoples and French
HIST 338	(3)	Twentieth-Century China
HIST 340	(3)	History of Modern Egypt
HIST 341	(3)	Themes in South Asian History
HIST 360	(3)	Latin America since 1825

HIST 361	(3)	Topics in Canadian Regional History
HIST 363	(3)	Canada 1870-1914
HIST 366	(3)	Themes in Latin American History
HIST 382	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 528	(3)	Indian Ocean World Slave Trade

## **International Development Studies**

INTD 350	(3)	Culture and Development
INTD 352	(3)	Disasters and Development
INTD 354	(3)	Civil Society and Development
INTD 360	(3)	Environmental Challenges in Development
INTD 397	(3)	Topics in International Development
INTD 398	(3)	Topics in Conflict and Development
INTD 490	(3)	Development Research Project
INTD 499	(3)	Internship: International Development Studies

#### **Islamic Studies**

ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 310	(3)	Women in Islam
ISLA 345	(3)	Science and Civilization in Islam
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 365	(3)	Middle East Since the 1970's
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 421	(3)	Islamic Culture - Indian Subcontinent

#### Latin American & Caribbean Studies

<sup>\*</sup> When topic is relevant to IDS.

## **Management Core**

MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business

## Management, Organizational Behavior

ORGB 380 (3) Cross Cultural Management

Management Policy		
MGPO 435	(3)	The Origins of Capitalism
MGPO 438	(3)	Social Entrepreneurship and Innovation
MGPO 440	(3)	Strategies for Sustainability
MGPO 469	(3)	Managing Globalization
MGPO 475	(3)	Strategies for Developing Countries
MSUS 402	(3)	Systems Thinking and Sustainability
Nutrition		
NUTR 501	(3)	Nutrition in Developing Countries
Political Science		
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa
POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 345	(3)	International Organizations
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa
POLI 353	(3)	Politics of the International Refugee Regime
POLI 359	(3)	Topics in International Politics 1
POLI 369	(3)	Politics of Southeast Asia
POLI 372	(3)	Indigenous Peoples and the Canadian State
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 422	(3)	Developing Areas/Topics 2
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
POLI 441	(3)	IPE: Trade
POLI 442	(3)	International Relations of Ethnic Conflict
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 450	(3)	Peacebuilding
POLI 474	(3)	Inequality and Development

SOCI 461	(3)	Quantitative Data Analysis
SOCI 477	(3)	Qualitative Methods in Sociology

<sup>\*</sup> When selecting their Methods courses, students must consult with the IDS Adviser. They must also consult with the most recent Faculty of Arts policy on course overlap: https://www.mcgill.ca/study/faculties/arts/undergraduate/ug\_arts\_course\_reqs

#### 4.11.22.3 Bachelor of Arts (B.A.) - Joint Honours Component International Development Studies (36 credits)

The B.A.; Joint Honours - International Development Studies component focuses on the many challenges facing developing countries, including issues related to socio-economic inequalities and well being, governance, peace and conflict, environment and sustainability, key development-related themes, and training in research methods related to international development studies.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary Honours thesis (if applicable).

Honours students must maintain a CGPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

#### **Course Selection Guidelines for the Overall Program**

1. At least 18 of the 36 credits must be at the 300 level or abo

## Thematic (12 credits)

12 credits from the following:

## Agriculture

ECON 209	(3)	Macroeconomic Analysis and Applications
ECON 223	(3)	Political Economy of Trade Policy
ECON 314	(3)	Economic Development 2

HIST 361	(3)	Topics in Canadian Regional History
HIST 363	(3)	Canada 1870-1914
HIST 366	(3)	Themes in Latin American History
HIST 382	(3)	History of South Africa
HIST 408	(3)	Selected Topics in Indigenous History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 528	(3)	Indian Ocean World Slave Trade

## International Development Studies

	•	
INTD 350	(3)	Culture and Development
INTD 352	(3)	Disasters and Development
INTD 354	(3)	Civil Society and Development
INTD 360	(3)	Environmental Challenges in Development
INTD 397	(3)	Topics in International Development
INTD 398	(3)	Topics in Conflict and Development
INTD 490	(3)	Development Research Project
INTD 491	(3)	Honours Thesis
INTD 492	(6)	Honours Thesis with Field Research
INTD 497	(3)	Advanced Topics in International Development
INTD 499	(3)	Internship: International Development Studies
INTD 597	(3)	Seminar in International Development

## Islamic Studies

ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 310	(3)	Women in Islam
ISLA 345	(3)	Science and Civilization in Islam
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 365	(3)	Middle East Since the 1970's
		Central Questions in Islamic La(3)

MGCR 382	(3)	International Business
Management, Organizat ORGB 380	ional Behavior	Cross Cultural Management
Management Policy		
MGPO 435	(3)	The Origins of Capitalism
MGPO 438	(3)	Social Entrepreneurship and Innovation
MGPO 440	(3)	Strategies for Sustainability
MGPO 469	(3)	Managing Globalization
MGPO 475	(3)	Strategies for Developing Countries
MSUS 402	(3)	Systems Thinking and Sustainability
Nutrition NUTR 501	(3)	Nutrition in Developing Countries
Political Science	(3)	Nutrition in Developing Countries
POLI 319	(3)	Politics of Latin America

POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
Religious Studies		
RELG 331	(3)	Religion and Globalization
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 375	(3)	Religion, Politics and Society
Sociology		
SOCI 234	(3)	Population and Society
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 309	(3)	Health and Illness
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 446	(3)	Colonialism and Society
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 550	(3)	Developing Societies
SOCI 555	(3)	Comparative Historical Sociology
Social Work		
SWRK 400	(3)	Policy and Practice for Refugees

## Methods (6 credits)

6 credits from the following:\*

<sup>\*</sup> When selecting their Methods courses, students must consult with the IDS Adviser.h the IDS

Political Science		
POLI 210	(3)	Political Science Research Methods
POLI 461	(3)	Advanced Quantitative Political Science
Sociology		
SOCI 350	(3)	Statistics in Social Research
SOCI 461	(3)	Quantitative Data Analysis
SOCI 477	(3)	Qualitative Methods in Sociology

## 4.11.23 Islamic Studies (ISLA)

Please see section 4.11.36: World Islamic and Middle East Studies (ISLA) for more information.

## 4.11.24 Jewish Studies (JWST)

The Department of Je

		Introduction to Yiddish Literature
	(3)	
▋▕▐▊▊▆▆▋▝▊▆▆▘░▋▐▆░▆▐▆▛▆▞▋▍▞▟▆▋▍▍▍	(3)	Jewish Studies 3: 1000 - 2000
	(3)	The Holocaust
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 445	(3)	The Poetry of Nationalism
JWST 485	(3)	Tutorial in Yiddish Literature
	(3)	Tutorial in Yiddish Literature



JWST 310	(3)	Believers, Heretics and Critics
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 337	(3)	Jewish Philosophy and Thought 1
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 358	(3)	Topics in Jewish Philosophy 1
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 474	(3)	Maimonides' Mishneh Torah
JWST 558	(3)	Topics: Modern Jewish Thought

Language and Literature - Hebrew

JWST 474	(3)	Maimonides' Mishneh Torah
JWST 538	(3)	Early Rabbinic Parshanut 1

## **Other Department Courses - History**

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek,

#### **Areas of Jewish Studies**

24 credits in Jewish Studies of which at least 12 are devoted to a single area of study: Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies.

Students without the background necessary to complete the advanced language requirement may substitute up to 12 credits in language.

Note: Hebrew language courses are found listed under the heading "Language and Literature - Hebrew", and Yiddish language courses are found under the heading "Language and Literature - Yiddish" in the areas of study lists below.

## **Biblical Studies**

JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 310	(3)	Believers, Heretics and Critics
JWST 327	(3)	A Book of the Bible
JWST 330	(3)	Topics in the Hebrew Bible
JWST 510	(3)	Jewish Bible Interpretation 1
JWST 511	(3)	Jewish Bible Interpretation 2
JWST 520	(3)	Bible Interpretation in Antiquity
JWST 538	(3)	Early Rabbinic Parshanut 1
JWST 581	(3)	Aramaic Language
RELG 307	(3)	Bible, Quran and Interpretations

#### **East European Studies**

HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
JWST 206	(3)	Introduction to Yiddish Literature
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 445	(3)	The Poetry of Nationalism
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 585	(3)	Tutorial: Eastern European Studies 1
JWST 586	(3)	Tutorial: Eastern European Studies 2

## **Jewish History**

HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History

HIST 572D2	(3)	Seminar in Jewish History
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 306	(3)	The American Jewish Community
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
Jewish Thought		
EDER 318	(3)	Teaching the Jewish Liturgy
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
JWST 201	(3)	Jewish Law
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 310	(3)	Believers, Heretics and Critics
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 337	(3)	Jewish Philosophy and Thought 1
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 358	(3)	Topics in Jewish Philosophy 1
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 474	(3)	Maimonides' Mishneh Torah
JWST 558	(3)	Topics: Modern Jewish Thought
Language and Literature	e - Hebrew	
JWST 199	(3)	FYS: Images - Jewish Identities
JWST 220D1	(3)	Introductory Hebrew
JWST 220D2	(3)	Introductory Hebrew
JWST 225	(3)	Literature and Society
JWST 300	(3)	Charisma and Social Change
JWST 320D1	(3)	Intermediate Hebrew
JWST 320D2	(3)	Intermediate Hebrew

The Israeli Novel

JWST 323

(3)

JWST 325	(3)	Israeli Literature in Translation
JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 367	(3)	Hebrew through Israeli Cinema
JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture
JWST 383	(3)	Holocaust Literature
JWST 403	(3)	Contemporary Hebrew Literature
JWST 445	(3)	The Poetry of Nationalism

# Language and Literature - Yiddish

JWST 206	(3)	Introduction to Yiddish Literature
JWST 281	(3)	Introductory Yiddish 1
JWST 282	(3)	Introductory Yiddish 2
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 387	(3)	Modern Jewish Authors
JWST 480	(3)	Advanced Yiddish 1
JWST 481	(3)	Advanced Yiddish 2
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 530	(3)	Topics in Yiddish Literature

## **Modern Jewish Studies**

EDER 319	(3)	Teaching the Holocaust
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 309	(3)	Jews in Film
JWST 346	(3)	Modern Jewish Studies
JWST 347	(3)	Modern Jewish Studies
JWST 348	(3)	Modern Jewish Studies
JWST 349	(3)	Modern Jewish Studies
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 361	(3)	The Shtetl: 1500-1897

JWST 365 (3) Modern Jewish Ideologies JWST 366 (3) History of Zionism

JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 491	(3)	Honours Thesis 1
JWST 492	(3)	Honours Thesis 2

## **Complementary Courses (27 credits)**

27 credits selected as follows:

### Jewish History

6 credits of courses on Jewish history.

HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
One of:		
HIST 219	(3)	Jewish History: 1000 - 2000
		·
JWST 217	(3)	Jewish Studies 3: 1000 - 2000

### Jewish Language

0-6 credits of a Jewish language. Each Joint Honours student will complete at least one Jewish language at the advanced level of instruction. A student who can demonstrate competence in a Jewish language may be permitted to substitute other courses for all or part of the language requirement.

JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 480	(3)	Advanced Yiddish 1
IWST 481	(3)	Advanced Viddish 2

### **Areas of Jewish Studies**

15-21 credits, planned with an adviser and normally chosen to reflect progress to the advanced level in one of the areas of study. Biblical Studies, East European Studies, Jewish History, Jewish Thought, Literature (Hebrew, Yiddish), Modern Jewish Studies, and Rabbinic Studies.

### **Biblical Studies**

JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 310	(3)	Believers, Heretics and Critics
JWST 327	(3)	A Book of the Bible
JWST 330	(3)	Topics in the Hebrew Bible
JWST 510	(3)	Jewish Bible Interpretation 1
JWST 511	(3)	Jewish Bible Interpretation 2
JWST 520	(3)	Bible Interpretation in Antiquity
JWST 538	(3)	Early Rabbinic Parshanut 1
JWST 581	(3)	Aramaic Language
RELG 307	(3)	Bible, Quran and Interpretations

### **East European Studies**

HIST 307 (3) Jews in Poland

HIST 427	(3)	The Hasidic Movement
JWST 206	(3)	Introduction to Yiddish Literature
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 381	(3)	God and Devil in Modern Yiddish Literature
JWST 383	(3)	Holocaust Literature
JWST 445	(3)	The Poetry of Nationalism
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 585	(3)	Tutorial: Eastern European Studies 1
JWST 586	(3)	Tutorial: Eastern European Studies 2
Jewish History		
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 306	(3)	The American Jewish Community
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
Jewish Thought		
EDER 318	(3)	Teaching the Jewish Liturgy
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
JWST 201	(3)	Jewish Law
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000

JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 310	(3)	Believers, Heretics and Critics
JWST 314	(3)	Denominations in North American Judaism
JWST 315	(3)	Modern Liberal Jewish Thought
JWST 337	(3)	Jewish Philosophy and Thought 1
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 358	(3)	Topics in Jewish Philosophy 1
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 474	(3)	Maimonides' Mishneh Torah
JWST 558	(3)	Topics: Modern Jewish Thought

# Language and Literature - Hebrew

JWST 199	(3)	FYS: Images - Jewish Identities
JWST 220D1	(3)	Introductory Hebrew
	(3)	Introductory Hebrew

JWST 480	(3)	Advanced Yiddish 1
JWST 481	(3)	Advanced Yiddish 2
JWST 485	(3)	Tutorial in Yiddish Literature
JWST 486	(3)	Tutorial in Yiddish Literature
JWST 530	(3)	Topics in Yiddish Literature
Modern Jewish Studies		
EDER 319	(3)	Teaching the Holocaust
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 240	(3)	The Holocaust
JWST 309	(3)	Jews in Film
JWST 346	(3)	Modern Jewish Studies
JWST 347	(3)	Modern Jewish Studies
JWST 348	(3)	Modern Jewish Studies
JWST 349	(3)	Modern Jewish Studies
JWST 351	(3)	Studies in Modern Jewish Literature
JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 361	(3)	The Shtetl: 1500-1897
JWST 365	(3)	Modern Jewish Ideologies
JWST 366	(3)	History of Zionism
JWST 383	(3)	Holocaust Literature
JWST 386	(3)	American Jewish Literature
JWST 387	(3)	Modern Jewish Authors
JWST 445	(3)	The Poetry of Nationalism
JWST 558	(3)	Topics: Modern Jewish Thought
JWST 585	(3)	Tutorial: Eastern European Studies 1
JWST 586	(3)	Tutorial: Eastern European Studies 2
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
Rabbinic Studies		
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
JWST 201	(3)	Jewish Law
JWST 216	(3)	Jewish Studies 2: 400 B.C.E 1000
JWST 217	(3)	Jewish Studies 3: 1000 - 2000
JWST 316	(3)	Social and Ethical Issues Jewish Law 1
JWST 345	(3)	Introduction to Rabbinic Literature
JWST 358	(3)	Topics in Jewish Philosophy 1

JWST 359	(3)	Topics in Jewish Philosophy 2
JWST 474	(3)	Maimonides' Mishneh Torah
JWST 538	(3)	Early Rabbinic Parshanut 1

### Other Department Courses - History

Many of the courses in Jewish Studies are related to other departments, e.g., History, Religious Studies. There are also related courses in other departments which students specializing in certain areas of Jewish Studies might be encouraged to include in their programs, e.g., Classical Greek, Arabic, theories of literature, etc.

The following History department courses may be used as Jewish Studies courses in the Department of Jewish Studies programs. These courses have been included in the areas of study course lists above.

HIST 194	(3)	FYS: Jewish Concepts of Others
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
HIST 307	(3)	Jews in Poland
HIST 427	(3)	The Hasidic Movement
HIST 572D1	(3)	Seminar in Jewish History
HIST 572D2	(3)	Seminar in Jewish History

# 4.11.25 Languages, Literatures, and Cultures (LLCU)

The Department of Languages, Literatures, and Cultures, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.24: Languages, Literatures, and Cultures.

### 4.11.25.1 Bachelor of Arts (B.A.) - Minor Concentration European Literature and Culture (18 credits)

The Minor Concentration in European Literature and Culture provides students with a broad foundation for understanding the development and interconnectedness of European culture, and its relevance for the comprehension of today's world through the study of literature and the arts from the Middle Ages to modern times. Knowledge of a language other than English is not required to complete the program.

### Required Course (3 credits)

LLCU 210 (3) Introduction to European Literature and Culture

# **Complementary Courses (15 credits)**

9-15 credits selected from the list below. At least 6 credits should be at the 300-level or above.

Students with an advanced knowledge of German, Italian, Russian, or Spanish can count GERM, HISP, ITAL, and RUSS literature courses taught in those languages toward the Minor Concentration. No more than 6 credits in any given area (LLCU, GERM, HISP, ITAL, and RUSS

HISP 301	(3)	Hispanic Literature and Culture in English 1
ITAL 355	(3)	Dante and the Middle Ages
ITAL 365	(3)	The Italian Renaissance

ENGL 329	(3)	English Novel: 19th Century 1
ENGL 337	(3)	Theme or Genre in Medieval Literature
ENGL 347	(3)	Great Writings of Europe 1
ENGL 349	(3)	English Literature and Folklore 1
ENGL 356	(3)	Middle English
ENGL 447	(3)	Crosscurrents/English Literature and European Literature $1$
ENGL 456	(3)	Middle English
FREN 355	(3)	Littérature du 20e siècle 1
FREN 360	(3)	La littérature du 19e siècle 1
FREN 362	(3)	La littérature du 17e siècle 1
FREN 364	(3)	La littérature du 18e siècle 1
FREN 366	(3)	Littérature de la Renaissance 1
FREN 453	(3)	Littérature du 20e siècle 2
FREN 455	(3)	La littérature médiévale 1
FREN 456	(3)	La littérature médiévale 2
FREN 457	(3)	La littérature de la Renaissance 2
FREN 458	(3)	La littérature du 17e siècle 2
FREN 459	(3)	La littérature du 18e siècle 2
FREN 482	(3)	La littérature du 19e siècle 2
FREN 485	(3)	Littérature française contemporaine

# 4.11.25.2 Bachelor of Arts (B.A.) - Minor Concentration German Language (18 credits)

The Minor Concentration in German Language is designed to allow students to achieve linguistic proficiency in German and to introduce students to some of the major aspects of German culture.

This program may be expanded to the Major Concentration German Studies.

Students may be

GERM 326	(3)	Topics: German Language and Culture
GERM 331	(3)	Germany after Reunification
GERM 332	(3)	Topics in Eighteenth-Century German Literature and Culture
GERM 333	(3)	What is Enlightenment?
GERM 335	(3)	Science and Literature
GERM 336	(3)	German Language, Media and Culture
GERM 337	(3)	Literature and Revolution
GERM 340	(3)	Romanticism
GERM 344	(3)	Realism
GERM 348	(3)	Nature and Ecopoetics
GERM 350	(3)	Modernism and the Avant-Garde

At least 3 credits in Surveys of Literature to be chosen from the following courses:

HISP 241	(3)	Survey of Spanish Literature and Culture 1
HISP 242	(3)	Survey of Spanish Literature and Culture 2
HISP 243	(3)	Survey of Latin American Literature and Culture 1
HISP 244	(3)	Survey of Latin American Literature and Culture 2

At least 3 credits chosen from the follo

HISP 357 (3) Latin American Digital Literature and Culture

## 4.11.25.4 Bachelor of Arts (B.A.) - Minor Concentration Italian Studies (18 credits)

This program may be expanded to the Major Concentration Italian Studies.

## **Complementary Courses (18 credits)**

18 credits selected from three Italian course lists as follows:

Group A – Basic Language Courses and Group B – Courses taught in Italian (12-18 credits combined)

Group C – Courses taught in English (0-6 credits)

## **Group A - Basic Language Courses**

ITAL 205D1	(3)	Italian for Beginners
ITAL 205D2	(3)	Italian for Beginners
ITAL 206	(6)	Beginners Italian Intensive
ITAL 210D1	(3)	Italian for Advanced Beginners
ITAL 210D2	(3)	Italian for Advanced Beginners
ITAL 215D1	(3)	Intermediate Italian
ITAL 215D2	(3)	Intermediate Italian
ITAL 216	(6)	Intermediate Italian Intensive

# **Group B - Courses Taught in Italian**

\* Note: Only one of ITAL 250 or ITAL 255 can count towards the program.

ITAL 250*	(3)	Italian Literary Composition
ITAL 255*	(6)	Advanced Reading and Composition
ITAL 260	(3)	Reading Italian Literature
ITAL 270	(3)	Manzoni: Novel and Nationhood
ITAL 281	(3)	Masterpieces of Italian Literature 2
ITAL 290	(3)	Commedia Dell'Arte
ITAL 295	(3)	Italian Cultural Studies
ITAL 310	(3)	The Invention of Italian Literature
ITAL 329	(3)	Italian Cinematic Tradition
ITAL 332	(3)	Italian Theatrical Traditions
ITAL 341	(3)	The Art of Essay Writing
ITAL 345	(3)	Romanticism in Italy
ITAL 356	(3)	Medieval Discourses on Love
ITAL 360	(3)	Contemporary Italian Prose
ITAL 362	(3)	Post-World War 2 Literature and Society
ITAL 368	(3)	Literature of the Renaissance
ITAL 371	(3)	The Italian Baroque
ITAL 376	(3)	Italian Epic Poetry
ITAL 380	(3)	Italian Realisms
ITAL 383	(3)	Women's Writing since 1880
ITAL 400	(3)	Italian Regional Identities
ITAL 410	(3)	Italian Modernism

ITAL 411	(3)	Pirandello
ITAL 420	(3)	Leopardi Poet and Philosopher
ITAL 435	(3)	Petrarch and His Legacy
ITAL 436	(3)	Tasso's "Gerusalemme Liberata"
ITAL 542	(3)	History of Italian Language
ITAL 551	(3)	Boccaccio and the Italian Novella
ITAL 560	(3)	Topics in 19th and 20th Century Literature
ITAL 563	(3)	13th-16th Century Literature

# **Group C - Courses Taught in English**

ITAL 199	(3)	FYS: Italy's Literature in Context
ITAL 230	(3)	Understanding Italy
ITAL 307	(3)	Topics in Italian Culture
ITAL 355	(3)	Dante and the Middle Ages
ITAL 361	(3)	Modern Italian Literature
ITAL 363	(3)	Gender, Literature and Society
ITAL 365	(3)	The Italian Renaissance
ITAL 374	(3)	Classics of Italian Cinema
ITAL 375	(3)	Cinema and Society in Modern Italy
ITAL 385	(3)	Italian Futurist Movement
ITAL 395	(3)	Interdisciplinary Seminar
ITAL 416	(3)	The Twentieth Century
ITAL 450	(3)	Italy and the Visual Age
ITAL 464	(3)	Machiavelli
ITAL 465	(3)	Religious Identities in Italy
ITAL 477	(3)	Italian Cinema and Video

Bachelor of Ar

HISP 244	(3)	Survey of Latin American Literature and Culture 2
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3-6 credits to be chosen from:

HIST 309	(3)	History of Latin America to 1825
HIST 360	(3)	Latin America since 1825
LACS 480	(3)	Latin American and Caribbean Studies Reading Course
LACS 499	(3)	Internship: Latin America and Caribbean Studies
POLI 319	(3)	Politics of Latin America

<sup>3-9</sup> credits to be selected from the following course list in consultation with the Program Adviser. If more than one course is chosen, they must be from at least two dif

HISP 219	(6)	Spanish Language Intensive - Intermediate
HISP 220D1	(3)	Spanish Language: Intermediate
HISP 220D2	(3)	Spanish Language: Intermediate
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
HISP 301	(3)	Hispanic Literature and Culture in English 1
HISP 320	(3)	Contemporary Brazilian Literature and Film
HISP 328	(3)	Literature of Ideas: Latin America
HISP 332	(3)	Latin American Literature of 19th Century
HISP 333	(3)	Theatre, Performance and Politics in Latin America
HISP 352	(3)	Latin American Novel
HISP 356	(3)	Latin American Short Story
HISP 358	(3)	Gender and Textualities
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 439	(3)	Topics: Latin American Literature
HISP 453	(3)	20th Century Latin American Poetry
HISP 505	(3)	Seminar in Hispanic Studies 01
History		
HIST 197	(3)	FYS: Race in Latin America
HIST 223	(3)	Indigenous Peoples and Empires
HIST 366	(3)	Themes in Latin American History
HIST 409	(3)	Topics in Latin American History
HIST 419	(3)	Central America
HIST 580D1	(3)	European and Native-American Encounters
HIST 580D2	(3)	European and Native-American Encounters
Political Science		
POLI 227	(3)	Developing Areas/Introduction
	` '	

# 4.11.25.6 Bachelor of Arts (B.A.) - Minor Concentration Russian (18 credits)

The Minor Concentration in Russian will give students a basic working knowledge of Russian and the tools with which to explore Russian life and culture in the original. Students who can demonstrate to the Department that they have acquired the equivalent competence elsewhere may waive prerequisites for 300-level courses and above.

The Minor Concentration in Russian may be expanded to the Major Concentration in Russian.

### **Complementary Courses (18 credits)**

18 credits to be chosen from:

RUSS 210	(3)	Elementary Russian Language 1
RUSS 211	(3)	Elementary Russian Language 2
RUSS 215*	(6)	Elementary Russian Language Intensive 1
RUSS 250	(3)	The Central European Novel
RUSS 300	(3)	Russian for Heritage Speakers 1

RUSS 301	(3)	Russian for Heritage Speakers 2
RUSS 310	(3)	Intermediate Russian Language 1
RUSS 311	(3)	Intermediate Russian Language 2
RUSS 316**	(6)	Intermediate Russian Language Intensive 2
RUSS 327	(3)	Reading Russian Poetry
RUSS 328	(3)	Readings in Russian
RUSS 350	(3)	Central European Film
RUSS 400	(3)	Advanced Russian Language 1
RUSS 401	(3)	Advanced Russian Language 2
RUSS 415***	(6)	Advanced Russian Language Intensive 1
RUSS 416	(6)	Advanced Russian Language Intensive 2
RUSS 452	(3)	Advanced Russian Language and Syntax 1
RUSS 453	(3)	Advanced Russian Language and Syntax 2

<sup>\*</sup> RUSS 215 is not open to students who have taken RUSS 210 and RUSS 211.

## 4.11.25.7 Bachelor of Arts (B.A.) - Minor Concentration Russian Culture (18 credits)

The Minor Concentration Russian Culture is designed primarily as an adjunct to area studies and/or programs in the humanities or social sciences. There are no Russian language requirements.

This program may be expanded into a Major Concentration in Russian.

## Complementary Courses (18 credits)

Courses offered by LLC may be accepted subject to approval by the Department.

18 credits selected with the following specifications:

At least 6 credits from Group A

6-12 credits from Group B

### Group A

At least 6 credits from:

RUSS 217	(3)	Russia's Eternal Questions
RUSS 218	(3)	Russian Literature and Revolution
RUSS 223	(3)	Russian 19th Century: Literary Giants 1
RUSS 224	(3)	Russian 19th Century: Literary Giants 2

# Group B

6-12 credits from:

RUSS 213 (3) Introduction to Soviet Film 3)Tjnta440 0 1 u

<sup>\*\*</sup> RUSS 316 is not open to students who have taken RUSS 310 and RUSS 311.

<sup>\*\*\*</sup> RUSS 415 is not open to students who have taken RUSS 400 and RUSS 401.

RUSS 347	(3)	Late and Post-Soviet Culture
RUSS 350	(3)	Central European Film
RUSS 357	(3)	Leo Tolstoy
RUSS 358	(3)	Fyodor Dostoevsky
RUSS 365	(3)	Supernatural and Absurd in Russian Literature
RUSS 369	(3)	Narrative and Memory in Russian Culture
RUSS 381	(3)	Russia's Utopia Complex
RUSS 382	(3)	Russian Opera
RUSS 385	(3)	Russian Drama: from Pushkin to Chekhov
RUSS 390	(3)	Special Topics in Russian
RUSS 395	(3)	Soviet Cinema: Art and Politics
RUSS 397	(3)	Tarkovsky: Cinema and Philosophy
RUSS 398	(3)	Soviet Women Filmmakers
RUSS 427	(3)	Russian Fin de Siècle
RUSS 428	(3)	Russian Avantgarde
RUSS 430	(3)	High Stalinist Culture 1
RUSS 440	(3)	Russia and Its Others
RUSS 454	(3)	Narratives of Desire
RUSS 475	(3)	Special Topics in Russ Culture
RUSS 500	(3)	Special Topics

### 4.11.25.8 Bachelor of Arts (B.A.) - Minor Concentration German Studies (18 credits)

The Minor Concentration in German Studies provides an introduction to and critical understanding of a variety of aspects of German culture from the eighteenth century to the present day. It is designed to complement other forms of disciplinary and cultural inquiry, such as international studies, the digital humanities, and studies in other languages or geographic areas. Courses include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture.

This program may be expanded to a Major Concentration.

### Complementary Courses (18 credits)

18 credits of courses in German literature, culture, and film taught in English or German selected from the following list.

A maximum of 6 credits of LLCU courses can be taken, with prior departmental approval.

Beginners' and Intermediate Language courses may not be applied towards this Minor Concentration.

GERM 325 may be applied towards this Minor Concentration.

GERM 259	(3)	Introduction to German Literature 1
GERM 260	(3)	Introduction to German Literature 2
GERM 325	(6)	German Language - Intensive Advanced
GERM 326	(3)	Topics: German Language and Culture
GERM 331	(3)	Germany after Reunification
GERM 332	(3)	Topics in Eighteenth-Century German Literature and Culture
GERM 333	(3)	What is Enlightenment?
GERM 335	(3)	Science and Literature
GERM 336	(3)	German Language, Media and Culture
GERM 337	(3)	Literature and Revolution
GERM 340	(3)	Romanticism

GERM 344	(3)	Realism
GERM 348	(3)	Nature and Ecopoetics
GERM 350	(3)	Modernism and the Avant-Garde
GERM 351	(3)	Berlin
GERM 355	(3)	Nietzsche and Wagner
GERM 357	(3)	German Culture in European Context
GERM 358	(3)	Franz Kafka
GERM 359	(3)	Bertolt Brecht
GERM 360	(3)	German Drama
GERM 362	(3)	20th Century Literature Topics
GERM 364	(3)	Gender and Society in German Literature and Culture
GERM 365	(3)	Modern Short Fiction
GERM 366	(3)	Lyric Poetry
GERM 368	(3)	Fin-de-Siècle Vienna
GERM 369	(3)	The German Novel
GERM 371	(3)	German Cinema
GERM 372	(3)	Topics in German Cinema
GERM 373	(3)	Weimar German Cinema
GERM 375	(3)	German Media Studies
GERM 379	(3)	German Visual Culture
GERM 381	(3)	Topics in German Thought
GERM 385	(3)	Critical Theory
GERM 388	(3)	Post-Wall Culture
GERM 390	(3)	Topics in 21st Century German Literature and Culture
GERM 397	(3)	Individual Reading Course 01
GERM 398	(3)	Individual Reading Course 02
GERM 401	(3)	Advanced Topics in German Literature and Culture

# 4.11.25.9 Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)

The Major Concentration in German Studies provides students with a rigorous and broad inquiry into the major features that have defined German cultural life since the eighteenth century. Knowledge of the German language is a core component of the major concentration and normally courses towards the major concentration will be taught in German. Courses will include the study of major works of literature, philosophy, film, theory, and visual art that have made a defining impact on German and European culture. Students will acquire the skills of critical reading and viewing that allow them to interpret complex works of art and evaluate their social and cultural significance.

# **Complementary Courses (36 credits)**

6 credits must be in pre-20th century literature and culture.

A minimum of 9 credits of literature, culture, and film courses taught in German.

A maximum of 6 credits of LLCU courses, with prior departmental approval.

### Language Courses

GERM 200	(6)	German Language, Intensive Beginners
GERM 202	(6)	German Language, Beginners'
GERM 202D1	(3)	German Language, Beginners'
GERM 202D2	(3)	German Language, Beginners

German Language Intensiv

GERM 398	(3)	Individual Reading Course 02
GERM 401	(3)	Advanced Topics in German Literature and Culture
GERM 580	(3)	Topics in German Literature and Culture

### 4.11.25.10 Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)

The Department of Languages, Literatures, and Cultures – Hispanic Studies offers courses in the literature, intellectual history, and civilization of Spain and Latin America, as well as in the Spanish language. The Department's undergraduate and graduate programs are committed to expanding the liberal arts background of students by helping to develop the skills of communication and critical reasoning, and by providing insight into the culture of other regional, linguistic, and national groups. Enrichment in these areas reduces provincialism and broadens intellectual horizons, regardless of the professional interests or fields of specialization that may guide students in other facets of their university education.

McGill University has bilateral exchange agreements with the Universidad de Salamanca (Spain), the Universidad Nacional Autónoma de México, and the Universidad de las Américas, Puebla (Mexico), as well as with other leading universities in the Spanish and Portuguese-speaking world which allow student and faculty exchanges, and other collaborative ventures. Further information about these exchanges may be obtained from the Department or from the International Education website.

### **Complementary Courses**

36 credits selected as follows:

### Language and Civilization

0-18 credits in Language and Civilization from:

HISP 210D1	(3)	Spanish Language: Beginners
HISP 210D2	(3)	Spanish Language: Beginners
HISP 218	(6)	Spanish Language Intensive - Elementary
HISP 219	(6)	Spanish Language Intensive - Intermediate
HISP 220D1	(3)	Spanish Language: Intermediate
HISP 220D2	(3)	Spanish Language: Intermediate
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2

# Survey of Literature

6 - 12 credits in Survey of Literature from:

HISP 241	(3)	Survey of Spanish Literature and Culture 1
HISP 242	(3)	Survey of Spanish Literature and Culture 2
HISP 243	(3)	Survey of Latin American Literature and Culture 1
HISP 244	(3)	Survey of Latin American Literature and Culture 2

### 300-Level or Above Hispanic Literature

12-30 credits in Hispanic literature at the 300 level or above, of which at least 6 credits must be in literature of the pre-1800 period, from:

HISP 320	(3)	Contemporary Brazilian Literature and Film
HISP 321	(3)	Hispanic Literature of the 18th Century
HISP 324	(3)	20th Century Drama
HISP 325	(3)	Spanish Novel of the 19th Century
HISP 326	(3)	Spanish Romanticism
HISP 327	(3)	Literature of Ideas: Spain
HISP 328	(3)	Literature of Ideas: Latin America
HISP 332	(3)	Latin American Literature of 19th Century

HISP 333	(3)	Theatre, Performance and Politics in Latin America
HISP 340	(3)	Latin American Cinema
HISP 341	(3)	Spanish Cinema
HISP 345	(3)	Contemporary Hispanic Cultural Studies
HISP 347	(3)	Queer Iberia
HISP 350	(3)	Spanish Literature from 1898 to the Civil War
HISP 352	(3)	Latin American Novel
HISP 355	(3)	Contemporary Spanish Literature and Culture
		Latin American Short Storynd Culture

ITAL 205D1	(3)	Italian for Beginners
ITAL 205D2	(3)	Italian for Beginners
ITAL 206	(6)	Beginners Italian Intensive
ITAL 210D1	(3)	Italian for Advanced Beginners
ITAL 210D2	(3)	Italian for Advanced Beginners
ITAL 215D1	(3)	Intermediate Italian
ITAL 215D2	(3)	Intermediate Italian
ITAL 216	(6)	Intermediate Italian Intensive

# **Group B - Courses Taught in Italian**

* Note: Only one of ITAL	250 or ITAL 255 can count toward the prog	ram.

ITAL 250*	(3)	Italian Literary Composition
ITAL 255*	(6)	Advanced Reading and Composition
ITAL 260	(3)	Reading Italian Literature
ITAL 270	(3)	Manzoni: Novel and Nationhood
ITAL 281	(3)	Masterpieces of Italian Literature 2
ITAL 290	(3)	Commedia Dell'Arte
ITAL 295	(3)	Italian Cultural Studies
ITAL 310	(3)	The Invention of Italian Literature
ITAL 329	(3)	Italian Cinematic Tradition
ITAL 332	(3)	Italian Theatrical Traditions
ITAL 341	(3)	The Art of Essay Writing
ITAL 345	(3)	Romanticism in Italy
ITAL 356	(3)	Medieval Discourses on Love
ITAL 360	(3)	Contemporary Italian Prose
ITAL 362	(3)	Post-World War 2 Literature and Society
ITAL 368	(3)	Literature of the Renaissance
ITAL 371	(3)	The Italian Baroque
ITAL 376	(3)	Italian Epic Poetry
ITAL 380	(3)	Italian Realisms
ITAL 383	(3)	Women's Writing since 1880
ITAL 400	(3)	Italian Regional Identities
ITAL 410	(3)	Italian Modernism
ITAL 411	(3)	Pirandello
ITAL 420	(3)	Leopardi Poet and Philosopher
ITAL 435	(3)	Petrarch and His Legacy
ITAL 436	(3)	Tasso's "Gerusalemme Liberata"
ITAL 542	(3)	History of Italian Language
ITAL 551	(3)	Boccaccio and the Italian Novella
ITAL 560	(3)	Topics in 19th and 20th Century Literature
ITAL 563	(3)	13th-16th Century Literature

**Group C - Courses Taught in English** 

(3)	FYS: Italy's Literature in Context
(3)	Understanding Italy
(3)	Topics in Italian Culture
(3)	Dante and the Middle Ages
(3)	Modern Italian Literature
(3)	Gender, Literature and Society
(3)	The Italian Renaissance
(3)	Classics of Italian Cinema
(3)	Cinema and Society in Modern Italy
(3)	Italian Futurist Movement
(3)	Interdisciplinary Seminar
(3)	The Twentieth Century
(3)	Italy and the Visual Age
(3)	Machiavelli
(3)	Religious Identities in Italy
(3)	Italian Cinema and Video
	(3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)         (3)

# 4.11.25.12 Bachelor of Arts (B.A.) - Major Concentration Latin American & Caribbean Studies (36 credits)

## Required Courses (18 credits)

\* Note: Successful completion of intermediate-level Spanish (HISP 220D1/D2 or HISP 219 or equivalent) is a prerequisite for the required courses HISP 243 and HISP 244.

HISP 243*	(3)	Survey of Latin American Literature and Culture 1
HISP 244*	(3)	Survey of Latin American Literature and Culture 2
HIST 309	(3)	History of Latin America to 1825
HIST 360	(3)	Latin America since 1825
LACS 497	(3)	Research Seminar: Latin America and the Caribbean
POLI 319	(3)	Politics of Latin America

## Complementary Courses (18 credits)

18 credits selected from the Complementary Course List in consultation with the Program Adviser with the following requirements:

- 1) Courses from at least two disciplines or departments must be included.
- 2) At least 6 of the 18 credits must be at the 300 level or above.

RUSS 401	(3)	Advanced Russian Language 2
RUSS 415***	(6)	Advanced Russian Language Intensive 1
RUSS 416	(6)	Advanced Russian Language Intensive 2
RUSS 452	(3)	Advanced Russian Language and Syntax 1
RUSS 453	(3)	Advanced Russian Language and Syntax 2

<sup>\*</sup>RUSS 215 is not open to students who have taken RUSS 210 or RUSS 211.

# Group B (9 credits)

9 credits selected from the following courses or their equivalent:

RUSS 217	(3)	Russia's Eternal Questions
RUSS 218	(3)	Russian Literature and Revolution
RUSS 223	(3)	Russian 19th Century: Literary Giants 1
RUSS 224	(3)	Russian 19th Century: Literary Giants 2
RUSS 229	(3)	Introduction to Russian Folklore

# Group C (9 credits)

9 credits selected from the following courses or their equivalent:

RUSS 213	(3)	Introduction to Soviet Film
RUSS 250	(3)	The Central European Novel
RUSS 330	(3)	Chekhov without Borders
RUSS 333	(3)	Petersburg: City of Myth
RUSS 337	(3)	Vladimir Nabokov
RUSS 340 247 F	(3)	Russian Short Story

<sup>\*\*</sup>RUSS 316 is not open to students who have taken RUSS 310 or RUSS 311.

<sup>\*\*\*</sup>RUSS 415 is not open to students who have taken RUSS 400 or RUSS 401.

### Required Courses (9 credits)

HISP 451	(3)	Don Quixote
HISP 490D1	(3)	Honours Thesis
HISP 490D2	(3)	Honours Thesis

### **Complementary Courses (27 credits)**

27 credits selected as follows:

### **Survey of Literature**

At least 6-12 credits from the following:

HISP 241	(3)	Survey of Spanish Literature and Culture 1
HISP 242	(3)	Survey of Spanish Literature and Culture 2
HISP 243	(3)	Survey of Latin American Literature and Culture 1
HISP 244	(3)	Survey of Latin American Literature and Culture 2

### 400-Level

At least 6 credits from the 400-level courses below:

HISP 432	(3)	Literature - Discovery and Exploration Spain New World
HISP 437	(3)	Colonial / Postcolonial Latin America
HISP 458	(3)	Golden Age Literature: Renaissance
HISP 460	(3)	Golden Age Literature: Baroque

All remaining credits may be selected from courses given in Spanish in the Department above the Intermediate Spanish language level (HISP 219 OR HISP 220D1/HISP 220D2).

No more than 12 credits in courses taught in English shall count towards this program.

### 4.11.25.16 Bachelor of Arts (B.A.) - Joint Honours Component Italian Studies (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Joint Honours students must maintain a GPA of 3.30 in their program courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

Admission to Joint Honours requires departmental approval. Students wishing to register in the program should consult with the Department as early as possible. Students may register for Joint Honours in the first year, instead of the second year, if in the opinion of the departments they are found to be qualified.

# Required Courses (6 credits)

ITAL 355	(3)	Dante and the Middle Ages
ITAL 470	(3)	Joint Honours Thesis

### Complementary Courses (30 credits)

30 credits, 6 of which must be at the 400 level or above, selected from the four Italian course lists as follows:

0-12 credits from Group A – Basic Language Courses.

12-30 credits from Group B - Courses T

HIST 345	(3)	History of Italian Renaissance
HIST 380	(3)	The Medieval Mediterranean
HIST 398	(3)	Topics in Italian History
HIST 401	(3)	Topics: Medieval Culture and Society
MUHL 387	(3)	Opera from Mozart to Puccini

## 4.11.25.17 Bachelor of Arts (B.A.) - Joint Honours Component Russian (36 credits)

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Prior to registering for each Joint Honours component, students must consult with advisers in the respective departments for approval of their course selection.

According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 and maintain a minimum program GPA of 3.00. Departments may require a higher program GPA. Joint Honours students must meet the requirements of both components of their program.

The specific course requirements for the 36-credit Joint Honours Component Russian program are determined on an individual basis in consultation with the student's program adviser(s).

The Honours thesis course, RUSS 490, is usually completed in the student's final year and is on a topic in Russian literature or culture agreed upon in consultation with the student's thesis advisor.\* It is to be written independently from the thesis that is required by the second program in which the student is pursuing their Joint Honours degree

\*Note: Students must submit their Russian thesis project proposals to the Russian Studies departmental adviser by March 15th or November 15th of the preceding term for independent research courses.

### Required Course (3 credits)

RUSS 490 (3) Honours Seminar 01

### **Complementary Courses (33 credits)**

33 credits selected from the following specifications:

## Group A:Russian Language

Students entering this program with previous knowledge of or exposure to Russian may, with permission of the Department, replace this group with selections from Group B or Group C.

18 credits selected from the following courses or their equivalent:

RUSS 210	(3)	Elementary Russian Language 1
RUSS 211	(3)	Elementary Russian Language 2
RUSS 215*	(6)	Elementary Russian Language Intensive 1
RUSS 300	(3)	Russian for Heritage Speakers 1
RUSS 301	(3)	Russian for Heritage Speakers 2
RUSS 310	(3)	Intermediate Russian Language 1
RUSS 311	(3)	Intermediate Russian Language 2
RUSS 316**	(6)	Intermediate Russian Language Intensive 2
RUSS 327	(3)	Reading Russian Poetry
RUSS 328	(3)	Readings in Russian
RUSS 400	(3)	Advanced Russian Language 1
RUSS 401	(3)	Advanced Russian Language 2
RUSS 415***	(6)	Advanced Russian Language Intensive 1
RUSS 416	(6)	Advanced Russian Language Intensive 2
RUSS 452	(3)	Advanced Russian Language and Syntax 1
RUSS 453	(3)	Advanced Russian Language and Syntax 2

# **Group B**

6-9 credits selected from the following courses or their equivalent:

RUSS 217	(3)	Russia's Eternal Questions
RUSS 218	(3)	Russian Literature and Revolution
RUSS 223	(3)	Russian 19th Century: Literary Giants 1
RUSS 224	(3)	Russian 19th Century: Literary Giants 2
RUSS 229	(3)	Introduction to Russian Folklore
RUSS 250	(3)	The Central European Novel

# **Group C**

6-9 credits selected from the following courses or their equivalent:

RUSS 213	(3)	Introduction to Soviet Film
RUSS 330	(3)	Chekhov without Borders
RUSS 333	(3)	Petersburg: City of Myth
RUSS 337	(3)	Vladimir Nabokov
RUSS 340	(3)	Russian Short Story
RUSS 347	(3)	Late and Post-Soviet Culture
RUSS 350	(3)	Central European Film
RUSS 357	(3)	Leo Tolstoy
RUSS 358	(3)	Fyodor Dostoevsky
RUSS 365	(3)	Supernatural and Absurd in Russian Literature
RUSS 369	(3)	Narrative and Memory in Russian Culture
RUSS 381	(3)	Russia's Utopia Complex
RUSS 382	(3)	Russian Opera
RUSS 385	(3)	Russian Drama: from Pushkin to Chekhov
RUSS 390	(3)	Special Topics in Russian
RUSS 395	(3)	Soviet Cinema: Art and Politics
RUSS 397	(3)	Tarkovsky: Cinema and Philosophy
RUSS 398	(3)	Soviet Women Filmmakers
R 252.fo	(3)	Russian Fin de Siècle

<sup>\*</sup>RUSS 215 is not open to students who have taken RUSS 210 or RUSS 211.

<sup>\*\*</sup>RUSS 316 is not open to students who have taken RUSS 310 or RUSS 311.

<sup>\*\*\*</sup>RUSS 415 is not open to students who have taken RUSS 400 or RUSS 401.

# Group D: Languages, Literatures, and Cultures and Faculty of Arts

0-3 credits to be chosen from the following or their equivalent:

LING 201	(3)	Introduction to Linguistics
LING 330	(3)	Phonetics
LING 331	(3)	Phonology 1
LING 360	(3)	Introduction to Semantics
LING 371	(3)	Syntax 1
PHIL 210	(3)	Introduction to Deductive Logic 1

## **Complementary Courses (18 credits)**

18 credits in Linguistics (LING) chosen according to the student's interests. At least 9 of these credits must be at the 400/500 level.

Only 3 credits at the 200 level may count towards complementary credits.

### 4.11.26.3 Bachelor of Arts (B.A.) - Joint Honours Component Linguistics (36 credits)

Students who wish to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Joint Honours students must maintain a GPA of 3.30 (B+ average) in their program courses and a minimum grade of B+ must be obtained in three out of four of the following courses: LING 330, LING 331, LING 360, LING 371, as well as in the Joint Honours Thesis, LING 481D1/D2. According to Faculty of Arts regulations, Joint Honours students must also maintain a minimum CGPA of 3.00 in general.

The requirement for First Class Honours is a CGPA of 3.50 and a minimum grade of A- in the Joint Honours Thesis. Inquiries may be addressed to the departmental office or to the Adviser for Undergraduate Studies.

### Required Courses (21 credits)

LING 201	(3)	Introduction to Linguistics
LING 330	(3)	Phonetics
LING 331	(3)	Phonology 1
LING 360	(3)	Introduction to Semantics
LING 371	(3)	Syntax 1
LING 481D1	(1.5)	Joint Honours Thesis
LING 481D2	(1.5)	Joint Honours Thesis
PHIL 210	(3)	Introduction to Deductive Logic 1

### **Complementary Courses (15 credits)**

15 credits in Linguistics (LING) chosen according to the student's interests. At least 9 of these credits must be at the 400/500 level.

Only 3 credits at the 200 level may count towards complementary credits.

### 4.11.27el. Mathematics and Statistics (MATH)

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

No overlap is permitted with other programs.

### **Program Prerequisites**

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 18 credits required for the program.

MATH 133	(3)	Linear Algebra and Geometry	
MATH 140	(3)	Calculus 1	
MATH 141	(4)	Calculus 2	

### **Expandable Version: Required Courses (12 credits)**

\* Note: Credit cannot be received for both MATH 236 and MATH 223 (listed as a required course in the non-expandable version of this Minor concentration).

MATH 222	(3)	Calculus 3
MATH 235	(3)	Algebra 1
MATH 236*	(3)	Algebra 2
MATH 315	(3)	Ordinary Differential Equations

### **Expandable Version: Complementary Courses (6 credits)**

Students selecting the expandable version of this program complete 6 credits of complementary courses from the Complementary Course List.

It is strongly recommended that students take MATH 323 as a complementary course.

### Non-Expandable Version: Required Courses (9 credits)

\* Note: Credit cannot be received for both MATH 223 and MATH 236 (listed as a required course in the expandable version of this Minor concentration).

MATH 222	(3)	Calculus 3
MATH 223*	(3)	Linear Algebra
MATH 315	(3)	Ordinary Differential Equations

## Non-Expandable Version: Complementary Courses (9 credits)

Students selecting the non-expandable version of this program complete 9 credits of complementary courses from the Complementary Course List. It is strongly recommended that students take MATH 323 as a complementary course.

## **Complementary Course List**

\* Note: Either MATH 249 or MATH 316 may be taken but not both.

MATH 249*	(3)	Honours Complex Variables
MATH 314	(3)	Advanced Calculus
MATH 316*	(3)	Complex Variables
MATH 317	(3)	Numerical Analysis
MATH 318	(3)	Mathematical Logic
MATH 319	(3)	Partial Differential Equations
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 340	(3)	Discrete Mathematics

MATH 346	(3)	Number Theory
MATH 348	(3)	Euclidean Geometry
MATH 417	(3)	Linear Optimization

#### 4.11.27.2 Bachelor of Arts (B.A.) - Minor Concentration Statistics (18 credits)

The Minor Concentration Statistics is offered only in a non-expandable version, that is, one that cannot be expanded into the Major Concentration Mathematics.

The Minor Concentration Statistics may be taken in conjunction with a major concentration in some other discipline under option A of the Multi-track System, or together with the Major Concentration Mathematics and a minor concentration (which must be in some other discipline than Mathematics) under option C.

Under option C, it is not possible to combine the Minor Concentration Statistics and the Minor Concentration Mathematics. Students wishing to do this should instead take the Major Concentration Mathematics under option B (two major concentrations) and select a large number of statistics complementaries.

For more information about the Multi-track System options please refer to the Faculty of Arts regulations under "Faculty Degree Requirements", "About Program Requirements", and "Departmental Programs".

No overlap is permitted with other programs.

# **Program Prerequisites**

#### 4.11.27.3 Bachelor of Arts (B.A.) - Major Concentration Mathematics (36 credits)

Students who have done well in MATH 242 and MATH 235 at the end of their first term should consider, in consultation with their adviser and the instructors of the courses involved, the possibility of entering into an Honours program in Mathematics, in Applied Mathematics, in Probability and Statistics, or a Joint Honours program in Mathematics and another discipline.

#### **Program Prerequisites**

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 36 credits required for the program.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2

#### **Guidelines for Course Selection**

Where appropriate, Honours-level courses may be substituted for their Majors-level counterparts. Students planning to undertake graduate studies in mathematics are urged to make such substitutions.

Students interested in computer science should consider the courses MATH 317, MATH 318, MATH 327, MATH 340, MATH 417, and take the Minor Concentration Computer Science.

Students interested in probability and statistics should consider either taking the Minor Concentration Statistics under option C, or else including some or all of the courses MATH 423, MATH 447, MATH 523, MATH 524, and MATH 525.

Students interested in applied mathematics should consider the courses MATH 317, MATH 319, MATH 324, MATH 326, MATH 327, and MATH 417.

Students interested in careers in business, industry or government should consider the courses MATH 317, MATH 319, MATH 327, MATH 417, MATH 423, MATH 447, MATH 523, and MATH 525.

#### Required Courses (21 credits)

MATH 323Complementari/3 Courses (15 Endditis)ty		
MATH 314	(3)	Advanced Calculus
MATH 242Analysis 2(3)	MA ( <b>H)</b> 243	Analysis 1
MATH 2424 1 : 2/2)	NA TON OAC	A 1 : 1
MATH 236	(3)	Algebra 2
MATH 235	(3)	Algebra 1
MATH 222	(3)	Calculus 3

15 credits selected as follows:

At least 9 credits from:

MATH 249\* (3) Honours Complex Variables

MATH 315Complex Variable(\$(3))MATH 316\*OnthoraryaDiAfratestix(BPMpAtFibh317

MATH 324	(3)	Statistics
MATH 340	(3)	Discrete Mathematics
MATH 423	(3)	Applied Regression

Remaining credits from:

<sup>\*</sup> Note: Either MATH 249 or MATH 316 may be taken but not both.

MATH 204	(3)	Principles of Statistics 2
MATH 208	(3)	Introduction to Statistical Computing
MATH 308	(3)	Fundamentals of Statistical Learning
MATH 318	(3)	Mathematical Logic
MATH 319	(3)	Partial Differential Equations
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 346	(3)	Number Theory
MATH 348	(3)	Euclidean Geometry
MATH 352	(1)	Problem Seminar
MATH 410	(3)	Majors Project
MATH 417	(3)	Linear Optimization
MATH 427	(3)	Statistical Quality Control
MATH 447	(3)	Introduction to Stochastic Processes
MATH 478	(3)	Computational Methods in Applied Mathematics
MATH 523	(4)	Generalized Linear Models
MATH 524	(4)	Nonparametric Statistics
MATH 525	(4)	Sampling Theory and Applications

#### 4.11.27.4 Bachelor of Arts (B.A.) - Joint Honours Component Mathematics (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

To remain in the Joint Honours program and receive the Joint Honours degree, a student must maintain the standards set by each discipline, as well as by the Faculty. In the Mathematics courses of the program a GPA of 3.00 and a CGPA of 3.00 must be maintained. Students who have difficulty in maintaining the required level should change to another program before entering their final year.

#### **Program Prerequisites**

Students who have not completed the program prerequisite courses listed below or their equivalents will be required to make up any deficiencies in these courses over and above the 36 credits required for the program.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 222	(3)	Calculus 3

# Required Courses (9 credits)

MATH 235	(3)	Algebra 1
MATH 251	(3)	Honours Algebra 2
MATH 255	(3)	Honours Analysis 2

### **Complementary Courses (27 credits)**

3 credits selected from:

MATH 242	(3)	Analysis 1
MATH 254*	(3)	Honours Analysis 1

<sup>\*</sup> It is strongly recommended that students take MATH 254.

#### 3 credits selected from:

MATH 248	(3)	Honours Vector Calculus
MATH 358	0	Honours Advanced Calculus

<sup>\*\*</sup> It is strongly recommended that students take MATH 358.

15 credits selected from the list below. The remaining credits are to be chosen from the full list of available Honours courses in Mathematics and Statistics.

- \* Not open to students who have taken MATH 354.
- \*\* Not open to students who have taken MATH 355.
- \*\*\* Not open to students who have taken MATH 370.
- + Not open to students who have taken MATH 371.
- ++ Not open to students who have taken MATH 380.

MATH 325	(3)	Honours Ordinary Differential Equations
MATH 356	(3)	Honours Probability
MATH 357	(3)	Honours Statistics
MATH 454*	(3)	Honours Analysis 3
MATH 455**	(3)	Honours Analysis 4
MATH 456***	(3)	Honours Algebra 3
MATH 457+	(3)	Honours Algebra 4
MATH 458++	(3)	Honours Differential Geometry
MATH 466	(3)	Honours Complex Analysis

# 4.11.28 Philosophy (PHIL)

The Department of Philosophy, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.30: Philosophy.

# 4.11.28.1 Bachelor of Arts (B.A.) - Minor Concentration History and Philosophy of Science (18 credits)

History and Philosophy of Science at McGill is an interdisciplinary program that aims to provide students with an understanding of science through the study of both its historical development and of some of the fundamental philosophical principles upon which it rests. For more information about the program and events, please visit http://www.mcstu10tp:/10.30

Introduction to Deductive Logic 1

# Mathematics (MATH)

MATH 338 (3) History and Philosophy of Mathematics

#### Psychology (PSYC)

PSYC 403 (3) Modern Psychology in Historical Perspective

# 4.11.28.2 Bachelor of Arts (B.A.) - Minor Concentration Philosophy (18 credits)

# **Complementary Courses (18 credits)**

18 credits, of which no more than 9 credits may be at the 200 level and at least 3 credits must be at the 400 or 500 level, distributed as follows:

15 credits from Groups A, B, C, D, and E with one course from at least four of the five groups.

3 additional credits from Groups A, B, C, D, and E or from other Philosophy (PHIL) courses.

Group A		
PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 237	(3)	Contemporary Moral Issues
PHIL 240	(3)	Political Philosophy 1
PHIL 242	(3)	Introduction to Feminist Theory
PHIL 334	(3)	Ethical Theory
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
PHIL 427	(3)	Topics in Critical Philosophy of Race
PHIL 434	(3)	Metaethics
PHIL 442	(3)	Topics in Feminist Theory
Group B		
PHIL 210	(3)	Introduction to Deductive Logic 1
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 306	(3)	Philosophy of Mind
PHIL 310	(3)	Intermediate Logic
PHIL 311	(3)	Philosophy of Mathematics
PHIL 341	(3)	Philosophy of Science 1
PHIL 411	(3)	Topics in Philosophy of Logic and Mathematics
PHIL 415	(3)	Philosophy of Language
PHIL 419	(3)	Epistemology
PHIL 421	(3)	Metaphysics
PHIL 441	(3)	Philosophy of Science 2
PHIL 470	(3)	Topics in Contemporary Analytic Philosophy
Group C		
PHIL 375	(3)	Existentialism
PHIL 474	(3)	Phenomenology
PHIL 475	(3)	Topics in Contemporary European Philosophy

Group D		
PHIL 344	(3)	Medieval and Renaissance Political Theory
PHIL 345	(3)	Greek Political Theory
PHIL 350	(3)	History and Philosophy of Ancient Science
PHIL 353	(3)	The Presocratic Philosophers
PHIL 354	(3)	Plato
PHIL 355	(3)	Aristotle
PHIL 356	(3)	Early Medieval Philosophy
PHIL 452	(3)	Later Greek Philosophy
PHIL 453	(3)	Ancient Metaphysics and Natural Philosophy
PHIL 454	(3)	Ancient Moral Theory
Group E		
PHIL 360	(3)	17th Century Philosophy
PHIL 361	(3)	18th Century Philosophy
PHIL 366	(3)	18th and Early 19th Century German Philosophy
PHIL 367	(3)	19th Century Philosophy

PHIL 334	(3)	Ethical Theory
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
PHIL 427	(3)	Topics in Critical Philosophy of Race
PHIL 434	(3)	Metaethics
PHIL 442	(3)	Topics in Feminist Theory

4.11.28.4 Bachelor of Arts (B.A.) - Joint Honours Component Philosophy (36 credits)

PHIL 350	(3)	History and Philosophy of Ancient Science
PHIL 353	(3)	The Presocratic Philosophers
PHIL 354	(3)	Plato
PHIL 355	(3)	Aristotle
PHIL 452	(3)	Later Greek Philosophy
		Ancient Metaph

1	15	credits	to be	selec	sted as	fo11	owe.
ı	1.)	creditis	to be	Selec	nea a	s ion	OWS

One of:		
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 251	(3)	Honours Classical Mechanics 1
One of:		
PHYS 232	(3)	Heat and Waves
PHYS 253	(3)	Thermal Physics
One of:		
PHYS 241	(3)	Signal Processing
PHYS 258	(3)	Experimental Methods 2
One of:		
PHYS 224	(3)	Physics of Music
PHYS 228	(3)	Energy and the Environment
PHYS 260	(3)	Modern Physics and Relativity
PHYS 320	(3)	Introductory Astrophysics
PHYS 346	(3)	Majors Quantum Physics
One of:		
PHYS 340	(3)	Majors Electricity and Magnetism
PHYS 350	(3)	Honours Electricity and Magnetism
	(3)	Tronours Electricity and magnetism

# 4.11.29.2 Bachelor of Arts and Science (B.A. & Sc.) - Major Concentration Physics (36 credits)

The Major Concentration Physics, which is restricted to students in the B.A. & Sc. or B.Sc./B.Ed., is a planned sequence of courses designed to permit a degree of specialization in this discipline. This program is insufficient to prepare a student for professional or graduate work in physics; students interested in pursuing a career in physics are advised to take the appropriate B.Sc. program in physics.

# Required Courses\* (30 credits)

\* Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. & Sc. or B.Sc./B.Ed. must be replaced by courses from the Complementary Course List.

MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 314	(3)	Advanced Calculus
MATH 315	(3)	Ordinary Differential Equations
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 257	(3)	Experimental Methods 1
PHYS 333	(3)	Thermal and Statistical Physics
PHYS 340	(3)	Majors Electricity and Magnetism

# **Complementary Courses (6 credits)**

6 credits selected from:

PHYS 224	(3)	Physics of Music
PHYS 228	(3)	Energy and the Environment
PHYS 241	(3)	Signal Processing
PHYS 258	(3)	Experimental Methods 2
PHYS 260	(3)	Modern Physics and Relativity
PHYS 320	(3)	Introductory Astrophysics
PHYS 534	(3)	Nanoscience and Nanotechnology

or any 300- or 400-level course approved by an adviser.

#### 4.11.30 Political Science (POLI)

The Department of Political Science, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.31: Political Science.

# 4.11.30.1 Bachelor of Arts (B.A.) - Minor Concentration Political Science (18 credits)

This program may be expanded to the Major Concentration Political Science.

#### **Complementary Courses (18 credits)**

18 credits selected as follows:

6-9 POLI credits at the 200 level. These courses should be in different groups, the relevant groups being Canadian Politics, International Relations, Comparative Politics, Political Theory, and Methods.

9-12 POLI credits at the 300 level or above.

No more than 6 POLI transfer credits can be used toward the program requirements.

POLI 490, POLI 499, and POLI 53.24ry

POLI 412	(3)	Canadian Voting/Public Opinion
POLI 417	(3)	Health Care in Canada
POLI 424	(3)	Media and Politics
POLI 426	(3)	Partis politiques et comportements électoraux au Québec
POLI 427	(3)	Selected Topics: Canadian Politics
POLI 436	(3)	Aboriginal Rights in the Canadian Constitution
POLI 478	(3)	The Canadian Constitution
POLI 521	(3)	Seminar: Canadian Politics and Government

# **Comparative Politics - Developed Areas**

GEOG 420*	(3)	Memory, Place, and Power
POLI 212	(3)	Government and Politics - Developed World
POLI 316	(3)	Black Lives Matter and American Democracy
POLI 318	(3)	Comparative Local Government
POLI 325	(3)	U.S. Politics
POLI 328	(3)	Comparing European Democracies
POLI 329	(3)	Russian and Soviet Politics
POLI 330	(3)	Law and Courts in Europe
POLI 331	(3)	Politics in East Central Europe
POLI 339	(3)	Comparative Developed: Topics 1
POLI 357	(3)	Politics: Contemporary Europe
POLI 361	(3)	Political Participation in Comparative Perspective
POLI 419	(3)	Transitions from Communism
POLI 420*	(3)	Memory, Place, and Power
POLI 421	(3)	The Politics of Misinformation
POLI 424	(3)	Media and Politics
POLI 425	(3)	Topics in American Politics
POLI 430	(3)	Politics of Art
POLI 431	(3)	Nations and States/Developed World
POLI 432	(3)	Selected Topics: Comparative Politics
POLI 451	(3)	The European Union
POLI 452	(3)	Conflict Simulation
POLI 475	(3)	Social Capital in Comparative Perspective
POLI 476	(3)	Religion and Politics
POLI 524	(3)	Seminar: Developed Areas

<sup>\*</sup> Either POLI 420 or GEOG 420 but not both.

# **Comparative Politics - Developing Areas**

POLI 227	(3)	Developing Areas/Introduction
POLI 319	(3)	Politics of Latin America
POLI 322	(3)	Political Change in South Asia
POLI 324	(3)	Developing Areas/Africa

POLI 338	(3)	Developing Areas/Topics 1
POLI 340	(3)	Developing Areas/Middle East
POLI 369	(3)	Politics of Southeast Asia
POLI 380	(3)	Contemporary Chinese Politics
POLI 381	(3)	Politics in Japan and South Korea
POLI 422	(3)	Developing Areas/Topics 2
POLI 423	(3)	Politics of Ethno-Nationalism
POLI 435	(3)	Identity and Inequality
POLI 450	(3)	Peacebuilding
POLI 473	(3)	Democracy and the Market
POLI 474	(3)	Inequality and Development
POLI 476	(3)	Religion and Politics
POLI 480	(3)	Contentious Politics
POLI 522	(3)	Seminar: Developing Areas

# International Relations

POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 341	(3)	Foreign Policy: The Middle East
POLI 342	(3)	Canadian Foreign Policy
POLI 345	(3)	International Organizations
POLI 346	(3)	American Foreign Policy
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
POLI 349	(3)	Foreign Policy: Asia
POLI 350	(3)	Global Environmental Politics
POLI 352	(3)	International Policy/Foreign Policy: Africa

POLI 451	(3)	The European Union
POLI 452	(3)	Conflict Simulation
POLI 575	(3)	Seminar: International Politics
Political Theory		
POLI 231	(3)	Introduction to Political Theory
POLI 333	(3)	Western Political Theory 1
POLI 334	(3)	Western Political Theory 2
POLI 362	(3)	Political Theory and International Relations
POLI 363	(3)	Contemporary Political Theory
POLI 364	(3)	Radical Political Thought
POLI 365	(3)	Democratic Theory
POLI 366	(3)	Topics in Political Theory 1
POLI 367	(3)	Liberal Political Theory
POLI 368	(3)	Political Theory and Indigeneity.
POLI 433	(3)	History of Political/Social Theory 3
POLI 434	(3)	History of Political/Social Theory 4
POLI 459	(3)	Topics in Political Theory 2
POLI 470	(3)	Philosophy, Economy and Society
POLI 561	(3)	Seminar: Political Theory
Methods		
POLI 210	(3)	Political Science Research Methods
POLI 311	(3)	Introduction to Quantitative Political Science
POLI 312	(3)	Intermediate Quantitative Political Science
POLI 313	(3)	Introduction to Qualitative Methods in Political Science
POLI 461	(3)	Advanced Quantitative Political Science

### 4.11.30.2 Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)

# Complementary Courses (36 credits)

36 credits of courses selected from the four main fields of political science (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, and Political Theory) with the following specifications.

No more than one-half of the credits (18 credits) may be taken in a single field of political science, unless the field is Comparative Politics in which case the maximum is 21 credits, provided courses are taken in both Developed Areas and Developing Areas.

No more than 12 of the 36 credits may be at the 200 level. No more than 3 credits at the 200 level may be in any given group.

3 credits should be taken at the 400 level at McGill rather than as transfer credits.

In the final year, no course used toward the program requirements may be below the 300 level.

No more than 12 POLI transfer credits can be used toward the program requirements.

# **Advising Information**

In the first year of the program (U1), students are advised to select their courses from at least three of the five main groups of courses in political science. U1 students should normally take courses at the 200 level only. However, those who have already completed the 200-level prerequisite for courses may take 300-level courses.

Course lists for each group of political science courses are provided below.

NOTE: POLI 200, 210, 311 and 461 can also be used towards this program.

_		_	
Can	adian	$P \cap$	litice

(3)	Government of Canada
(3)	Political Process and Behaviour in Canada
(3)	La vie politique québécoise
(3)	The Politics of Race in Canada
(3)	Comparative Local Government
(3)	Issues in Canadian Democracy
(3)	Issues: Canadian Public Policy
(3)	Provincial Politics
(3)	Le Québec et le Canada
(3)	Canadian Foreign Policy
(3)	Gender and Canadian Politics
(3)	Challenge of Canadian Federalism
(3)	Indigenous Peoples and the Canadian State
(3)	The Canadian Judicial Process
(3)	Topics in Canadian Politics
(3)	Canadian Political Parties
(3)	Canadian Voting/Public Opinion
(3)	Health Care in Canada
(3)	Media and Politics
(3)	Partis politiques et comportements électoraux au Québec
(3)	Selected Topics: Canadian Politics
(3)	Aboriginal Rights in the Canadian Constitution
(3)	The Canadian Constitution
(3)	Seminar: Canadian Politics and Government
	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)

Comparative Politics - Developed AreaTj1De

POLI 424	(3)	Media and Politics
POLI 425	(3)	Topics in American Politics
POLI 430	(3)	Politics of Art
		Nations and States/Dev

POLI 352	(3)	International Policy/Foreign Policy: Africa	
POLI 353	(3)	Politics of the International Refugee Regime	
POLI 354	(3)	Approaches to International Political Economy	
POLI 355	(3)	The Politics of International Law	
POLI 358	(3)	Political Economy of International Organizations	
POLI 359	(3)	Topics in International Politics 1	
POLI 360	(3)	Security: War and Peace	
POLI 362	(3)	Political Theory and International Relations	
POLI 441	(3)	IPE: Trade	
POLI 442	(3)	International Relations of Ethnic Conflict	
POLI 443	(3)	Intervention in World Politics	
POLI 444	(3)	Topics in International Politics 2	
POLI 445	(3)	International Political Economy: Monetary Relation	
POLI 446	(3)	International Law and Politics of Human Rights	
POLI 447	(3)	Political Economy of Multinationals	
POLI 448	(3)	Gender and International Relations	
POLI 449	(3)	Diplomacy in Practice	
POLI 450	(3)	Peacebuilding	
POLI 451	(3)	The European Union	
POLI 452	(3)	Conflict Simulation	
POLI 575	(3)	Seminar: International Politics	
Political Theory			
POLI 231	(3)	Introduction to Political Theory	
POLI 333	(3)	Western Political Theory 1	
POLI 334	(3)	Western Political Theory 2	
POLI 362	(3)	Political Theory and International Relations	
POLI 363	(3)	Contemporary Political Theory	
POLI 364	(3)	Radical Political Thought	
POLI 365	(3)	Democratic Theory	
POLI 366	(3)	Topics in Political Theory 1	
POLI 367	(3)	Liberal Political Theory	
POLI 368	(3)	Political Theory and Indigeneity.	
POLI 433	(3)	History of Political/Social Theory 3	
POLI 434	(3)	History of Political/Social Theory 4	
POLI 459	(3)	Topics in Political Theory 2	
POLI 470	(3)	Philosophy, Economy and Society	
POLI 561	(3)	Seminar: Political Theory	
Methods			
POLI 210	(3)	Political Science Research Methods	
POLI 311	(3)	Introduction to Quantitative Political Science	

POLI 312	(3)	Intermediate Quantitative Political Science
POLI 313	(3)	Introduction to Qualitative Methods in Political Science
POLI 461	(3)	Advanced Quantitative Political Science

#### 4.11.30.3 Bachelor of Arts (B.A.) - Joint Honours Component Political Science (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours Program components from two Arts disciplines.

Prior to registering for each Joint Honours component, students should consult an adviser in each department for approval of their course selection and their interdisciplinary research project (if applicable).

To enter, remain and graduate in Joint Honours, students must achieve/maintain a 3.3 average in their political science courses and more than half of the political science grades must be at the B+ level or higher. According to Faculty regulations, Joint Honours students must maintain a minimum CGPA of 3.00 in general. In addition to meeting these Political Science requirements, students must meet the requirements set forth by the other department.

To be awarded First Class Joint Honours at graduation, in addition to the Faculty requirement of a 3.50 CGPA, students must achieve a 3.6 average in their political science courses and more than half of political science grades must be at the A- level or higher. All political science courses taken at McGill are counted in determining a student's standing. (The specific criteria are given in the brochure "Major and Honours Program Guide", which may be found on the Department website http://www.mcgill.ca/politicalscience/.) To be awarded Joint Honours at graduation, students must be registered in the Joint Honours program in their final year. At graduation, students' Joint Honours standing will be determined by their overall record in the Joint Honours program. In addition to meeting these Political Science requirements, students must meet the requirements set forth by the other department.

Students may enter the Joint Honours program in U1.

#### Required Course (3 credits)

POLI 210\* (3) Political Science Research Methods

NOTE: If the POLI 210 requirement is waived, students must still fulfill the 36-credit program requirement.

#### Complementary Courses (33 credits)

33 credits of complementary courses selected with the following specifications.

3 credits in methods courses at the 300 or 400 level.

No more than one-half (18 credits) of a student's political science credits may be in any one field (Canadian Politics, Comparative Politics (Developed Areas and Developing Areas), International Relations, Political Theory). However, if the field is Comparative Politics and if courses are taken in both Developed Areas and Developing Areas, the maximum is 21 credits. Refer to the lists below for course choices in each field.

One quarter (9 credits) of political science credits must be at the 400-level or above including one 500-level Honours Seminar. Refer to the lists below for course choices at the 400 and 500 levels in each field.

No more than 12 credits of political science courses (including POLI 210) may be at the 200 level. No more than 3 credits may be taken at the 200 level in each of the five groups of courses (Canadian Politics, International Relations, Comparative Politics (Developed Areas and Developing Areas), Political Theory, Methods). Students may not take 200-level political science courses in their final year.

No more than 12 POLI transfer credits can be used toward the program requirements.

Course lists for each group of political science courses are provided below.

#### **Canadian Politics**

POLI 221	(3)	Government of Canada
POLI 222	(3)	Political Process and Behaviour in Canada
POLI 226	(3)	La vie politique québécoise
POLI 318	(3)	Comparative Local Government
POLI 320	(3)	Issues in Canadian Democracy
POLI 321	(3)	Issues: Canadian Public Policy
POLI 326	(3)	Provincial Politics
POLI 336	(3)	Le Québec et le Canada

Canadian F

<sup>\*</sup> The POLI 210 requirement is waived for students admitted to McGill BEFORE Fall 2017. The POLI 210 requirement is waived for students who have taken SOCI 211.

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POLI 449	(3)	Diplomacy in Practice
POLI 450	(3)	Peacebuilding
POLI 451	(3)	The European Union
POLI 452	(3)	Conflict Simulation
POLI 575	(3)	Seminar: International Politics
Political Theory		
POLI 231	(3)	Introduction to Political Theory
POLI 333	(3)	Western Political Theory 1
POLI 334	(3)	Western Political Theory 2
POLI 362	(3)	Political Theory and International Relations
POLI 363	(3)	Contemporary Political Theory
POLI 364	(3)	Radical Political Thought
POLI 365	(3)	Democratic Theory
POLI 366	(3)	Topics in Political Theory 1
POLI 367	(3)	Liberal Political Theory
POLI 368	(3)	Political Theory and Indigeneity.
POLI 433	(3)	History of Political/Social Theory 3
POLI 434	(3)	History of Political/Social Theory 4
POLI 459	(3)	Topics in Political Theory 2
POLI 470	(3)	Philosophy, Economy and Society
POLI 561	(3)	Seminar: Political Theory
Methods		
POLI 210	(3)	Political Science Research Methods
POLI 311	(3)	Introduction to Quantitative Political Science
POLI 312	(3)	Intermediate Quantitative Political Science
POLI 313	(3)	Introduction to Qualitative Methods in Political Science
POLI 461	(3)	Advanced Quantitative Political Science

#### 4.11.31 Psychology (PSYC)

The Department of Psychology information, programs, and courses are described in:

- Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.32: Psychology
- Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.33: Psychology (PSYC)

#### 4.11.31.1 Bachelor of Arts (B.A.) - Minor Concentration Psychology (18 credits)

Students registered in a Bachelor of Arts program in another department may pursue the Minor Concentration Psychology. This Minor concentration is expandable for students who may wish to transfer into the Major Concentration Psychology at a later date.

### Required Background

Students are required to complete a course in Introductory Psychology either at the collegial or freshman level. Students who have not previously completed CEGEP Psychology 350-101 or 350-102 or equivalent are required to complete PSYC 100 during the first year of study at McGill.

#### **Program Prerequisite**

PSYC 100	(3)	Introduction to Psychology

# **Complementary Courses (18 credits)**

6 credits selected from:

PSYC 204	(3)	Introduction to Psychological Statistics
PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 212	(3)	Perception
PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology

12 credits in Psychology at the 300 level or above.

# 4.11.31.2 Bachelor of Arts (B.A.) - Major Concentration Psychology (36 credits)

The Major Concentration Psychology does not provide sufficient undergraduate background to enable students to apply for membership in the Ordre des Psychologues du Québec, even once the additional graduate requirements of the Ordre have been completed. Students who are interested in practising psychology in Quebec are advised to also complete the Minor Concentration Behavioral Science.

### **Recommended Background for Quebec CEGEP Students**

Students planning to apply to a Bachelor of Arts degree with a Major Concentration Psychology or a Bachelor of Arts and Science degree with a Major Concentration Psychology are advised to take courses in Introductory Psychology and Human Biology at the collegial lev

a minimum of 27 graded credits in U1 to be eligible for admission to the Honours program. For additional information about applying to Honours, please refer to the Honours program description.

# **Complementary Courses (18 credits)**

18 credits selected as follows:

3 credits in Psychology from List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)

3 credits in Psychology from List B - (Social, Health and Developmental Psychology)

6 credits in Psychology at the 300 level or above.

6 credits in Psychology at the 400 or 500 level.

# List A - (Behavioural Neuroscience, Cognition and Quantitative Methods)

(3) Introduction to Neuroscience 2

PSYC 537	(3)	Advanced Seminar in Psychology of Language
PSYC 538	(3)	Categorization, Communication and Consciousness
PSYC 541	(3)	Multilevel Modelling
PSYC 545	(3)	Topics in Language Acquisition
PSYC 560*	(3)	Machine Learning Tools in Psychology
PSYC 562	(3)	Measurement of Psychological Processes

<sup>\* 1.</sup> Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.

<sup>2.</sup> Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

PSYC 488D2	(1.5)	Special Topics Seminar
PSYC 492	(3)	Special Topics Seminar 1
PSYC 494D1	(4.5)	Psychology Research Project
PSYC 494D2	(4.5)	Psychology Research Project
PSYC 495	(6)	Psychology Research Project 2
PSYC 499	(1)	Reading Project

#### 4.11.31.3 Bachelor of Arts (B.A.) - Joint Honours Component Psychology (36 credits)

Students who wish to study at the Honours level in two Arts disciplines may apply to combine Joint Honours program components from two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Students should note that awarding of the Joint Honours degree will depend on both cumulative grade point average and a minimum grade of B on PSYC 380D1/PSYC 380D2, PSYC 482. "First Class Honours" is awarded to students who obtain a minimum CGPA of 3.50 and a minimum grade of A- in the required honours courses (i.e: PSYC 380D1/D2, PSYC 482). "Honours" is awarded to students with a minimum CGPA of 3.00 and a minimum grade of B in the required honours courses.

In addition to the requirements of the Joint Honours Component Psychology, students must also complete all requirements of their other Joint Honours component.

Admission to the Joint Honours component is selective. Students with a cumulative grade point average of 3.00 or higher are eligible to apply; however, normally only students with a U1 GPA above 3.50 are admitted. Students must complete a minimum of 27 graded credits in two terms in their U1 year to be eligible to apply. Once in the Joint Honours component, students must obtain a GPA of 3.00 in the U2 year in order to continue in the program for U3. Students in the Joint Honours component are encouraged to complete a minimum of 27 graded credits per academic year. This is also the minimum number of credits required to be eligible for fellowships and awards.

Students may apply to the Joint Honours component upon completion of the U1 year. Eligible students must have completed the following Psychology courses: PSYC 204, PSYC 211, PSYC 212, PSYC 213 and PSYC 215. Students are advised to complete PSYC 305 in their U1 year.

The application is available on the Psychology Dept website at:

http://www.mcgill.ca/psychology/undergraduate/current-students/research-opportunities/research-courses. The deadline is specified on the application form. Candidates will be informed of the Department's decision via email before classes begin in September.

# **Program Prerequisites**

Students planning on entering the Joint Honours Component Psychology program are required to complete Introductory Psychology; a course in Human Biology is strongly recommended.

Students who have not previously completed Psychology 350-101 or 350-102 in CEGEP are required to register for PSYC 100 during their U1 year.

Bachelor of Arts students who have not completed one of Biology 101-301, 101-401, 101-911 or 101-921 in CEGEP should complete one of BIOL 115, BIOL 111 or BIOL 112 during their U1 year. Students who enter as Freshmen may take these courses in U0.

BIOL 111	(3)	Principles: Organismal Biology	
BIOL 112	(3)	Cell and Molecular Biology	
BIOL 115	(3)	Essential Biology	
PSYC 100	(3)	Introduction to Psychology	

### **U1 Required Courses (18 credits)**

\* Advising note for PSYC 204: Students who have completed in CEGEP either Mathematics 201-307 or 201-337 or equivalent, or the combination of Quantitative Methods 360-300 with Mathematics 201-300, and who obtained a minimum grade of 75%, are exempt from the U1 required course PSYC 204.

Bachelor of Arts students will replace this requirement with 3 credits at the 300 level in one of the following disciplines: Psychology (PSYC), Anthropology

PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology
PSYC 305**	(3)	Statistics for Experimental Design

# U2 Required Courses (9 credits)

PSYC 380D1	(4.5)	Honours Research Project Seminar
PSYC 380D2	(4.5)	Honours Research Project Seminar

# **U3 Required Course (3 credits)**

PSYC 482 (3) Advanced Honours Seminar

#### **Complementary Courses (6 credits)**

3 credits in Psychology at the 300 level or above, and

3 credits in Psychology at the 400 or 500 level.

# 4.11.32 Religious Studies (RELG)

Religious Studies information, programs, and courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.33: Religious Studies.

# 4.11.32.1 Bachelor of Arts (B.A.) - Minor Concentration Religious Studies (18 credits)

The B.A; Minor Concentration in Religious Studies focuses on the methodological approaches to the study of religious traditions, including the languages, teachings, and history of those traditions.

# Required Course (3 credits)

RELG 207 (3) Introduction to the Study of Religions

# **Complementary Courses (15 credits)**

6 credits of Introductory Courses at the 200 level.

ANTH 209	(3)	Anthropology of Religion
CATH 200	(3)	Introduction to Catholicism
CATH 220	(3)	Selected Topics in Catholic Studies
HIST 207	(3)	Jewish History: 400 B.C.E. to 1000
HIST 219	(3)	Jewish History: 1000 - 2000
ISLA 200	(3)	Islamic Civilization

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RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 205	(3)	Death and Dying
RELG 210	(3)	Jesus of Nazareth
RELG 211	(3)	Theology through Fiction
RELG 252	(3)	Hinduism and Buddhism
RELG 253	(3)	Religions of East Asia
RELG 254	(3)	Introduction to Yoga Traditions
RELG 270	(3)	Religious Ethics and the Environment
RELG 271	(3)	Religion and Sexuality
RELG 288	(3)	Introduction to Sikhism

9 credits of Advanced Courses at the 300 level or higher.

CATH 310	(3)	Catholic Intellectual Traditions
CATH 315	(3)	Catholicism and Ethics
CATH 320	(3)	Catholicism and Modernity
CATH 325	(3)	Mystery and the Imagination
CATH 330	(3)	Catholicism in a Global Context
CATH 335	(3)	Confessions of Saint Augustine
CATH 340	(3)	Catholicism and Public Policy
CATH 370	(3)	Topics in Catholic Studies
CATH 375	(3)	Topics in Catholic Theology
CATH 460	(3)	Catholic Studies Seminar
HIST 427	(3)	The Hasidic Movement
ISLA 310	(3)	Women in Islam
JWST 334	(3)	Jews and Muslims: A Modern History
JWST 382	(3)	Jews, Judaism and Social Justice
RELG 300	(3)	Second Temple Judaism
RELG 302	(3)	Literature of Ancient Israel 1
RELG 303	(3)	Literature of Ancient Israel 2
RELG 307	(3)	Bible, Quran and Interpretations
RELG 309	(3)	World Religions and Cultures They Create
RELG 310	(3)	Canadian Church History
RELG 311	(3)	Formation of the New Testament
RELG 312	(3)	The Gospels
RELG 313	(3)	Topics in Biblical Studies 1
RELG 315	(3)	Special Topics in Religion 1
RELG 316	(3)	New Religious Movements
RELG 317	(3)	Special Topics in Religion 2
RELG 318	(3)	Special Topics in Religion 3
RELG 319	(3)	Special Topics in Religion 4
RELG 322	(3)	Church and Empire to 1300

RELG 323	(3)	Church and State since 1300
RELG 325	(3)	Varieties Religious Experience in Christianity
RELG 326	(3)	Christians in the Roman World
RELG 331	(3)	Religion and Globalization
RELG 332	(3)	Conversations Across World Religions
RELG 333	(3)	Principles of Theology
RELG 334	(3)	Theology of History
RELG 336	(3)	Contemporary Theological Issues
RELG 337	(3)	Themes in Buddhist Studies
RELG 338	(3)	Women and the Christian Tradition
RELG 341	(3)	Introduction: Philosophy of Religion
RELG 344	(3)	Mahayana Buddhism
RELG 348	(3)	Classical Hinduism
RELG 350	(3)	Bhakti Hinduism
RELG 352	(3)	Japanese Religions: History and Thought
RELG 354	(3)	Chinese Religions
RELG 358	(3)	Religion and Cinema in India
RELG 366	(3)	Rivers, Religion, and Environment in South Asia
RELG 368	(3)	Japanese Religions in Pop Culture
RELG 369	(3)	Tibetan Buddhism
RELG 370	(3)	Religion and Human Rights
RELG 371	(3)	Ethics of Violence/Non-Violence
RELG 372	(3)	Hindu Goddesses
RELG 373	(3)	Christian Ethics of Love
RELG 375	(3)	Religion, Politics and Society
RELG 376	(3)	Religious Ethics
RELG 378	(3)	Pilgrimage, Heritage, and Tourism
RELG 379	(3)	Eastern Orthodox Christianity
RELG 380	(3)	Religion, Philosophy, Modernity
RELG 384	(3)	Religion and Public Policy
RELG 387	(3)	Introduction to Jainism
RELG 388	(3)	Introduction to Sikhism
RELG 398	(3)	North American Christianity
RELG 399	(3)	Christian Spirituality
RELG 407	(3)	The Writings
RELG 408	(3)	The Prophets
RELG 419	(3)	Religious Heritage and Tourism
RELG 423	(3)	Reformation Thought
RELG 434	(3)	Advanced Theology
RELG 440	(3)	Global Islam
RELG 442	(3)	Pure Land Buddhism
RELG 444	(3)	Indian Ocean Religious Networks
RELG 445	(3)	Modern Buddhism

RELG 450	(3)	The Way of the Kami
RELG 451	(3)	Zen Buddhism: Poetry and Art
RELG 453	(3)	Vajrayana Buddhism
RELG 454	(3)	Modern Hindu Thought
RELG 455	(3)	Religion and the Performing Arts in South India
RELG 470	(3)	Theological Ethics
RELG 479	(3)	Christianity in Global Perspective
RELG 502	(3)	Greco-Roman Judaism
RELG 532	(3)	History of Christian Thought 1
RELG 533	(3)	History of Christian Thought 2
RELG 544	(3)	Ethnography as Method in Religious Studies
RELG 545	(3)	Ramayana: Multiple Lives
RELG 546	(3)	Indian Philosophy
RELG 547	(3)	Special Topics in Hinduism
RELG 548	(3)	Indian Buddhist Philosophy
RELG 549	(3)	Japanese Buddhism in Historical Context
RELG 551	(3)	Special Topics in Buddhism
RELG 552	(3)	Advaita Vedanta
RELG 556	(3)	Issues in Buddhist Studies
RELG 558	(3)	Indian Tantric Traditions
RELG 559	(3)	Caste and Dalits: Historical and Political Perspectives
RELG 560	(3)	Buddhist Poetry
RELG 571	(3)	Ethics, Medicine and Religion
RELG 572	(3)	Religion and Global Politics
RELG 573	(3)	Religions in Global Society

#### 4.11.33 Social Studies of Medicine (SSMD)

Social Studies of Medicine, the program, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.36: Social Studies of Medicine.

# 4.11.33.1 Bachelor of Arts (B.A.) - Minor Concentration Social Studies of Medicine (18 credits)

The Minor Concentration in Social Studies of Medicine presents as a complex network of institutions, cultures, and political relations embedded in the institutions, cultures and political relations of the larger society. Courses are divided into three groups: History of Medicine, Anthropology of Medicine, and Sociology of Medicine. The Minor consists of 18 credits. Students are required to take at least one course in each of the three groups.

Note: No overlap is permitted with courses counting towards the student's major concentration.

#### **Complementary Courses (18 credits)**

18 credits from the following (at least 3 credits from each of the three groups):

# **History of Medicine**

HIST 249	(3)	Health and the Healer in Western History
HIST 319	(3)	The Scientific Revolution
HIST 335	(3)	Science and Medicine in Canada
HIST 356	(3)	Medicine in the Medieval West
HIST 381	(3)	Colonial Africa

HIST 424	(3)	Gender, Sexuality and Medicine
HIST 430	(3)	Topics in Modern Medicine
HIST 449	(3)	Medicine in the Ancient World
HIST 452	(3)	Topics in Pre-Modern Medicine
HIST 457	(3)	Topics in Medical History
HIST 558	(3)	Modern Medicine: Seminar
HIST 559	(3)	Modern Medicine: Research
HIST 567D1	(3)	Seminar: Medieval Medicine
HIST 567D2	(3)	Seminar: Medieval Medicine

#### **Anthropology of Medicine**

ANTH 227	(3)	Medical Anthropology
ANTH 302	(3)	New Horizons in Medical Anthropology
ANTH 314	(3)	Psychological Anthropology 01
ANTH 325	(3)	Anthropology of the Self
ANTH 407	(3)	Anthropology of the Body
ANTH 408	(3)	Sensory Ethnography
ANTH 423	(3)	Mind, Brain and Psychopathology
ANTH 438	(3)	Topics in Medical Anthropology
ANTH 480	(3)	Special Topic 5
ANTH 481	(3)	Special Topic 6

#### Sociology of Medicine

SOCI 225	(3)	Medicine and Health in Modern Society
SOCI 309	(3)	Health and Illness
SOCI 310	(3)	Sociology of Mental Health
SOCI 365	(3)	Health and Development
SOCI 390	(3)	Gender and Health
SOCI 508	(3)	Medical Sociology and Social Psychiatry
SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge
SOCI 588	(3)	Biosociology/Biodemography

# 4.11.34 Sociology (SOCI)

The Department of Sociology, the programs, and specific courses are described in Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.38: Sociology.

# 4.11.34.1 Bachelor of Arts (B.A.) - Minor Concentration Sociology (18 credits)

The purpose of the Minor Concentration Sociology is to give the student a basic understanding of the field of sociology. This Minor concentration may be expanded to the Major Concentration Sociology.

# **U1 Required Courses (6 credits)**

SOCI 210	(3)	Sociological Perspectives
SOCI 211	(3)	Sociological Inquiry

# **Complementary Courses (12 credits)**

# **Politics and Social Change**

SOCI 212	(3)	International Migration
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 245	(3)	The Sociology of Emotions
SOCI 254	(3)	Development and Underdevelopment
SOCI 255	(3)	Gender and the State
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 326	(3)	Political Sociology 01
SOCI 345	(3)	Topics in Sociology
SOCI 354	(3)	Dynamics of Industrial Societies
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 400	(3)	Comparative Migration and Citizenship
SOCI 424	(3)	Networks and Social Structures
	(3)	Sociology of Citizenship

SOCI 430	(3)	Sociology of Citizenship
SOCI 475	(3)	Canadian Ethnic Studies Seminar
SOCI 510	(3)	Seminar in Social Stratification
SOCI 512	(3)	Ethnicity and Public Policy
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 526	(3)	Indigenous Women's Health and Healthcare
SOCI 530	(3)	Sex and Gender
SOCI 555	(3)	Comparative Historical Sociology

### Work, Organizations, and the Economy

SOCI 235	(3)	Technology and Society
SOCI 304	(3)	Sociology of the Welfare State
SOCI 312	(3)	Sociology of Work and Industry
SOCI 325	(3)	Sociology of Science
SOCI 420	(3)	Organizations
SOCI 470	(3)	Topics in Economic Sociology

### 4.11.34.2 Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)

The purpose of the Major Concentration Sociology is to give the student a comprehensive understanding of the field of sociology.

#### **U1 Required Courses (6 credits)**

SOCI 210	(3)	Sociological Perspectives
SOCI 211	(3)	Sociological Inquiry

# U2 Required Courses (6 credits)

Note: Students who are exempted from SOCI 350 must replace it with another 300-level or higher sociology course.

SOCI 330	(3)	Sociological Theory
SOCI 350	(3)	Statistics in Social Research

### **Complementary Courses (24 credits)**

24 credits of complementary courses selected with the following specifications:

3 credits minimum at the 400 level or higher

9 credits maximum at the 200 level

500-Level Seminars:

Seminars at the 500 level are open to Major concentration students in their final year.

No more than 6 credits of the current problems, independent study and/or reading courses listed below may count toward the Major concentration.

SOCI 341	(3)	Current Problems in Sociology 02
SOCI 342	(3)	Independent Study 1
SOCI 343	(3)	Independent Study 2
SOCI 441	(3)	Current Problems in Sociology 03
SOCI 442	(3)	Independent Reading and Research 01
SOCI 443	(3)	Independent Reading and Research 02

# **Areas of Sociology**

The Department of Sociology offers courses in four substantive areas of study:

Institutions, Deviance, and Culture

Politics and Social Change

Social Stratification: Class, Ethnicity, and Gender

Work, Organizations, and the Economy

The following lists indicate the courses which are included within each substantive area. Students should use these lists when selecting their complementary courses

The 500-level seminars in each substantive area are open to social science Major concentration students in their final year and to Honours students. Minor concentration students may only register for these with the permission of the instructor.

# Institutions, Deviance, and Culture

SOCI 213	(3)	Deviance
SOCI 225	(3)	Medicine and Health in Modern Society
SOCI 247	(3)	Family and Modern Society
SOCI 250	(3)	Social Problems
SOCI 305	(3)	Socialization
SOCI 309	(3)	Health and Illness
SOCI 310	(3)	Sociology of Mental Health
SOCI 318	(3)	Sociology of the Media
SOCI 322	(3)	Sociology of Literature
SOCI 325	(3)	Sociology of Science
SOCI 388	(3)	Crime
SOCI 430	(3)	Sociology of Citizenship
SOCI 488	(3)	Punishment and Prisons
SOCI 489	(3)	Gender, Deviance and Social Control
SOCI 495	(3)	Social Problems and Conflicts
SOCI 503	(3)	Surveillance in Modern Society
SOCI 508	(3)	Medical Sociology and Social Psychiatry
SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 535	(3)	Sociology of the Family
	(3)	Selected Topics in Sociology of Biomedical Knowledge

SOCI 307	(3)	Globalization
SOCI 326	(3)	Political Sociology 01
SOCI 345	(3)	Topics in Sociology
SOCI 354	(3)	Dynamics of Industrial Societies
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements
SOCI 390	(3)	Gender and Health
SOCI 400	(3)	Comparative Migration and Citizenship
SOCI 424	(3)	Networks and Social Structures
SOCI 430	(3)	Sociology of Citizenship
SOCI 446	(3)	Colonialism and Society
SOCI 455	(3)	Post-Socialist Societies
SOCI 484	(3)	Emerging Democratic States
SOCI 495	(3)	Social Problems and Conflicts
SOCI 507	(3)	Social Change
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 545	(3)	Sociology of Population

SOCI 555	(3)	Comparative Historical Sociology
SOCI 595	(3)	Immigration Control and The State

## Work, Organizations, and the Economy

SOCI 235	(3)	Technology and Society
SOCI 304	(3)	Sociology of the Welfare State
SOCI 312	(3)	Sociology of Work and Industry
SOCI 325	(3)	Sociology of Science
SOCI 420	(3)	Organizations
SOCI 470	(3)	Topics in Economic Sociology

# 4.11.34.3 Bachelor of Arts (B.A.) - Joint Honours Component Sociology (36 credits)

The Joint Honours Component Sociology provides a greater focus on Sociology with substantial breadth and depth. The completion of a Joint Honours program is an asset when applying to graduate or profession schools.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Students may register for Joint Honours at the beginning of their second year (U2).

SOCI 213	(3)	Deviance
SOCI 225	(3)	Medicine and Health in Modern Society
SOCI 247	(3)	Family and Modern Society
SOCI 250	(3)	Social Problems
SOCI 305	(3)	Socialization
SOCI 309	(3)	Health and Illness
SOCI 310	(3)	Sociology of Mental Health
SOCI 318	(3)	Sociology of the Media
SOCI 322	(3)	Sociology of Literature
SOCI 325	(3)	Sociology of Science
SOCI 388	(3)	Crime
SOCI 488	(3)	Punishment and Prisons
SOCI 489	(3)	Gender, Deviance and Social Control
SOCI 495	(3)	Social Problems and Conflicts
SOCI 503	(3)	Surveillance in Modern Society
SOCI 508	(3)	Medical Sociology and Social Psychiatry
SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 535	(3)	Sociology of the Family
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge
SOCI 571	(3)	Deviance and Social Control
SOCI 595	(3)	Immigration Control and The State
Politics and Soc	ial Change	
SOCI 212	(3)	International Migration
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 245	(3)	The Sociology of Emotions
SOCI 254	(3)	Development and Underdevelopment
SOCI 255	(3)	Gender and the State
SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 326	(3)	Political Sociology 01
SOCI 345	(3)	Topics in Sociology
SOCI 354	(3)	Dynamics of Industrial Societies
SOCI 365	(3)	Health and Development
SOCI 370	(3)	Sociology: Gender and Development
SOCI 386	(3)	Contemporary Social Movements

Gender and Health

Comparative Migration and Citizenship

Networks and Social Structures

Colonialism and Society

**SOCI 390** 

 $SOCI\,400$ 

SOCI 424

SOCI 446

(3)

(3)

(3)

(3)

SOCI 455	(3)	Post-Socialist Societies
SOCI 484	(3)	Emerging Democratic States
SOCI 495	(3)	Social Problems and Conflicts
SOCI 507	(3)	Social Change
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 519	(3)	Gender and Globalization
SOCI 545	(3)	Sociology of Population
SOCI 550	(3)	Developing Societies
SOCI 595	(3)	Immigration Control and The State

# Social Stratification: Class, Ethnicity, and Gender

SOCI 227	(3)	Jews in North America
SOCI 230	(3)	Sociology of Ethnic Relations
SOCI 255	(3)	Gender and the State
SOCI 270	(3)	Sociology of Gender
SOCI 321	(3)	Gender and Work
SOCI 333	(3)	Social Stratification
SOCI 335	(3)	Sociology of Aging and the Life Course
SOCI 355	(3)	Rural Life in a Global Society
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 375	(3)	Suspect Minorities in Canada
SOCI 415	(3)	Education and Inequality
SOCI 475	(3)	Canadian Ethnic Studies Seminar
SOCI 510	(3)	Seminar in Social Stratification
SOCI 512	(3)	Ethnicity and Public Policy
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 526	(3)	Indigenous Women's Health and Healthcare
SOCI 530	(3)	Sex and Gender
SOCI 555	(3)	Comparative Historical Sociology
SOCI 595	(3)	Immigration Control and The State

# Work, Organizations, and the Economy

SOCI 235	(3)	Technology and Society
SOCI 304	(3)	Sociology of the Welfare State
SOCI 312	(3)	Sociology of Work and Industry
SOCI 325	(3)	Sociology of Science
SOCI 420	(3)	Organizations
SOCI 470	(3)	Topics in Economic Sociology

## 4.11.35 Sustainability, Science, and Society

### 4.11.35.1 Location

Program website: mcgill.ca/sss

AEMA 310	(3)	Statistical Methods 1
BIOL 373	(3)	Biometry
GEOG 202	(3)	Statistics and Spatial Analysis
PSYC 204	(3)	Introduction to Psychological Statistics

## **System Modelling**

3 credits of System Modelling tools from the following:

ESYS 301	(3)	Earth System Modelling
GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation

### **Economics**

3 credits of Economics from the following:

AGEC 333	(3)	Resource Economics
ECON 225	(3)	Economics of the Environment
ECON 326	(3)	Ecological Economics

18 additional credits of complementary courses chosen from three areas listed below:

Students must choose at least two courses from each area, and in total complete at least 9 credits at the 300 level or higher.

## AREA 1: Methods: Observation, Analysis, Modelling, and Management

AGRI 435	(3)	Soil and Water Quality Management
ENVB 437	(3)	Assessing Environmental Impact
ENVR 544	(3)	Environmental Measurement and Modelling
ESYS 500	(3)	Earth System Applications
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 314	(3)	Geospatial Analysis
GEOG 351	(3)	Quantitative Methods
GEOG 404	(3)	Environmental Management 2
GEOG 509	(3)	Qualitative Methods
GEOG 512	(3)	Advanced Quantitative Methods in Social Field Research
GEOG 523	(3)	Global Ecosystems and Climate
URBP 506	(3)	Environmental Policy and Planning

## AREA 2: Society, Economics, Policy, Ethics, and Equity

Take at least one course from each subsection (2A and 2B) below:

## 2A: Society, Economics, and Policy

AGEC 200\* (3) Principles of Microeconomics

<sup>\*</sup> Students select either AGEC 200 or ECON 208, but not both.

<sup>\*\*</sup> Students may select either AGEC 201 or ECON 209, but not both.

AGEC 201**	(3)	Principles of Macroeconomics
AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development
ANTH 206	(3)	Environment and Culture
ANTH 212	(3)	Anthropology of Development
ANTH 339	(3)	Ecological Anthropology
ECON 208*	(3)	Microeconomic Analysis and Applications
ECON 209**	(3)	Macroeconomic Analysis and Applications
		Microeconomic 0 1 165.8bS0 0 1 165.864 646.96 m( 0 1 16(6 0 0 1 70.52 615.52 m( 0 1 169**)Tj 0 0 1 221.949 694.12

ENVR 540**	(3)	Ecology of Species Invasions
ESYS 200	(3)	Earth System Processes
ESYS 300	(3)	Investigating the Earth System
GEOG 221	(3)	Environment and Health
GEOG 305	(3)	Soils and Environment
GEOG 322*	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments
GEOG 403	(3)	Global Health and Environmental Change
GEOG 470	(3)	Wetlands
GEOG 530	(3)	Global Land and Water Resources
GEOG 555	(3)	Ecological Restoration
NRSC 333	(3)	Pollution and Bioremediation

Students who wish to explore the following topics in more depth may select the courses listed below:

- $1)\ Climate\ Change:\ ESYS\ 200,\ ESYS\ 300,\ ESYS\ 500,\ GEOG\ 523,\ ATOC\ 214,\ ATOC\ 215$
- $2)\ Land\ Resources, Food, Forests: AGEC\ 430, AGEC\ 442, AGRI\ 435, BIOL\ 308, BIOL\ 310, ENVB\ 410, GEOG\ 523, GEOG\ 530$

3)

ENVR 495D2	(3)	Honours Research
ENVR 495N1	(3)	Honours Research
ENVR 495N2	(3)	Honours Research

# Biophysical, Societal, Cultural, Institutional, and Ethical

18 credits from introduction to biophysical, societal, cultural, institutional, and ethical dimensions of sustainability.

ENVR 200	(3)	The Global Environment
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
GEOG 203	(3)	Environmental Systems
GEOG 310	(3)	Development and Livelihoods
MGPO 440	(3)	Strategies for Sustainability

## Complementary Courses (27 credits)

27 credits selected as follows:

3 credits of Statistics

3 credits of System Modelling tools

3 credits of Economics

18 credits selected from 3 areas

### **Statistics**

3 credits of Statistics from the following:

AEMA 310	(3)	Statistical Methods 1
BIOL 373	(3)	Biometry
GEOG 202	(3)	Statistics and Spatial Analysis
PSYC 204	(3)	Introduction to Psychological Statistics

## **System Modelling**

3 credits of System Modelling tools from the following:

ESYS 301 (3) Earth System Modelling

Socio-Environmental Systems:

ENVB 437	(3)	Assessing Environmental Impact
ENVR 544	(3)	Environmental Measurement and Modelling
ESYS 500	(3)	Earth System Applications
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 314	(3)	Geospatial Analysis
GEOG 351	(3)	Quantitative Methods
GEOG 404	(3)	Environmental Management 2
GEOG 509	(3)	Qualitative Methods
GEOG 523	(3)	Global Ecosystems and Climate
URBP 506	(3)	Environmental Policy and Planning

# AREA 2: Society, Economics, Policy, Ethics, and Equity

Take at least one course from each subsection (2A and 2B) below:

# 2A: Society, Economics, and Policy

Note:

<sup>\*\*</sup> Students may select either AGEC 201 or ECON 209, but not both.

AGEC 200*	(3)	Principles of Microeconomics
AGEC 201**	(3)	Principles of Macroeconomics

Agriculture, Food and Resource Policy

<sup>\*</sup> Students select either AGEC 200 or ECON 208, but not both.

## 4.11.36.1 Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)

The Minor Concentration African Studies is available for those students majoring in a discipline of the Faculty of Arts who wish to acquire interdisciplinary knowledge of Africa.

This program may be expanded to the Major Concentration African Studies.

## Required Courses (6 credits)

AFRI 200	(3)	Introduction to African Studies
AFRI 598	(3)	Research Seminar in African Studies

### **Complementary Courses (12 credits)**

12 credits selected as follows:

3 credits from the Group A or "core" course list and

9 credits from the Group B course list drawn from at least 2 disciplines with no more than 6 credits from any one discipline.

If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the program adviser.

Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

### Group A

3 credits from:

ANTH 322	(3)	Social Change in Modern Africa
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
POLI 324	(3)	Developing Areas/Africa

## **Group B**

9 credits from the Group B course lists below drawn from at least 2 disciplines with no more than 6 credits from any one discipline.

## **African Studies**

AFRI 401	(3)	Swahili Language and Culture
AFRI 480	(3)	Honours Thesis

Economic Development 1

SOCI 484	(3)	<b>Emerging Democratic States</b>
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 550	(3)	Developing Societies

### 4.11.36.2 Bachelor of Arts (B.A.) - Major Concentration African Studies (36 credits)

The Major Concentration African Studies provides students with an interdisciplinary approach to the study of the African continent.

Students wishing to major in African Studies should consult the Program Adviser at the beginning of their first academic year. In the African Studies Major concentration, students will be encouraged to identify an area within a discipline of the Faculty, taking as many relevant courses as possible in that field.

## Required Courses (6 credits)

AFRI 200	(3)	Introduction to African Studies
AFRI 598	(3)	Research Seminar in African Studies

## **Complementary Courses (30 credits)**

30 credits selected as follows:

9 credits from the Group A or "core" course list and

21 credits from the Group B course list drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

If courses listed below are not available in any particular year, modifications to the program may be made with the approval of the Program Adviser.

Students who wish to obtain program credit for other courses with African content should seek approval from the Program Adviser. African content may be found in certain courses offered in Islamic Studies and Religious Studies.

## **Group A**

9 credits from:

ANTH 322	(3)	Social Change in Modern Africa
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
POLI 324	(3)	Developing Areas/Africa

## Group B

21 credits from the Group B course lists below drawn from at least 3 disciplines with no more than 9 credits from any one discipline.

## **African Studies**

AFRI 401	(3)	Swahili Language and Culture
AFRI 480	(3)	Honours Thesis
AFRI 481	(3)	Special Topics 1
AFRI 499	(3)	Arts Internships: African Studies
HIST 579D1	(3)	Seminar: African History
HIST 579D2	(3)	Seminar: African History

## Anthropology

ANTH 212	(3)	Anthropology of Development
ANTH 301	(3)	Nomadic Pastoralists
ANTH 322	(3)	Social Change in Modern Africa
ANTH 411	(3)	Primate Studies and Conservation
ANTH 416	(3)	Environment/Development: Africa

Economics		
ECON 208	(3)	Microeconomic Analysis and Applications
ECON 313	(3)	Economic Development 1
ECON 416	(3)	Topics in Economic Development 2
English		
* Note: Course is cou	inted only when Afr	rican materials are taught.
ENGL 320*	(3)	Postcolonial Literature
ENGL 352*	(3)	Theories of Difference
ENGL 421	(3)	African Literature
Geography		
GEOG 216	(3)	Geography of the World Economy
GEOG 403	(3)	Global Health and Environmental Change
GEOG 404	(3)	Environmental Management 2
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 416	(3)	Africa South of the Sahara
History		
HIST 200	(3)	Introduction to African History
HIST 201	(3)	Modern African History
HIST 381	(3)	Colonial Africa
HIST 382	(3)	History of South Africa
HIST 498	(3)	Independent Research
HIST 528	(3)	Indian Ocean World Slave Trade
Islamic Studies		
ISLA 221D1	(4.5)	Introductory Arabic
ISLA 221D2	(4.5)	Introductory Arabic
ISLA 360	(3)	Islam and Politics
ISLA 410	(3)	History: Middle-East 1798-1918
Political Science		
* Note: Course is cou	inted only when Afr	ican materials are taught.
POLI 227	(3)	Developing Areas/Introduction
POLI 324	(3)	Developing Areas/Africa
POLI 522*	(3)	Seminar: Developing Areas

Health and Development

Sociology SOCI 365

(3)

SOCI 370	(3)	Sociology: Gender and Development
SOCI 446	(3)	Colonialism and Society
SOCI 484	(3)	Emerging Democratic States
SOCI 513	(3)	Social Aspects HIV/AIDS in Africa
SOCI 550	(3)	Developing Societies

## 4.11.36.3 Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits)

The Minor Concentration in Arabic Language provides students with comprehensive training in listening, speaking, reading, and writing in Arabic.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.

This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

### **Complementary Courses**

18 credits of Arabic language (3 levels) from the list below.

In the case of Introductory Arabic (9 credits), the extra 3 credits will be counted as electives.

ISLA 221D1	(4.5)	Introductory Arabic
ISLA 221D2	(4.5)	Introductory Arabic
ISLA 322	(6)	Lower Intermediate Arabic
ISLA 322D1	(3)	Lower Intermediate Arabic
ISLA 322D2	(3)	Lower Intermediate Arabic
ISLA 423D1	(3)	Higher Intermediate Arabic
ISLA 423D2	(3)	Higher Intermediate Arabic
ISLA 524	(3)	Advanced Arabic 1
ISLA 525	(3)	Advanced Arabic 2
ISLA 526	(3)	Colloquial Arabic

# 4.11.36.4 Bachelor of Arts (B.A.) - Minor Concentration Persian Language (18 credits)

The Minor Concentration in Persian Language provides students with comprehensive training in listening, speaking, reading, and writing in Persian.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.

This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

## **Complementary Courses**

18 credits of Persian language (3 levels) from the list below.

ISLA 241D1	(3)	Introductory Persian
ISLA 241D2	(3)	Introductory Persian
ISLA 342D1	(3)	Lower Intermediate Persian
ISLA 342D2	(3)	Lower Intermediate Persian
ISLA 443D1	(3)	Upper Intermediate Persian
ISLA 443D2	(3)	Upper Intermediate Persian
ISLA 545	(3)	Advanced Persian 1
ISLA 546	(3)	Advanced Persian 2

## 4.11.36.5 Bachelor of Arts (B.A.) - Minor Concentration Turkish Language (18 credits)

The Minor Concentration in Turkish Language provides students with comprehensive training in listening, speaking, reading, and writing in Turkish.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.

This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

## **Complementary Courses**

18 credits of Turkish language (3 levels) from the list below.

ISLA 232D1	(3)	Introductory Turkish
ISLA 232D2	(3)	Introductory Turkish
ISLA 333D1	(3)	Lower Intermediate Turkish
ISLA 333D2	(3)	Lower Intermediate Turkish
ISLA 434D1	(3)	Higher Intermediate Turkish
ISLA 434D2	(3)	Higher Intermediate Turkish
ISLA 535D1	(3)	Advanced Turkish
ISLA 535D2	(3)	Advanced Turkish

## 4.11.36.6 Bachelor of Arts (B.A.) - Minor Concentration Urdu Language (18 credits)

The Minor Concentration in Urdu Language provides students with comprehensive training in listening, speaking, reading, and writing in Urdu.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/mes/.

This program may be expanded to the Major Concentration in World Islamic and Middle East Studies.

#### **Complementary Courses**

18 credits of Urdu language (3 levels) from the list below.

ISLA 251D1	(3)	Introductory Urdu-Hindi
ISLA 251D2	(3)	Introductory Urdu-Hindi
ISLA 352D1	(3)	Intermediate Urdu-Hindi
ISLA 352D2	(3)	Intermediate Urdu-Hindi
ISLA 553	(3)	Advanced Urdu-Hindi 1
ISLA 554	(3)	Advanced Urdu-Hindi 2
ISLA 555	(3)	Urdu Poetry

## 4.11.36.7 Bachelor of Arts (B.A.) - Minor Concentration World Islamic & Middle East Studies (18 credits)

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the languages, textual traditions, and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

## **Complementary Courses (18 credits)**

18 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:

 $3\ credits$  at the  $100\mbox{-/}200$  level, in non-language ISLA courses;

6 credits at the 300 level, in non-language ISLA courses;

9 credits at an

ISLA 221D1	(4.5)	Introductory Arabic
ISLA 221D2	(4.5)	Introductory Arabic
ISLA 232D1	(3)	Introductory Turkish
ISLA 232D2	(3)	Introductory Turkish
ISLA 241D1	(3)	Introductory Persian
ISLA 241D2	(3)	Introductory Persian
ISLA 251D1	(3)	Introductory Urdu-Hindi
ISLA 251D2	(3)	Introductory Urdu-Hindi

# ISLA 300 Level and Higher

6 credits from:		
ISLA 310	(3)	Women in Islam
ISLA 315	(3)	Ottoman State and Society to 1839
ISLA 322D1	(3)	Lower Intermediate Arabic
ISLA 322D2	(3)	Lower Intermediate Arabic
ISLA 325	(3)	Introduction to Shi'i Islam
ISLA 330	(3)	Islamic Mysticism: Sufism
ISLA 333D1	(3)	Lower Intermediate Turkish
ISLA 333D2	(3)	Lower Intermediate Turkish
ISLA 340	(3)	Islamic Law and Human Rights
ISLA 342D1	(3)	Lower Intermediate Persian
ISLA 342D2	(3)	Lower Intermediate Persian
ISLA 345	(3)	Science and Civilization in Islam
ISLA 350	(3)	From Tribe to Dynasty
ISLA 352D1	(3)	Intermediate Urdu-Hindi
ISLA 352D2	(3)	Intermediate Urdu-Hindi
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 370	(3)	The Qur'an: History and Interpretation
ISLA 380	(3)	Islamic Philosophy and Theology
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 385	(3)	Poetics and Politics in Arabic Literature
ISLA 388	(3)	Persian Literature
ISLA 392	(3)	Arabic Literature as World Literature
ISLA 423D1	(3)	Higher Intermediate Arabic
ISLA 423D2	(3)	Higher Intermediate Arabic

# **ISLA Courses**

ISLA 199	(3)	FYS: Narrations of the Middle East
ISLA 200	(3)	Islamic Civilization
ISLA 210	(3)	Muslim Societies
ISLA 325	(3)	Introduction to Shi'i Islam

ISLA 330	(3)	Islamic Mysticism: Sufism
ISLA 340	(3)	Islamic Law and Human Rights
ISLA 345	(3)	Science and Civilization in Islam
ISLA 350	(3)	From Tribe to Dynasty
ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 370	(3)	The Qur'an: History and Interpretation
ISLA 380	(3)	Islamic Philosophy and Theology
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 385	(3)	Poetics and Politics in Arabic Literature
ISLA 388	(3)	Persian Literature
ISLA 392	(3)	Arabic Literature as World Literature
ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
ISLA 415	(3)	Modern Iran: Anthropological Approach
ISLA 420	(3)	Indo-Islamic Civilization: Medieval
ISLA 421	(3)	Islamic Culture - Indian Subcontinent
ISLA 430	(3)	Islamdom: Baghdad to Cordoba
ISLA 488	(3)	Tales of Wonder-Islamic World
ISLA 499	(3)	World Islamic and Middle East Studies Internship
ISLA 502	(3)	Art in the Age of Empires
ISLA 505	(3)	Islam: Origin and Early Development
ISLA 506	(3)	Revolutions in the Arab World
ISLA 512	(3)	Art of the Ottoman Empire
ISLA 515	(3)	The Medieval School in Islam
ISLA 516	(3)	Medieval Islam, 13th-15th Century
ISLA 555	(3)	Urdu Poetry
ISLA 585	(3)	Arab Women's Literature
Non-ISLA Courses		
ANTH 327	(3)	Anthropology of South Asia
HIST 240	(3)	Modern History of Islamic Movements
HIST 341	(3)	Themes in South Asian History
HIST 435	(3)	Topics in South Asian History
HIST 591D1	(3)	Modern Middle East History
HIST 591D2	(3)	Modern Middle East History
JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 323	(3)	The Israeli Novel

Jewish Philosophy and Thought 2

(3)

Turkish					
ISLA 232D1	(3)	Introductory Turkish			
ISLA 232D2	(3)	Introductory Turkish			
ISLA 333D1	(3)	Lower Intermediate Turkish			
ISLA 333D2	(3)	Lower Intermediate Turkish			
ISLA 434D1	(3)	Higher Intermediate Turkish			
ISLA 434D2	(3)	Higher Intermediate Turkish			
ISLA 535D1	(3)	Advanced Turkish			
ISLA 535D2	(3)	Advanced Turkish			
Urdu					
ISLA 251D1	(3)	Introductory Urdu-Hindi			
ISLA 251D2	(3)	Introductory Urdu-Hindi			
ISLA 352D1	(3)	Intermediate Urdu-Hindi			
ISLA 352D2	(3)	Intermediate Urdu-Hindi			
ISLA 553	(3)	Advanced Urdu-Hindi 1			
ISLA 554	(3)	Advanced Urdu-Hindi 2			

# ISLA 100-/200-Level

3 credits from:

FYS: Narrations of tu.154Int00rrations of tu.154Int10(ISLA 100-/200-Le)Tj1 0 0 1331.5.721 Tm(Higl)Tj/F1

## ISLA 400-/500-Level

6 credits from:				
ISLA 410	(3)	History: Middle-East 1798-1918		
ISLA 411	(3)	History: Middle-East 1918-1945		
ISLA 415	(3)	Modern Iran: Anthropological Approach		
ISLA 420	(3)	Indo-Islamic Civilization: Medieval		
ISLA 421	(3)	Islamic Culture - Indian Subcontinent		
ISLA 430	(3)	Islamdom: Baghdad to Cordoba		
ISLA 488	(3)	Tales of Wonder-Islamic World		
ISLA 502	(3)	Art in the Age of Empires		
ISLA 505	(3)	Islam: Origin and Early Development		
ISLA 506	(3)	Revolutions in the Arab World		
ISLA 512	(3)	Art of the Ottoman Empire		
ISLA 515	(3)	The Medieval School in Islam		
ISLA 516	(3)	Medieval Islam, 13th-15th Century		
ISLA 526	(3)	Colloquial Arabic		
ISLA 555	(3)	Urdu Poetry		
ISLA 585	(3)	Arab Women's Literature		

6-9 credits at any level, including ISLA 499, or more language courses (from the language lists above), but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

### **Non-ISLA Courses**

ANTH 327	(3)	Anthropology of South Asia
HIST 240	(3)	Modern History of Islamic Movements
HIST 341	(3)	Themes in South Asian History
HIST 435	(3)	Topics in South Asian History
HIST 591D1	(3)	Modern Middle East History
HIST 591D2	(3)	Modern Middle East History
JWST 220D1	(3)	Introductory Hebrew
JWST 220D2	(3)	Introductory Hebrew
JWST 261	(3)	History of Jewish Philosophy and Thought
JWST 320D1	(3)	Intermediate Hebrew
JWST 320D2	(3)	Intermediate Hebrew
JWST 323	(3)	The Israeli Novel
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 366	(3)	History of Zionism
JWST 367	(3)	Hebrew through Israeli Cinema
JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture

PHIL 356	(3)	Early Medieval Philosophy
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
RELG 204	(3)	Judaism, Christianity and Islam
RELG 307	(3)	Bible, Quran and Interpretations
RELG 309	(3)	World Religions and Cultures They Create
RELG 573	(3)	Religions in Global Society

### 4.11.36.9 Bachelor of Arts (B.A.) - Joint Honours Component World Islamic & Middle East Studies (36 credits)

World Islamic and Middle East Studies is an interdisciplinary program focusing on Muslim cultures and societies both past and present. Recognizing the variety of approaches within Islam, its global reach, but also its regional specificities, and that of the Middle East in particular, the program aims at providing students with training in the textual traditions and social life of Muslims across different times and places.

For information about instructors and course descriptions, visit the program's website at http://www.mcgill.ca/islamicstudies/.

Students wishing to study at the Honours level in two disciplines can combine Joint Honours program components in any two Arts disciplines. For a list of available Joint Honours programs, see "Overview of Programs Offered" and "Joint Honours Programs."

Joint Honours students should consult an adviser in each department to discuss their course selection and their interdisciplinary research project (if applicable).

Joint Honours students must maintain a program GPA of 3.30 in their World Islamic & Middle East Studies courses and, according to Faculty regulations, a minimum CGPA of 3.00 in general.

### Required Course (3 credits)

ISLA 495 (3) World Islamic and Middle East Studies Research Seminar

#### Complementary Courses (33 credits)

33 credits of complementary courses selected from the World Islamic and Middle East Studies course lists as follows:

12-15 credits (2 levels) in one language: Arabic, Persian, Turkish, or Urdu (lists below). In the case of Arabic, the first two levels involve 15 credits. The extra 3 credits will be counted toward the remainder of the complementary courses requirement.

18-21 credits (18 if Introductory Arabic has been chosen), distributed as follows:

3 credits of 100-/200-level non-language ISLA courses;

9 credits of 300-level non-language ISLA courses;

3 credits of 400-/500-level non-language ISLA courses;

3-6 credits at any level, including more language courses, but no more than 6 credits overall at the 100/200 level. Students might fulfill these credits by taking complementary courses from other departments listed as relevant to the program.

Languages (12-15 credits)

### Arabic

ISLA 221D1	(4.5)	Introductory Arabic
ISLA 221D2	(4.5)	Introductory Arabic
ISLA 322	(6)	Lower Intermediate Arabic
ISLA 322D1	(3)	Lower Intermediate Arabic
ISLA 322D2	(3)	Lower Intermediate Arabic
ISLA 423D1	(3)	Higher Intermediate Arabic
ISLA 423D2	(3)	Higher Intermediate Arabic
ISLA 524	(3)	Advanced Arabic 1
ISLA 525	(3)	Advanced Arabic 2

### Persian

ISLA 355	(3)	Modern History of the Middle East
ISLA 360	(3)	Islam and Politics
ISLA 370	(3)	The Qur'an: History and Interpretation
ISLA 380	(3)	Islamic Philosophy and Theology
ISLA 383	(3)	Central Questions in Islamic Law
ISLA 385	(3)	Poetics and Politics in Arabic Literature
ISLA 388	(3)	Persian Literature
ISLA 392	(3)	Arabic Literature as World Literature

# ISLA 400-/500-Level

3 credits from:

ISLA 410	(3)	History: Middle-East 1798-1918
ISLA 411	(3)	History: Middle-East 1918-1945
3)	(3)	Modern Iran: Anthropological Approach

JWST 323	(3)	The Israeli Novel
JWST 338	(3)	Jewish Philosophy and Thought 2
JWST 340D1	(3)	Advanced Hebrew
JWST 340D2	(3)	Advanced Hebrew
JWST 366	(3)	History of Zionism
JWST 367	(3)	Hebrew through Israeli Cinema
JWST 368	(3)	A Taste of Hebrew Literature
JWST 369	(3)	History of the Hebrew Language
JWST 370	(3)	Israeli Popular Culture
PHIL 356	(3)	Early Medieval Philosophy
POLI 340	(3)	Developing Areas/Middle East
POLI 341	(3)	Foreign Policy: The Middle East
POLI 347	(3)	Arab-Israel Conflict, Crisis, Peace
RELG 204	(3)	Judaism, Christianity and Islam
RELG 307	(3)	Bible, Quran and Interpretations
RELG 309	(3)	World Religions and Cultures They Create
RELG 573	(3)	Religions in Global Society

# 5 Faculty of Education

## 5.1 About the Faculty

The Faculty of Education serves approximately 2,500 students enrolled in undergraduate, graduate, and professional development programs. The Faculty is organized into three departments, and has a number of research and service centres, including several of an interdisciplinary nature.

The Faculty of Education has a role in the initial training of teachers and leaders in education-allied occupations. It also prepares professionals in the areas of Educational and Counselling Psychology and Kinesiology and Physical Education. It provides professional development services to the wider educational community and it is concerned with constructing knowledge through research and scholarship.

In recent years, a number of links have been established with counterparts in other countries for teaching, research, and development purposes. Current active projects, some of which involve students as well as staff, include those in Japan, Hong Kong, Indonesia, South Africa, and Mexico.

## 5.2 History

The Faculty of Education traces its beginnings back to 1857, when the McGill Normal School was established at McGill by agreement between the University and the Government of Quebec. In 1907, it was renamed the School for Teachers and was moved to Sainte-Anne-de-Bellevue, where it became part of Macdonald College. At this time also, the Macdonald Chair of Education was endowed at McGill University and a Department of Education was created in the Faculty of Arts and Science for the purpose of preparing candidates for the High School Diploma. The first graduate program was inaugurated in 1930, and in 1953, the University established the B.Ed. degree.

In 1955, the School for Teachers and the Department of Education were combined to become the Institute of Education within the Faculty of Arts and Science. To these was joined, in 1957, the McGill School of Physical Education (founded in 1912).

The Institute was reconstituted as the Faculty of Education in 1965 and the work continued on both the McGill and Macdonald campuses. The St. Joseph Teachers College and the Faculty of Education were amalgamated in 1970 and relocated in a new building on the Downtown Campus. In 1996, the School of Information Studies became affiliated with the Faculty, until it moved to the Faculty of Arts in 2014.

### Available equipment

Video cameras Tripods

Microphones and cables Small portable mixers

PC data projector adaptors

Mac data projector adaptors

iPad adaptors Bullhorns

Digital still cameras Digital audio recorders

Portable document cameras Document cameras on carts for Education classroom use

Cables and connectors for most applications Extension cords and power bars

You can send in an equipment reservation request using the *Reservation Request Form*, or visit the counter in person or call **514-398-6954**. Note that the online AV reservation form does not guarantee a reservation; please wait for an email confirmation of the reservation.

For information about our hours of operation, please consult mcgill.ca/education/prospective/audiovisual-equipment-loans (under "Audiovisual Equipment Loans").

#### ICS McGill Central Audiovisual Equipment Loan Services

Audiovisual equipment loan services are also available centrally through ICS Audiovisual equipment loans (article # KB0010873).

## 5.3.4 McGill Career Planning Service (CaPS)

Refer to University Regulations and Resources > Undergraduate > Student Services > section 1.13.3: Student Services - Downtown Campus and section 1.13.4: Student Services - Macdonald Campus for further information on this service.

Career Adviser: Lara Franko
Telephone: 514-398-2484
Email: career.education@mcgill.ca

Website: mcgill.ca/caps

How to make an appointment: mcgill.ca/caps/contact

### 5.3.5 McGill Journal of Education

The McGill Journal of Education/Revue des sciences de l'éducation de McGill request using the

Location: McGill Sports Complex, Room 207A

475 Pine Avenue West

Telephone: 514-398-4184 ext. 0464 Website: *mcgill.ca/edu-kpe/facilities/asllc* Hours: Monday to Friday 08:00—17:00

# 5.3.7 Internships & Student Affairs Office (ISA)

The Internships and Student Affairs Office (ISA) in the Faculty of Education is responsible for the planning and implementation of the practice teaching component of undergraduate (B.Ed) and graduate (MATL) Teacher Education programs, as well 4.0Us rer Eadvisng and inder

# 5.3.8.2 The International Centre for Youth Gambling Problems and High-Risk Behaviors

 $McGill\ University's\ International\ Centre\ for\ Youth\ Gambling\ Problems\ and\ High-Risk\ Beha$ 

#### **Building Director**

David Maris (Deputy Building Director)

### **Marketing and Communications Officer**

Andee Schuster

### **Associate Director Development**

TBA

## 5.5 Overview of Faculty Programs

The Faculty of Education offers three different kinds of programs.

**Undergraduate Programs:** The Faculty offers programs leading to the Bachelor of Education (B.Ed.) degree that can lead to teacher certification, a Bachelor of Arts - Education (B.A.(Education)) degree with a Major in Education in Global Contexts, and a Bachelor of Science (B.Sc.) – Kinesiology degree.

**Programs of Professional Development:** For qualified teachers wishing to enhance their knowledge and skills, the Faculty offers programs of professional development leading to specialized certificates and diplomas. Most courses that are required to complete these programs are offered in the evenings and in the summer.

**Graduate Programs:** The Faculty offers graduate programs for those already holding a university degree who wish to pursue advanced study and research leading to master's and doctoral degrees in various fields of education and psychology. A new Master of Arts in Teaching and Learning, which leads to teacher certification, is also offered; more information is available at <a href="mailto:mcgill.ca/dise/grad">mcgill.ca/dise/grad</a>.

Undergraduate programs of initial teacher education are described below in *section 5.5.1: Undergraduate Education Programs*; programs of professional development are described in the *School of Continuing Studies section*; and graduate programs are described in the *Graduate and Postdoctoral Studies section*.

#### 5.5.1 Undergraduate Education Programs

The Faculty of Education offers the following undergraduate programs. Details of each program may be found in this publication under the headings of the appropriate department.

All Bachelor of Education programs have been accredited by the Comité d'agrément des programmes de formation à l'enseignement (CAPFE).

The credit weights given are for students who have completed a Quebec CEGEP degree, or have been granted 30 credits of Advanced Standing. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing their degree must also complete a minimum of 30 credits of Freshman courses (in addition to the 90-credit or 120/137-credit program) for a total of 120 credits (B.A.(Education), B.Sc.(Kinesiology)) or 150/167 credits (B.Ed.).

#### **Undergraduate Education Programs Leading to Certification**

section 5.8.2.4.1: Bachelor of Education: Secondary Program (120 credits), offered by the Department of Integrated Studies in Education.

section 5.8.2.4.3: Bachelor of Education (Kindergarten and Elementary) (120 credits), offered by the Department of Integrated Studies in Education.

section 5.8.2.13: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits), offered by the Department of Integrated Studies in Education.

mection 5.8.2.14.1: B.Ed. Kindergarten and Elementary Program (Jewish Studies Option), offered by the Department of Integrated Studies in Education.

section 5.8.2.15: Bachelor of Education (B.Ed.) - Kindergarten and Elementary Pédagogie de l'Immersion Française (120 credits)

#### **Other Undergraduate Education Programs**

section 5.8.2.10: Bachelor of Arts(Education) - Major Education in Global Contexts (90 credits), offered by the Department of Integrated Studies in Education.

The program focuses on understanding the role of education in addressing contemporary and emergent global challenges. Students will take the concepts of teaching and learning outside of the classroom environment, exploring subject areas in sociology, psychology, leadership studies, history, philosophy, and public policy. Students will benefit from examining the world through an international scope and learning to problem-solve using the foundation of educational principles and hands-on experiences through a semester-long internship. Designed for anyone who wishes to take on the role of educator in non-traditional contexts: in non-profit, government, business, and other career sectors.

section 5.8.4.6: Bachelor of Science (Kinesiology) (B.Sc.(Kinesiology)) - Kinesiology (90 credits), offered by the Department of Kinesiology and Physical Education.

The program entails a comprehensive understanding of human movement. Kinesiology is a multidisciplinary field viewing human movement from social, historical, psychological, or biological perspectives. The program provides students with a breadth of theoretical knowledge as well as an opportunity to explore related areas in greater depth, including minor programs available elsewhere with instances of the program of the program of the program and provides students.

### 5.5.1.1 General Admission Requirements

For information about admission requirements to the **B.Ed.**, **B.A.(Education)**, **B.Sc.(Kinesiology)**, or **Concurrent B.Mus. and B.Ed.** programs, refer to the Undergraduate ..ca/apply de94 Tm(edits))Tj0 G0 g/F1 8282.453 0 0 1 129.0.Mus. and101.1hel enout a1 585.5.2 iona584.2t admnship.quirements to the

Students who have completed previous university studies may be awarded transfer credits for their coursework. This can only be determined after the formal application and all necessary supporting documents have been received by Enrolment Services. A minimum of 60 credits must be completed while in residence at McGill University in order to be eligible for a degree. Transfer credits for courses taken more than five (5) years before the time of admission are not permitted in subjects where there have been substantial content changes, nor in any pedagogy courses specific to the Quebec K-11 curriculum. Courses more than five (5) years old in other subject areas may be considered on an individual subject basis by the Program Director. It is the student's responsibility to verify their student record to ensure that they have received Advanced Standing. Students must meet with their adviser, in their admitted term, to ensure that the necessary record changes are made before the set deadlines. For more details, see the Undergraduate Admissions Guide, found at mcgill.ca/applying.

### 5.5.1.3 Quebec Teacher Certification

Teacher Certification in Quebec is the responsibility of the *Quebec Ministry of Education*. Students who complete requirements for the Bachelor of Education degree and who meet the Ministry requirements (specified below) are recommended by the University for certification.

#### Language Proficiency

Fluency (oral and written) in the language of instruction is a requirement for all those seeking certification.

#### Confidential Declaration Concerning Judicial Record

In June 2005, the National Assembly of Quebec adopted an Act amending the Education Act and the Act respective of private education. The amendments concern the verification of judicial antecedents of persons holding or applying for a permit to teach in the youth, adult, and vocational sectors. Anyone seeking teacher certification in the Province of Quebec is required to submit a confidential declaration concerning their judicial record to the Minister of Education. This document is available on the *Ministry website* at *V* 

5.5.2.2 Department of Integrated Studies in Education

#### 5.6.1 Advising

Refer to *University Regulations and Resources > Undergraduate > section 1.11: Undergraduate Advising* and the *Internships and Student Affairs website* for further information. Assistance is also available by emailing *isa.education@mcgill.ca*.

All **newly admitted** students are required to consult with an academic adviser prior to the start of the Fall term. For a detailed description of advising and registration procedures, students should refer to *Welcome to McGill* at *mcgill.ca/accepted*. Additional advising material is also available on the *Internships and Student Affairs website*.

Academic advising for all **returning students** takes place in the spring for the upcoming academic year. Links to departmental (program) advising websites and detailed information on registration and important Faculty of Education policies are posted on the Internships and Student Affairs website: *mcgill.ca/isa/student*. Students entering their graduating year are encouraged to meet with their departmental (program) adviser during this Advising period.

A list of courses for Freshman (Year 0) students is available for each program at section 5.5.1: Undergraduate Education Programs.

### 5.6.2 McGill Principles of Practice, Behaviour and Ethical Conduct for Teacher Candidates

The mission of McGill University's Bachelor of Education Program within the Department of Integrated Studies in Education (DISE) and the Department of Kinesiology and Physical Education (KPE) as well as the Master of Teaching and Learning (MATL) Program within DISE in cooperation with the Faculty of Education's Internship and Student Affairs Office (ISA) is to prepare teachers who are knowledgeable, skillful, flexible, creative, and compassionate members of the profession guided by a sense of social and ethical responsibility in relation to their students and the wider society.

In keeping with the professional culture of teaching and learning, McGill's teacher education community believes that teaching and learning spaces should model such professional environments. McGill's teacher education community is committed to creating authentic opportunities where an understanding of teaching and learning is co-constructed between instructors and teacher candidates, teachers and learners, as well as peer-to-peer and beyond. In order for us to create these learning environments, we are expected to demonstrate awareness of, respect for, and commitment to, the behaviours and actions of professionals. We expect members of McGill's teacher education community, including teacher candidates, teaching assistants, lecturers, professors and community partners to be accountable to themselves and others, and to be engaged, collegial, and accessible. By doing so, McGill's teacher education community is more fully able to share together in the types of critical dialogue, creative thinking, and reflective practice expected of professionals.

McGill's teacher education community is committed to nurturing a space where teacher candidates, teaching assistants, lecturers, professors and community partners can all engage in the exchange of ideas and dialogue, without fear of being made to feel unwelcome or unsafe on account of biological sex, sexual orientation, gender identity or expression, race/ethnicity, religion, linguistic and cultural background, age, physical or mental ability, or any other aspect integral to one's personhood. We therefore recognize that it is our individual and collective responsibility, to strive to establish and maintain an environment wherein all interactions are based on empathy and mutual respect for the person, acknowledging differences of perspectives, free from judgment, censure, and/or stigma

Finally, McGill's teacher education community is charged with ensuring that all graduates of its programs have the requisite knowledge, skills, and attitudes required of the teaching profession and can meet standards of the Québec Professional Teacher Competencies to be eligible for professional certification as educators in the Province of Québec.

The complete McGill Principles of Practice, Behaviour and Ethical Conduct for T

#### 5.6.4 Judicial Record Verification for Students in the Bachelor of Education Programs

Quebec's Education Act, section 261.0.2, grants school boards the right to verify the judicial record of any person regularly in contact with minors, and this includes student teachers. Each school board or private school may have its own administrative procedures for verification. Students are responsible for complying with their request. Anyone unable to obtain the required security clearance will not be permitted to undertake their Field Experiences, which is a mandatory requirement of the program, and consequently would be required to withdraw from the program.

### 5.6.5 Course and Program Regulations

#### 5.6.5.1 Course Load

Undergraduate Education programs can normally be followed only on a full-time basis. Students must take a minimum of twelve (12) credits per term unless the Director of Internships and Student Affairs gives them special permission. Special permission must be requested prior to the end of Course Add/Drop period

Any absence or reduction in course load that may impact the regular progression of a student's program must have written approval by the Director of Internships and Student Affairs.

The normal course load per term is 15 credits. Students in Satisfactory Standing may take up to 17 credits per term. Students whose CGPA is above 3.00 may request permission to take an overload. Overloads are **not** allowed in major Field Experience terms for students in the B.Ed. programs. Students in Probationary Standing take a maximum of 12 credits.

#### 5.6.5.2 Time Limit and Credits for Completion of Degrees

Students are expected to complete their program no more than:

- five (5) years after their initial registration and within 150 credits for the **B.Ed.** degree;
- four (4) years after their initial registration and within 120 credits for the **B.A.(Education)** degree;
- four (4) years after their initial registration and within 120 credits for the **B.Sc.(Kinesiology)** degree.

Students who enter into a **Freshman year** become subject to these regulations one year after their initial registration. Students who exceed these limits must apply to the Faculty for permission to continue.

Students will receive credits for all courses (subject to degree regulations) taken up to and including the semester in which they obtain the full degree credit requirements. Students who wish to remain at McGill beyond that semester must seek permission of the Director of Internships and Student Affairs. Students who wish to exceed the specified minimum number of credits required for their degree must also seek permission of the Director of Internships and Student Affairs. If permission is granted, credits over the limit will be flagged for no credit and the grades will not count in the CGPA.

Permission for exceeding the time and/or credit limits will normally be granted only for valid academic reasons, such as change of program or approved part-time status. If permission is granted, students will receive credit only for required and complementary courses necessary to complete their program requirements.

### 5.6.5.3 Course Requirements

All required and complementary courses used to fulfil program requirements must be completed with a grade of C or better. Students who fail to obtain a satisfactory grade in a required and/or complementary course must either pass the supplemental examination if available, or repeat the course. If the failed course is a complementary course required by the program, a student may choose to replace it with another complementary course. If a student repeats a required course in which a D was received, credit will only be given once. Students must contact their program adviser at least once each academic year and at the end of year 3 (B.Ed. Programs) and year 2 (B.A.(Education), B.Sc.(Kinesiology) program) to ensure that they are on the right track to completing their program requirements. A failure (F, J, KF, WF) in any level of Field Experience places a student in Unsatisfactory Standing, requiring withdrawal from the program. Further details on requirements for Field Experience are listed in *Faculty of Education > Undergraduate > section 5.7: Student Teaching/Field Experience*.

#### 5.6.5.4 Electives

Any courses taught at McGill University may be used towards elective credits, with the following exceptions:

- · School of Continuing Studies courses with a teaching unit that starts with C are not for credit (except for CHEM courses).
- Online Education: Refer to the *section 5.6.5.7: Online Courses* section below.

### 5.6.5.5 Courses Taken as Transfer Credit

Students wishing to study away at a university outside of Quebec must obtain approval from their academic adviser and the Internships and Student Affairs Office prior to taking a transfer course. Students will only be permitted to take courses required to complete their program. Students are not permitted to take transfer courses during their graduating term. Please refer to *University Regulations and Resources > Undergraduate > Student Records > section* 1.5.6: Transfer Credits for further information.

#### 5.6.5.6 Inter-University Transfer Credit

Students may, with the permission of their academic adviser, register at any university in the province of Quebec for three (3) or, exceptionally, six (6) credits per term in addition to their registration at McGill. Students will only be permitted to take courses required to complete their program. Students are not permitted to take transfer courses during their graduating term. Please refer to *University Regulations and Resources > Undergraduate > Registration > section 1.3.7: Quebec Inter-University Transfer Agreement* for further information.

#### 5.6.5.7 Online Courses

#### 5.6.7 Attendance

The class attendance necessary to satisfy course requirements varies from course to course. All students are expected to apprise themselves of and meet course-specific requirements.

Attendance is particularly critical in B.Ed. programs, as these are designed to develop required professional competencies, which prepare students for the demands of the teaching profession. Students must therefore inform themselves of, and adhere to, the attendance requirements for all Education courses. Special attention should be paid to the requirements of intensive courses and professional seminars scheduled around Field Experiences. Unexcused absences may result in exclusion from a course, course failure, and/or removal from any associated Field Experience.

For Field Experiences, punctual attendance is required throughout. Absences are only excused in exceptional circumstances. Please refer to section 5.7: Student T

#### 5.6.10.3 Reassessment of Course Work

Reassessment of course work is administered by the course instructor or the offering department. Requests, made by students, must be made within 10 working days of the date of return of the graded materials. The reviewer will assess the fairness of the original grade rather than re-grade the assignment as they would have graded it. Reassessments should normally be completed within 20 working days of the request. Grades may be lowered or raised, or the

#### 5.6.11.2.3 Students Will be Placed in Probationary Standing

- if their CGPA falls between 1.50 and 1.99, and if they were previously in Satisfactory Standing;
- if they receive a grade of D for a Field Experience course of any level and were previously in Satisfactory Standing;
- if their CGPA falls between 1.50 and 1.99 and their TGPA in Fall or Winter is 2.50 or higher, and if they were previously in Probationary or Interim Unsatisfactory Standing; and
- if their CGPA is between 1.50 and 1.99 and their TGPA is 2.50 or higher, they were previously in Unsatisfactory Readmitted Standing, and have satisfied
  the relevant conditions specified in their letter of readmission.

# 5.6.11.3 Unsatisfactory/Interim Unsatisfactory Standing 5.6.11.3.1 Interim Unsatisfactory Standing at the End of the Fall Term

Students in Interim Unsatisfactory Standing at the end of the Fall term:

- may continue in their program;
- should evaluate their course load and reduce it as appropriate;
- should consult a departmental adviser, before the withdrawal deadlines, about their course selection for the Winter term;
- will not be permitted to proceed with the next normally scheduled Field Experience.

#### 5.6.11.3.2 Unsatisfactory Standing at the End of the Winter Term

Students in Unsatisfactory Standing at the end of the Winter term:

- have failed to meet the minimum standards set by the Faculty;
- may not continue in their program.

#### 5.6.11.3.3 Readmitted Unsatisfactory Standing

Students who were previously in Unsatisfactory Standing and who were readmitted to the Faculty by the Director, Internships and Student Affairs or the Student Affairs Committee will have their Standing changed to Readmitted Unsatisfactory Standing. Their course load is specified at the time of readmission, as are the conditions they must meet to be allowed to continue in their program. They should see their departmental adviser to discuss their course selection.

#### 5.6.11.3.4 Students Will be Placed in Unsatisfactory Standing (Winter or Summer Term) or Interim Unsatisfactory Standing (Fall Term)

- if their CGPA falls or remains below 1.50;
- if their TGPA falls below 2.50 and their CGPA is below 2.00 and they were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing;
- · if they receive a failure (F, J, KF, WF) in a student teaching/Field Experience course of any lev

Students whose Standing changes to Unsatisfactory and who wish to ask for permission to continue in their program must make a request to the Director, Internships and Student Affairs as soon as they are placed in Unsatisfactory Standing. Readmission will be considered only when proof of e

# 5.7.1 About Field Experiences

Field experiences:

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#### 5.7.3.2 Attendance and Absences

Punctual attendance is required at the assigned school for the entire Field Experience. Alternate dates cannot be arranged at the request of the student. Unexcused absences from intensive courses and professional seminars may result in exclusion from the course, course failure, and/or removal from any associated Field Experience.

Days absent due to **illness** or **McGill exams** must be made up at the end of the Field Experience. Absences due to illness extending beyond two days require a valid medical note (see *mcgill.ca/wellness-hub/hub-clinical-services/medical-notes-and-immunization-reviews#Medical%20Notes*) to be submitted to the ISA, and, depending on the circumstances, the outcome of the Field Experience will be evaluated on an individual basis. Student teachers must contact the following people as soon as possible on the morning of the day of their absence:

- · Cooperating Teacher
- ISA Placement Coordinators (Email: placements.education@mcgill.ca)
- Field Supervisor

Student teachers are permitted to be absent for **religious holy days**, as outlined in McGill's Policy for the Accommodation of Religious Holy Days; see *mcgill.ca/importantdates/holy-days-0*. Students must notify the ISA, Cooperating Teacher, and Field Supervisor before the Field Experience begins if possible, or at least two weeks before the planned absence. The missed days must be made up, usually at the end of the Field Experience.

Absences related to McGill Intercollegiate Sport events are ev

# 5.8.1 Educational and Counselling Psychology

# 5.8.1.1 Location

Educational and Counselling Psychology, Faculty of Education  $3700\;\mathrm{McTa}$ 

# 5.8.1.3 Educational and Counselling Psychology Faculty

#### Chair

Victoria Talwar

#### **Program Directors**

 ${\bf Steven~Shaw}-{\bf School/Applied~Child~Psychology,~Counselling~Psychology}$ 

 $Krista\ Muis-Learning\ Sciences, Health\ Professions\ Education$ 

Chiaki Konishi – Human Development, M.Ed. Concentrations in Educational Psycholo

#### 5.8.2.2 About the Department of Integrated Studies in Education

The Department of Integrated Studies in Education, created in September 2001, incorporates the programs and staff previously associated with the Departments of Culture and Values in Education, Educational Studies, Second Language Education, and First Nations and Inuit Education.

The Department offers four-year programs for CEGEP graduates and five-year programs for out-of-province students leading to a B.Ed. degree.

For B.Ed. program overviews, see mcgill.ca/dise/progs.

#### 5.8.2.4.1 Bachelor of Education: Secondary Program (120 credits)

The aim of the B.Ed. Secondary program is to prepare strong teachers for the secondary school level. This integrated 120-credit program (150 credits for out-of-province students) consists of academic studies to provide background depth in subjects taught in the secondary school, and professional studies in pedagogy, curriculum, and educational foundations organized around school-based field experiences. Students choose their teaching profiles from: English, Mathematics, Science and Technology, and Social Sciences (History and Citizenship, and one of Geography or Ethics and Religious Culture). Students applying to the B.Ed. Secondary in the areas of Mathematics or Science and Technology should refer to mcgill.ca/applying/requirements for specific admission requirements.

For more information on each profile, see:

- section 5.8.2.5: Bachelor of Education (B.Ed.) Secondary English (120 credits)
- section 5.8.2.6: Bachelor of Education (B.Ed.) Secondary Mathematics (120 credits)
- section 5.8.2.7: Bachelor of Education (B.Ed.) Secondary Science and Technology (120 credits)
- section 5.8.2.8: Bachelor of Education (B.Ed.) Secondary Social Sciences History and Citizenship, Ethics and Religious Culture (120 credits)
- section 5.8.2.9: Bachelor of Education (B.Ed.) Secondary Social Sciences History and Citizenship, Geography (120 credits)

#### 5.8.2.4.2 Concurrent Bachelor of Music (Music Education)/Bachelor of Education in Music program (137 credits)

This program provides students with the opportunity to obtain a Bachelor of Music degree and a Bachelor of Education degree concurrently. The two degrees are awarded during the same convocation period. This integrated program consists of studies in music to develop musicianship and professional studies in pedagogy, curriculum, and educational foundations organized around school-based field experiences in elementary and secondary music classrooms. Students who have completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies are normally enrolled in a program requiring the completfoundations or

Options within the B.Ed. (Kindergarten and Elementary) program are:

First Nations and Inuit Studies (offered through community partners)
Jewish Studies
Pédagogie de l'immersion française

For more information on each profile, see:

- section 5.8.2.12: Bachelor of Education (B.Ed.) Kindergarten and Elementary Education (120 credits)
- section 5.8.2.13: Bachelor of Education (B.Ed.) Kindergarten and Elementary Education First Nations and Inuit Studies (120 credits)
- section 5.8.2.14: Bachelor of Education (B.Ed.) Kindergarten and Elementary Jewish Studies (120 credits); (Please contact Prof. Eric Caplan for more information. Email: eric.caplan@mcgill.ca. Telephone: 514-398-6544.)
- section 5.8.2.15: Bachelor of Education (B.Ed.) Kindergarten and Elementary Pédagogie de l'Immersion Française (120 credits)

#### 5.8.2.4.4 Bachelor of Education in Teaching English as a Second Language (120 credits)

This program prepares specialist teachers to teach English as a second language (ESL) at both the elementary level (including regular and intensive ESL) and the secondary level (including regular ESL and enriched ESL). This integrated 120-credit program (150 credits for out-of-province students) consists of academic and professional components. The academic components provide students with opportunities to develop a broad liberal education and to study language and language learning from linguistic, social, cultural, and psychological perspectives. The professional components revolve around school-based field experiences, which are supported by studies in pedagogy, curriculum, and educational foundations.

Prior to admission, applicants to the B.Ed. TESL program must also pass the English Language Proficiency Test (ELPT). Eligible applicants will receive email notification from the Admissions Office regarding registration for the ELPT. Please contact <a href="mailto:info.dise@mcgill.ca">info.dise@mcgill.ca</a> for further information.

An option within the B.Ed. in Teaching English as a Second Language program is:

• Teaching Greek Language & Culture

For more information, see:

- section 5.8.2.16: Bachelor of Education (B.Ed.) Teaching English as a Second Language TESL Elementary and Secondary (120 credits)
- section 5.8.2.17: Bachelor of Education (B.Ed.) Teaching English as a Second Language TESL Elementary and Secondary: Teaching Greek Language
   & Culture (120 credits)

#### 5.8.2.4.5 In-Community Programs

The Department of Integrated Studies in Education offers a number of in-community programs through the Office of First Nations and Inuit Education: a B.Ed. K/Elem First Nations and Inuit Studies; a Certificate in Education for First Nations and Inuit; a Certificate in Indigenous Language and Literacy Education; a Certificate in Middle School Education in Indigenous Communities; a Certificate in First Nations and Inuit Educational Leadership; a Certificate in First Nations and Inuit Student Personnel Services; and a Bachelor of Education for Certified Teachers.

For more information, see:

- section 5.8.2.13: Bachelor of Education (B.Ed.) Kindergarten and Elementary Education First Nations and Inuit Studies (120 credits)
- section 5.8.3.2: Certificate (Cert.) Education for First Nations and Inuit (60 credits)
- section 5.8.3.6: Certificate (Cert.) Indigenous Language and Literacy Education (30 credits)
- section 5.8.3.4: Certificate (Cert.) Middle School Education in Indigenous Communities (30 credits)
- section 5.8.3.5: Certificate (Cert.) First Nations and Inuit Educational Leadership (30 credits)
- section 5.8.3.3ns and Inuit Educational Leader

The Secondary English program provides students with the learning opportunities needed to become proficient English teachers.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification".

#### Freshman Program

Students normally complete 30 credits in their Freshman (U0) year.

The Freshman year is the time to take introductory-level courses in English, as well as to explore areas that are not normally taken as "teachable" subject areas within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Y

EDPE 304	(3)	Measurement and Evaluation
EDPI 309	(3)	Diverse Learners
EDPI 341	(3)	Instruction in Inclusive Schools

#### **Complementary Courses (3 credits)**

3 credits selected as described below:

# **Equity Education**

3 credits from:

EDEC 248 (3) Equity and Education

EDEC 249 (3) Global Education and Social Justice

#### Secondary English Subject Area (51 credits)

#### Option 1

51 credits distributed as follows:

#### Required Course (3 credits)

EDES 366 (3) Literature for Young Adults

#### Complementary Language/Linguistics courses (6 credits)

EDEC 203*	(3)	Communication in Education
EDSL 305	(3)	L2 Learning: Classroom Settings
EDSL 350	(3)	Essentials of English Grammar
LING 200	(3)	Introduction to the Study of Language
LING 201	(3)	Introduction to Linguistics
LING 355	(3)	Language Acquisition 1
WCOM 250*	(3)	Research Essay and Rhetoric

<sup>\*</sup> Note: Students may take either WCOM 250 OR EDEC 203 for credit but not both

#### **Complementary Courses**

42 credits distributed as follows (including at least one course in Shakespeare):

#### Literature (30 credits)

A minimum of 15 credits must be at the 300 level or higher, chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:

ENGL 200	(3)	Survey of English Literature 1
ENGL 201	(3)	Survey of English Literature 2
ENGL 215	(3)	Introduction to Shakespeare
ENGL 225	(3)	American Literature 1
ENGL 226	(3)	American Literature 2
ENGL 227	(3)	American Literature 3
ENGL 228	(3)	Canadian Literature 1
ENGL 229	(3)	Canadian Literature 2

GERM 259	(3)	Introduction to German Literature 1
GERM 260	(3)	Introduction to German Literature 2
JWST 206	(3)	Introduction to Yiddish Literature
JWST 225	(3)	Literature and Society
LLCU 220	(3)	Introduction to Literary Analysis
RUSS 218	(3)	Russian Literature and Revolution
RUSS 223	(3)	Russian 19th Century: Literary Giants 1
RUSS 224	(3)	Russian 19th Century: Literary Giants 2

#### **Cultural Studies (9 credits)**

A minimum of 3 credits must be at the 300 level or higher chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:

ENGL 279	(3)	Introduction to Film as Art
ENGL 280	(3)	Introduction to Film as Mass Medium
LLCU 200	(3)	Topics in Film
LLCU 250	(3)	History and Future of the Book

#### Drama/Theatre (3 credits)

Chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:

ENGL 215	(3)	Introduction to Shakespeare
ENGL 230	(3)	Introduction to Theatre Studies

# Option 2 (51 credits)

51 credits distributed as follows:

### Required Course (3 credits)

EDES 366 (3) Literature for Young Adults

#### Complementar

A minimum of 6 credits at the 300 level or higher, chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:

ENGL 200	(3)	Survey of English Literature 1
ENGL 201	(3)	Survey of English Literature 2
ENGL 215	(3)	Introduction to Shakespeare
ENGL 225	(3)	American Literature 1
ENGL 226	(3)	American Literature 2
ENGL 227	(3)	American Literature 3
ENGL 228	(3)	Canadian Literature 1
ENGL 229	(3)	Canadian Literature 2
GERM 259	(3)	Introduction to German Literature 1
GERM 260	(3)	Introduction to German Literature 2
JWST 206	(3)	Introduction to Yiddish Literature
JWST 225	(3)	Literature and Society
LLCU 220	(3)	Introduction to Literary Analysis
RUSS 218	(3)	Russian Literature and Revolution
RUSS 223	(3)	Russian 19th Century: Literary Giants 1
RUSS 224	(3)	Russian 19th Century: Literary Giants 2

#### **Cultural Studies (6 credits)**

A minimum of 3 credits at the 300 level or higher from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:

ENGL 279	(3)	Introduction to Film as Art
ENGL 280	(3)	Introduction to Film as Mass Medium
LLCU 200	(3)	Topics in Film
LLCU 250	(3)	History and Future of the Book

# Drama/Theatre (3 credits)

Chosen from the English Department undergraduate complementary course list (http://www.mcgill.ca/english/undergrad) or the following list:

ENGL 215	(3)	Introduction to Shakespeare
ENGL 230	(3)	Introduction to Theatre Studies

Unofficial "Teachable" Subject Area (15 credits)

The aim of the B.Ed. Secondary Education program is to prepare strong beginning teachers for the secondary school level.

This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives. For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at <a href="https://www.mcgill.ca/dise/progs/secmath">https://www.mcgill.ca/dise/progs/secmath</a>.

The Secondary Mathematics program provides students with the learning opportunities needed to become proficient Mathematics teachers.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".

#### Freshman Program

EDFE 254	(3)	Second Field Experience (Secondary)
EDFE 351	(8)	Third Field Experience (Secondary)
EDFE 451	(7)	Fourth Field Experience (Secondary)
EDPE 300	(3)	Educational Psychology

27 credits from the list below for Secondary Mathematics Option 1 students or

12 credits from the list below for Secondary Mathematics Option 2 students

COMP 202	(3)	Foundations of Programming
COMP 230	(3)	Logic and Computability
EDTL 520	(3)	Perspectives on Knowledge in Mathematics and Science
MATH 235	(3)	Algebra 1
MATH 236	(3)	Algebra 2
MATH 242	(3)	Analysis 1
MATH 243	(3)	Analysis 2
MATH 314	(3)	Advanced Calculus
MATH 316	(3)	Complex Variables
MATH 317	(3)	Numerical Analysis
MATH 318**	(3)	Mathematical Logic
MATH 319	(3)	Partial Differential Equations
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 329	(3)	Theory of Interest
MATH 340	(3)	Discrete Mathematics
MATH 346	(3)	Number Theory
MATH 348	(3)	Euclidean Geometry
MATH 417	(3)	Linear Optimization
MATH 423	(3)	Applied Regression
MATH 447	(3)	Introduction to Stochastic Processes
MATH 523	(4)	Generalized Linear Models
MATH 524	(4)	Nonparametric Statistics
MATH 525	(4)	Sampling Theory and Applications
PHIL 210**	(3)	Introduction to Deductive Logic 1

<sup>\*\*</sup> Students cannot receive credit for both.

#### Unofficial "Teachable" Subject Area

15 credits

15 credits of designated courses for Secondary Mathematics Option 2 students (English, Social Sciences, or Science and Technology - see an adviser for course selection)

#### **Electives (6 credits)**

Note: Students who have chosen to do 36 credits in one teachable subject and 15 credits in another will use 3 credits of electives to take the Secondary Teaching Methods course needed for their second unofficial teachable subject.

#### 5.8.2.7 Bachelor of Education (B.Ed.) - Secondary Science and Technology (120 credits)

The Bachelor of Education (B.Ed.) - Secondary Science and Technology program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credits for the program) for a total of 150 credits.

The aim of the B.Ed. Secondary Education program is to prepare strong beginning teachers for the secondary school level. This integrated program consists of courses in Education (including field experiences) and courses in the subject area of the teaching specialization. Students also take 6 credits of free electives.

<sup>\*</sup> Should be taken in Year 1 or Year 2

For all teacher education programs, course sequencing is highly structured. For this reason, the advising information in this eCalendar section must be used in conjunction with the summary companion document (Program Overview) found at http://www.mcgill.ca/dise/progs/secscitech.

The Secondary Science and Technology program provides students with the subject matter expertise in the Living World, Earth and Space, the Material World, and the Technological World needed to teach the secondary science curriculum in Quebec schools.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs," "Undergraduate Education Programs," and "Quebec Teacher Certification."

Note: Students entering this program from CEGEP or with Advanced Standing should have completed two biology courses, two chemistry courses, two math courses and two physics courses at the CEGEP level. Students entering from CEGEP without having completed these prerequisites (or their equivalents) will be required to make up any deficiencies in these courses over and above the degree requirements.

#### Freshman Program - Basic Sciences

Freshmen in the Science and Technology program must complete the 29 to 30 credits of Basic Science courses listed below in their first year of studies.

Fall term: BIOL 111, CHEM 110, MATH 139 or MATH 140 or MATH 150, PHYS 101 or PHYS 131

Winter term: BIOL 112, CHEM 120, MATH 141 or MATH 151, PHYS 102 or PHYS 142

Students should consult a program adviser for guidance on which Fall and Winter term Math and Physics courses should be taken. Course choices depend on a student's background in science and plans for upper-level Physics courses.

BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology
CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
MATH 139	(4)	Calculus 1 with Precalculus
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B
PHYS 101	(4)	Introductory Physics - Mechanics
PHYS 102	(4)	Introductory Physics - Electromagnetism
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics

#### Freshman Program - Complementary

For Freshman students with Advanced Standing in one or more of the basic sciences, the Faculty also recommends some of the courses listed below. French Second Language (FRSL) courses require a placement test to determine the course level.

EDEM 220	(3)	Contemporary Issues in Education
FRSL 101	(3)	Beginners French 1
FRSL 102	(3)	Beginners French 2
FRSL 207D1	(3)	Elementary French 01
FRSL 207D2	(3)	Elementary French 01
FRSL 211D1	(3)	Oral and Written French 1
FRSL 211D2	(3)	Oral and Written French 1
WCOM 250	(3)	Research Essay and Rhetoric

#### Required Courses (60 credits)

EDEC 201	(1)	First Year Professional Seminar
EDEC 215	(0)	English Exam for Teacher Certification

BIOL 205	(3)	Functional Biology of Plants and Animals
EDKP 292	(3)	Nutrition and Wellness
EDKP 395	(3)	Exercise Physiology
NUTR 207	(3)	Nutrition and Health
NUTR 307	(3)	Metabolism and Human Nutrition
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

#### Populations, Ecosystems, and Evolution

BIOL 215	(3)	Introduction to Ecology and Evolution
BIOL 240	(3)	Monteregian Flora
BIOL 304	(3)	Evolution
BIOL 305	(3)	Animal Diversity
BIOL 308	(3)	Ecological Dynamics
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 331	(3)	Ecology/Behaviour Field Course
BIOL 352	(3)	Dinosaur Biology
ENVB 305	(3)	Population and Community Ecology
EPSC 334	(3)	Invertebrate Paleontology

#### Earth and Space

Students select a minimum of 3 credits to a maximum of 18 credits from the following list:

ATOC 214	(3)	Introduction: Physics of the Atmosphere
ATOC 215	(3)	Oceans, Weather and Climate
ATOC 219	(3)	Introduction to Atmospheric Chemistry
ATOC 309	(3)	Weather Radars and Satellites
ATOC 315	(3)	Thermodynamics and Convection
ENVR 202	(3)	The Evolving Earth
EPSC 201	(3)	Understanding Planet Earth
EPSC 210	(3)	Introductory Mineralogy
EPSC 212	(3)	Introductory Petrology
EPSC 220	(3)	Principles of Geochemistry
EPSC 221	(3)	General Geology
EPSC 225	(1)	Properties of Minerals
EPSC 233	(3)	Earth and Life History
EPSC 303	(3)	Structural Geology
EPSC 320	(3)	Elementary Earth Physics
EPSC 350	(3)	Tectonics
ESYS 200	(3)	Earth System Processes
ESYS 300	(3)	Investigating the Earth System
ESYS 301	(3)	Earth System Modelling
GEOG 272	(3)	Earth's Changing Surface

GEOG 321	(3)	Climatic Environments
PHYS 320	(3)	Introductory Astrophysics

# Earth and Space - Environment

Students select a minimum of 3 credits to a maximum of 18 credits from the following list:

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems

Global Change: PGlobal Cha3420 7 221.9CHEMst67Tm(wing list:)Tj1 41

PHYS 439	(3)	Majors Laboratory in Modern Physics
PHYS 447	(3)	Applications of Quantum Mechanics

#### The Technological World

Students select a minimum of 3 credits to a maximum of 12 credits from the following list:

COMP 102*	(3)	Computers and Computing
COMP 202**	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 280*	(3)	History and Philosophy of Computing
COMP 364	(3)	Computer Tools for Life Sciences
MATH 204	(3)	Principles of Statistics 2

<sup>\*</sup> Note: Students may take either COMP 102 or COMP 280, but not both.

#### **Elective Courses (6 credits)**

# 5.8.2.8 Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture (120 credits)

The Bachelor of Education (B.Ed.) - Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of univ

<sup>\*\*</sup> Note: Credit will not be given for COMP 102 if it is taken concurrently with or after COMP 202.

GEOG 210	(3)	Global Places and Peoples
HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 214	(3)	Early Modern Europe

Secondary Social Sciences - History and Citizenship, Ethics and Religious Culture students complete 51 credits selected in consultation with the Program Adviser with the following specifications:

# **Required Courses**

History

9 credits:

HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 303	(3)	History of Quebec

# **Complementary Courses (42 credits)**

History and Citizenship (24 credits)

At least 9 of the 24 credits must be taken at the 300 or 400 level, distributed as follows:

3-9 credits in European History

3-9 credits in Asian, African, American, Latin American, or Ancient History

6 credits of history courses on social history, gender history, identity

POLI 442 (3) International Relations of Ethnic Conflict
POLI 450 (3) Peacebuilding
Inequality and De

# Freshman Program

Students normally complete 30 credits in their Freshman (U0) year.

The Freshman year is the time to take introductory-le

EDPE 300	(3)	Educational Psychology
EDPE 304	(3)	Measurement and Evaluation
EDPI 309	(3)	Diverse Learners
EDPI 341	(3)	Instruction in Inclusive Schools

#### **Complementary Courses (3 credits)**

3 credits selected as described below:

#### **Equity Education**

3 credits from:

EDEC 249 (3) Global Education and Social Justice

#### Secondary Social Sciences - History and Citizenship, Geography Subject Area (51 credits)

Secondary Social Sciences - History and Citizenship, Geography students complete 51 credits selected in consultation with the Program Adviser with the following specifications:

#### **Required Courses**

History

9 credits selected from:

HIST 202	(3)	Survey: Canada to 1867
HIST 203	(3)	Survey: Canada since 1867
HIST 303	(3)	History of Quebec

#### Complementary Courses (42 credits)

History and Citizenship (24 credits)

At least 9 of the 24 credits must be taken at the 300 or 400 level, distributed as follows:

- 3-9 credits in European History
- 3-9 credits in Asian, African, American, Latin American, or Ancient History

6 credits of history courses on social history, gender history, identity, culture, religion and values, political life and institutions, conflict, wealth and poverty, science, and health

(Students may consult the course lists for History programs offered by the Faculty of Arts for guidance on course choices.)

6-12 credits selected from the following list (students must select a minimum of 3 credits ECON and a minimum of 3 credits POLI):

ANTH 338 (3) Indigenous Studies of Anthropology

ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
POLI 212	(3)	Government and Politics - Developed World
POLI 221	(3)	Government of Canada
POLI 222	(3)	Political Process and Behaviour in Canada
POLI 227	(3)	Developing Areas/Introduction
POLI 243	(3)	International Politics of Economic Relations
POLI 244	(3)	International Politics: State Behaviour
POLI 341	(3)	Foreign Policy: The Middle East
POLI 345	(3)	International Organizations
POLI 354	(3)	Approaches to International Political Economy
POLI 360	(3)	Security: War and Peace
POLI 362	(3)	Political Theory and International Relations
POLI 423	(3)	Politics of Ethno-Nationalism

Students whose highest level of education is high school (normally out of province) are admitted into Year 0 (U0) to complete the Freshman Program. Freshman students are required to complete 30 credits of introductory (100- or 200- level) courses of the students' choice (in addition to the 90-credit program), verified by an adviser\*, for a total of 120 credits. Students will not be granted permission to take first-year (U1) courses if the credits from the Freshman year have not been obtained. In consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. There are no required courses in the Freshman Program, though the department recommends that students use the opportunity to take 100- or 200- level courses in the subject areas that interest them or are relevant to their chosen concentration. As well, the Freshman year offers students the opportunity to explore areas that are not typically taken as a course of study in the program.

The department recommends the following courses:

Courses in the Faculty of Education:

EDGC 299	(3)	Research Methods
EDGC 301	(3)	Program Design and Evaluation
EDGC 398	(0)	Internship: Education in Global Contexts
EDGC 399	(3)	Education in Global Contexts Internship Project
EDGC 400	(3)	21st Century Learning
EDGC 499	(3)	Critical Research Inquiry
EDPE 300	(3)	Educational Psychology

#### Complementary Courses (30 credits)

12 credits from the following; no more than 9 credits from one specific list. Other courses on these topics from the Faculty of Education or other Faculties may be selected subject to approval of program adviser.

#### Leadership and Social Change

EDGC 300*	(3)	Special Topics
EDGC 312	(3)	Understanding Teacher Leadership
EDGC 313	(3)	Cultivating Process of Social Transformation
EDGC 411	(3)	Affect, Education, and Social Change
EDGC 412	(3)	Historical Knowledge: Tool for Agents of Change

<sup>\*</sup> when topic is relevant to this list.

# Ethics, Wellbeing, and Diverse Knowledge Approaches

EDER 494	(3)	Human Rights and Ethics in Practice
EDGC 222	(3)	Integrating Arts into STEM
EDGC 300*	(3)	Special Topics
EDGC 324	(3)	Physical Health and Wellbeing in Education
EDGC 423	(3)	Human Knowledge Claims and Education
EDSL 390	(3)	Teaching English as a Second Language in the Community

<sup>\*</sup> when topic is relevant to this list.

# Critical Issues in Education

EDGC 200	(3)	Knowledge through the Arts
EDGC 233	(3)	Learning in Out-of-School Contexts
EDGC 300*	(3)	Special Topics
EDGC 335	(3)	Eco-Justice and Sustainability in Education
EDGC 336	(3)	Race, Class, and Power in Education in Global Contexts
EDGC 337	(3)	Gendered Identities, Social Learning
EDPI 341	(3)	Instruction in Inclusive Schools
EDSL 500	(3)	Foundations and Issues in Second Language Education

<sup>\*</sup> when topic is relevant to this list.

### Children and Youth

EDGC 244 (3) Investigating Children's Reasoning

EDGC 300*	(3)	Special Topics
EDGC 348	(3)	Global Perspectives of Early Childhood Education
EDGC 444	(3)	Critical Contexts of Youth Development and Wellbeing

<sup>\*</sup> when topic is relevant to this list.

One of the following approved minors:

B.Com.; Minor in Management for Non-Management Students
B.A.; Minor Concentration in International Development Studies

B.A.; Minor Concentration in Educational Psychology

Subject to approval of program adviser, students in a minor offered by the Faculty of Education (i.e., Educational Psychology) may be granted permission to complete a second minor from the above list in order to fulfill the requirement of 18 credits of elective courses.

# **Elective Courses (18 credits)**

18 credits of electives selected from Faculty of Education of

of Collegial Studies (Diplôme d'études collégiales) in a Music concentration or equivalent, or students transferring from other universities or colleges, who have successfully completed a course in the history of Western music, will be exempted from the first-year Western Musical Traditions requirement (MUHL 186).

MUHL 186	(3)	Western Musical Traditions
MUIN 180	(3)	BMus Practical Lessons 1
MUIN 181	(3)	BMus Practical Lessons 2
MUPD 135	(1)	Music as a Profession 1
MUPD 235	(1)	Music as a Profession 2
MUSP 140	(2)	Musicianship Training 1
MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 150	(3)	Theory and Analysis 1
MUTH 151	(3)	Theory and Analysis 2

#### **Required Music Components (48 credits)**

# **Music Education**

MUCT 235	(3)	Vocal Techniques
MUGT 215	(1)	Basic Conducting Techniques
MUGT 354	(3)	Music for Children
MUGT 358	(3)	General Music for Adults and Teenagers
MUGT 401	(3)	Issues in Music Education
MUIT 202	(3)	Woodwind Techniques
MUIT 203	(3)	Brass Techniques
MUIT 204	(3)	Percussion Techniques
MUIT 356	(3)	Jazz Instruction: Philosophy and Techniques

# Theory

Theory and Analysis 3	(3)	MUTH 250
Theory and Analysis 4	(3)	MUTH 251
Theory and Analysis 5	(3)	MUTH 350

# Musicianship

MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4

# **Music History**

MUHL 286	(3)	Critical Thinking About Music

#### **Performance**

MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4

MUIN 283	(1)	BMus Concentration Final Examination
Professional Developme	ent	
MUPD 235	(1)	Music as a Profession 2
Complementary Course	s - Music Com	ponents (24 credits)
Composing/Arranging		
3 credits from:		
MUCO 230	(3)	The Art of Composition
MUCO 261	(3)	Orchestration 1
MUJZ 260	(3)	Jazz Arranging 1
Music Education		
3 credits from:		
MUIT 201	(3)	String Techniques
		Guitar

MUEN 573	(2)	Baroque Orchestra
MUEN 587	(2)	Cappella McGill
MUEN 590	(2)	McGill Wind Orchestra
MUEN 592	(2)	Chamber Jazz Ensemble
MUEN 593	(2)	Choral Ensembles
MUEN 594	(2)	Contemporary Music Ensemble
MUEN 595	(2)	Jazz Ensembles
MUEN 597	(2)	McGill Symphony Orchestra

## **Elective Courses (8 credits)**

8 credits of free electives

## Required Courses - Education Component (49 credits)

EDEA 206	(1)	1st Year Professional Seminar
EDEA 208	(1)	Second Professional Seminar (Music)
EDEA 407	(3)	Final Year Professional Seminar Music
EDEA 442	(3)	Methods in Music Education 1
EDEA 472	(3)	Methods in Music Education 2
EDEC 215	(0)	English Exam for Teacher Certification
EDEC 247	(3)	Policy Issues in Quebec and Indigenous Education
EDEC 260	(3)	Philosophical Foundations
EDEC 262	(3)	Media, Technology and Education
EDES 350	(3)	Classroom Practices
EDFE 205	(2)	First Field Experience (Music)
EDFE 208	(3)	Second Field Experience (Music)
EDFE 308	(8)	Third Field Experience (Music)
EDFE 407	(7)	Fourth Field Experience (Music)
EDPE 300	(3)	Educational Psychology
EDPI 341	(3)	Instruction in Inclusive Schools

## Required Indigenous Studies Course (3 credits)

EDEC 233 (3) Indigenous Education

or any other course with Indigenous Studies content approved by the Faculty of Education.

# Complementary Courses – Education Components (6 credits)

3 credits from:		
EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice
3 credits from:		
EDEE 355	(3)	Classroom-based Evaluation
EDPE 304	(3)	Measurement and Evaluation

## 5.8.2.11.1 Admissions to the Concurrent B.Mus. (Major Music Education) and B.Ed. in Music Program

Applicants without a completed Bachelor of Music degree who wish to pursue a teacher education degree specializing in Music should apply to the Concurrent Bachelor of Music (Music Education)/Bachelor of Education in Music program. Students who have partially completed a Bachelor of Music program are eligible to apply for Advanced Standing in the Concurrent program.

Application to the Concurrent B.Mus./B.Ed. program may be made online at

FRSL 207D1	(3)	Elementary French 01
FRSL 207D2	(3)	Elementary French 01
FRSL 211D1	(3)	Oral and Written French 1
FRSL 211D2	(3)	Oral and Written French 1
MATH 111	(3)	Mathematics for Education Students
RELG 207	(3)	Introduction to the Study of Religions
WCOM 250	(3)	Research Essay and Rhetoric

# Required Courses (84 credits)

•	•	
EDEC 201	(1)	First Year Professional Seminar
EDEC 203	(3)	Communication in Education
EDEC 215	(0)	English Exam for Teacher Certification
EDEC 233	(3)	Indigenous Education
EDEC 247	(3)	Policy Issues in Quebec and Indigenous Education
EDEC 253	(1)	Second Professional Seminar (Kindergarten/Elementary)
EDEC 260	(3)	Philosophical Foundations
EDEC 262	(3)	Media, Technology and Education
EDEC 405	(3)	Fourth Year Professional Seminar (K/Elem)
EDEE 223	(3)	Language Arts
EDEE 230	(3)	Elementary School Mathematics 1
EDEE 253	(3)	Kindergarten Classroom Pedagogy
EDEE 260	(3)	Reading Methods - Kindergarten/Elementary
EDEE 270	(3)	Elementary School Science
EDEE 273	(3)	Elementary School Science 2
EDEE 280	(3)	Geography, History and Citizenship Education
EDEE 283	(3)	Social Studies Pedagogy
EDEE 332	(3)	Teaching Elementary Mathematics 2
EDEE 353	(3)	Third Year Professional Seminar (Kindergarten/Elementary)
EDEE 355	(3)	Classroom-based Evaluation
EDER 360	(2)	Ethics and Religious Culture (K/Elementary)
EDFE 200	(2)	First Field Experience (K/Elem and Secondary)
EDFE 256	(3)	Second Field Experience (Kindergarten/Elementary)
EDFE 306	(8)	Third Field Experience (Kindergarten/Elementary)
EDFE 406	(7)	Fourth Field Experience (K/Elem)
EDPE 300	(3)	Educational Psychology
EDPI 309	(3)	Diverse Learners
EDPI 341	(3)	Instruction in Inclusive Schools

# Complementary Courses (12 credits)

12 credits of courses selected as described below:

# **Equity Education**

3 credits from:

EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice

## Ethics, Values, or Religion

credits	

EDER 309	(3)	The Religious Quest
RELG 204	(3)	Judaism, Christianity and Islam
RELG 207	(3)	Introduction to the Study of Religions
RELG 309	(3)	World Religions and Cultures They Create
RELG 341	(3)	Introduction: Philosophy of Religion

### Kindergarten and Elementary Teaching Methods - Art, Drama, or Music

3-6 credits from:

EDEA 332	(3)	Art Curriculum and Instruction - Elementary
EDEA 342	(3)	Curriculum and Instruction in Drama Education
EDEA 345	(3)	Music Curriculum and Instruction for Generalists

#### Kindergarten & Elementary Teaching Methods - Physical Education or English Second Language

0-3 credits from:

Students may select both their Methods courses from the list above for Art, Drama, or Music.

<sup>\*</sup> Note: EDSL 447 has EDSL 350 as a prerequisite.

EDKP 332	(3)	Physical Education Curriculum and Instruction
EDSL 447*	(3)	Methods in TESL 1

# Kindergarten & Elementary Education - Subject Areas (18 credits)

18 credits selected in consultation with the Program Adviser as follows:

9 credits in "teachable" subject area courses of the elementary school curriculum from the lists below for Art, English, Ethics and Religious Culture, French, Mathematics, Music, Natural Sciences, Physical Education, and Social Studies.

And

9 credits, 3 credits from each of any three subject areas not chosen above.

No more than 9 credits may be selected from any single course list.

#### Art

Students may select up to 9 credits from this list and from Art History (ARTH) courses.

EDEA 204	(3)	Drawing
EDEA 205	(3)	Painting 2
EDEA 241	(3)	Basic Art Media for Classroom
EDEA 296	(3)	Basic Design
EDEA 304	(3)	Painting 3
EDEA 307	(3)	Drawing 2
EDEA 410	(3)	Aesthetics and Art for the Classroom
EDEA 496	(3)	Sculpture 1

#### **English**

Students may select up to 9 credits from this list.

·		
CLAS 203	(3)	Greek Mythology
COMS 200	(3)	History of Communication
COMS 210	(3)	Introduction to Communication Studies
COMS 300	(3)	Media and Modernity in the 20th Century
COMS 310	(3)	Media and Feminist Studies
COMS 320	(3)	Media and Empire
COMS 330	(3)	Media in Cultural Life
EDEE 325*	(3)	Children's Literature
EDES 366	(3)	Literature for Young Adults
EDSL 350	(3)	Essentials of English Grammar
ENGL 200	(3)	Survey of English Literature 1
ENGL 201	(3)	Survey of English Literature 2
ENGL 215	(3)	Introduction to Shakespeare
ENGL 225	(3)	American Literature 1
ENGL 226	(3)	American Literature 2
ENGL 227	(3)	American Literature 3
ENGL 228	(3)	Canadian Literature 1
ENGL 229	(3)	Canadian Literature 2
ENGL 230	(3)	Introduction to Theatre Studies
ENGL 237	(3)	Introduction to Study of a Literary Form
ENGL 279	(3)	Introduction to Film as Art
ENGL 280	(3)	Introduction to Film as Mass Medium
ENGL 314	(3)	20th Century Drama
ENGL 345	(3)	Literature and Society
ENGL 347	(3)	Great Writings of Europe 1
ENGL 349	(3)	English Literature and Folklore 1
ENGL 388	(3)	Studies in Popular Culture
LING 200	(3)	Introduction to the Study of Language
LING 201	(3)	Introduction to Linguistics

## **Ethics and Religious Culture**

Students may select up to 9 credits from this list. Students may also choose other Religious Studies (RELG) courses with the permission of the Program Adviser.

<sup>\*</sup> Note: Courses marked with an asterisk ("\*") may be used as Ethics and Religious Culture courses or as Social Studies.

EDER 252	(3)	Understanding and Teaching Jewish Life
EDER 309	(3)	The Religious Quest
EDER 395	(3)	Moral Values and Human Action
EDER 461	(3)	Society and Change
EDER 473	(3)	Living with Insight
GSFS 200*	(3)	Feminist and Social Justice Studies
JWST 211	(3)	Jewish Studies 1: Biblical Period
JWST 240*	(3)	The Holocaust

PHIL 200	(3)	Introduction to Philosophy 1
PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 237	(3)	Contemporary Moral Issues
RELG 203	(3)	Bible and Western Culture
RELG 204	(3)	Judaism, Christianity and Islam
RELG 207	(3)	Introduction to the Study of Religions
RELG 252	(3)	Hinduism and Buddhism
RELG 253	(3)	Religions of East Asia
RELG 270	(3)	Religious Ethics and the Environment
RELG 271	(3)	Religion and Sexuality

#### French

Students may choose up to 9 credits of French as a Second Language (FRSL) courses and/or French (FREN) courses and/or:

EDSL 341 (3) Littératie et littérature jeunesse en FLS

#### **Mathematics**

Students may choose up to 9 credits of Mathematics (MATH) courses at the 200 level or higher.

Note: Students admitted with CEGEP mathematics (or equivalent) may not take MATH 111 for credit. MATH 111 is a recommended course for Freshman students.

MATH 111 (3) Mathematics for Education Students

#### Music

Students may choose up to 9 credits from this list. Students may also select any Music course with the MUGT, MUHL, MUIT, or MUCT subject codes.

With the permission of the Program Adviser, students without a formal music background may choose courses with the MUAR subject code.

\* Note: Courses marked with a single asterisk ("\*") require permission from the Schulich School of Music to register.

EDEA 341	(3)	Listening for Learning
MUJZ 160*	(3)	Jazz Materials 1
MUJZ 161*	(3)	Jazz Materials 2

# **Natural Sciences**

Students may choose up to 9 credits from this list.

ATOC 181	(3)	Introduction to Atmospheric Science
ATOC 182	(3)	Introduction to Oceanic Sciences
ATOC 184	(3)	Science of Storms
ATOC 185	(3)	Natural Disasters
BIOL 115	(3)	Essential Biology
CHEM 180	(3)	World of Chemistry: Environment
CHEM 181	(3)	World of Chemistry: Food
CHEM 182	(3)	World of Chemistry: Technology
CHEM 183	(3)	World of Chemistry: Drugs
EDEC 374	(3)	Education and the Environment
EDEE 473	(3)	Ecological Studies
EPSC 180	(3)	The Terrestrial Planets

EPSC 181	(3)	Environmental Geology
EPSC 185	(3)	Natural Disasters
EPSC 201	(3)	Understanding Planet Earth
PHYS 180	(3)	Space, Time and Matter
PHYS 181	(3)	Everyday Physics
PHYS 182	(3)	Our Evolving Universe
PHYS 183	(3)	The Milky Way Inside and Out

# **Physical Education**

Students may take up to 9 credits of Physical Education (EDKP) courses from the list with the permission of the Department of Kinesiology and Physical Education.

### 5.8.2.13 Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies (120 credits)

The Bachelor of Education (B.Ed.) - Kindergarten and Elementary Education - First Nations and Inuit Studies program requires 120 credits and leads to teacher certification. Interested applicants must contact the Office of First Nations and Inuit Education for admission information; please call 514-398-4527.

Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of freshman courses (in addition to the 120 credit program) for a total of 150 credits. Students who are admitted as "mature students" are not required to complete the 30 credits of Freshman courses. These students are admitted to U1.

Please note that graduates of teacher education programs are recommended by the University for Quebec Certification to the Quebec Ministère de l'Enseignement supérieur. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Undergraduate Education Programs", and "Quebec Teacher Certification".

### Freshman Program

Students normally complete 30 credits in their Freshman (U0) year.

The Freshman year is the time to take introductory-level courses in the subjects taught in Elementary school, as well as to explore areas that are not normally taken as teachable subject area courses within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.).

Students admitted to the First Nations and Inuit Studies program in U0 should consult with their program adviser for guidance on course selection. More information is also found for newly admitted students to the B.Ed. Kindergarten and Elementary Education program on the Faculty of Education website at <a href="http://www.mcgill.ca/dise/ofnie/teachcert/kelery">http://www.mcgill.ca/dise/ofnie/teachcert/kelery</a> Education/ofnie/teachEttp://www

## Complementary Courses (36 credits)

36 credits of courses selected as described below:

# **Language - Complementary Component**

 $\boldsymbol{6}$  credits from the following language courses chosen according to language group and fluency:

Algonquin		
EDEC 270	(3)	Algonquin Heritage Language 1
EDEC 271	(3)	Algonquin Heritage Language 2
EDEC 272	(3)	Algonquin Language 1
EDEC 273	(3)	Algonquin Language 2
Cree		
EDEC 241	(3)	Cree Language 1
EDEC 242	(3)	Cree Language 2
Inuktitut		
EDEC 289	(3)	Inuktitut Orthography and Grammar
EDEC 403	(3)	The Dialects of Inuktitut
Mi'gmaw		
EDEC 237	(3)	Mi'gmaw Heritage Language 1

 $Tm((3Ms~403)Tj/F0~6na6l.1~a(6)Inuktitut \textbf{EDEQ} \colored{2890EwwW.c.3779e1166nJungw2} + 1600Ew0~1~165.864~.1~69uTj/FT4~.1~6m(Ew0~0~1~70.52~46)Ew0~0~1~70.52~46)$ 

## **Science Component**

_		
~	credits	from:

EDEC 374	(3)	Education and the Environment
EDEE 273	(3)	Elementary School Science 2

## **Religion Component**

3 credits from:		
EDER 309	(3)	The Religious Quest
EDER 395	(3)	Moral Values and Human Action
EDER 461	(3)	Society and Change
EDER 473	(3)	Living with Insight
EDER 494	(3)	Human Rights and Ethics in Practice

# Kindergarten and Elementary Subject Area Component

9 credits from the subject course lists below

Art		
EDEA 204	(3)	Drawing
EDEA 205	(3)	Painting 2
EDEA 241	(3)	Basic Art Media for Classroom
EDEA 242	(3)	Cultural Skills 1
EDEA 243	(3)	Cultural Skills 2
EDEA 296	(3)	Basic Design
EDEA 304	(3)	Painting 3
EDEA 307	(3)	Drawing 2
EDEA 410	(3)	Aesthetics and Art for the Classroom
EDEA 496	(3)	Sculpture 1
English		
EDEA 394	(3)	Creative Dramatics for Classroom
EDEE 325	(3)	Children's Literature
EDEE 371	(3)	Integrating Indigenous Storytelling and Creative Writing
EDES 366	(3)	Literature for Young Adults
EDSL 350	(3)	Essentials of English Grammar

## Ethics and Religious Culture

EDER 252	(3)	Understanding and Teaching Jewish Life
EDER 309	(3)	The Religious Quest
EDER 395	(3)	Moral Values and Human Action
EDER 461	(3)	Society and Change
EDER 473	(3)	Living with Insight

EDER 494	(3)	Human Rights and Ethics in Practice
French		
EDSL 341	(3)	Littératie et littérature jeunesse en FLS
Music		
EDEA 341	(3)	Listening for Learning
Natural Science		
EDEC 374	(3)	Education and the Environment
		T

EDSL 247	(3)	Second Language Education in Indigenous Communities
EDSL 300	(3)	Foundations of L2 Education
EDSL 370	(3)	Issues and Practices in Teaching Indigenous Languages
EDSL 390	(3)	Teaching English as a Second Language in the Community
3-6 credits from the	following	
EDEC 244	(3)	Issues in Aboriginal Education
EDEC 263	(3)	Information Communication Technology in Indigenous Literacy
EDEC 302	(3)	Language and Learning - Curriculum
EDEC 313	(3)	Indigenous Land-Based Pedagogy
EDEC 591	(3)	Cultural Values and Socialization
EDEE 245	(3)	Orientation to Education
EDEE 444	(3)	First Nations and Inuit Curriculum
EDPC 209	(3)	Basic Crisis Intervention Skills
EDPI 441	(3)	Students with Behaviour Difficulties
EDPI 442	(3)	Students with Learning Difficulties

## **Elective Courses (6 credits)**

6 credits chosen from the Subject Area and/or the Methods and Curriculum and Pedagogy courses listed above. No more than 9 credits can be chosen from any one subject area.

## 5.8.2.14 Bachelor of Education (B.Ed.) - Kindergarten and Elementary Jewish Studies (120 credits)

Bachelor of Education (B.Ed.) - Kindergarten and Elementary Jewish Studies program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of uniEE m(v)Tj1 0 0 1 78.933 3747 .

FRSL 102	(3)	Beginners French 2
FRSL 207D1	(3)	Elementary French 01
FRSL 207D2	(3)	Elementary French 01
FRSL 211D1	(3)	Oral and Written French 1
FRSL 211D2	(3)	Oral and Written French 1
MATH 111	(3)	Mathematics for Education Students
RELG 207	(3)	Introduction to the Study of Religions
WCOM 250	(3)	Research Essay and Rhetoric

# Required Courses (87 credits)

EDEC 201	(1)	First Year Professional Seminar
EDEC 203	(3)	Communication in Education
EDEC 215	(0)	English Exam for Teacher Certification
EDEC 233	(3)	Indigenous Education
EDEC 247	(3)	Policy Issues in Quebec and Indigenous Education
EDEC 253	(1)	Second Professional Seminar (Kindergarten/Elementary)
EDEC 262	(3)	Media, Technology and Education
EDEC 405	(3)	Fourth Year Professional Seminar (K/Elem)
EDEE 223	(3)	Language Arts
EDEE 230	(3)	Elementary School Mathematics 1
EDEE 253	(3)	Kindergarten Classroom Pedagogy
EDEE 260	(3)	Reading Methods - Kindergarten/Elementary
EDEE 270	(3)	Elementary School Science
EDEE 273	(3)	Elementary School Science 2
EDEE 280	(3)	Geography, History and Citizenship Education
EDEE 283	(3)	Social Studies Pedagogy
EDEE 332	(3)	Teaching Elementary Mathematics 2
EDEE 353	(3)	Third Year Professional Seminar (Kindergarten/Elementary)
EDEE 355	(3)	Classroom-based Evaluation
EDER 320	(3)	Visions and Realities of Jewish Education
EDER 360	(2)	Ethics and Religious Culture (K/Elementary)
EDFE 200	(2)	First Field Experience (K/Elem and Secondary)
EDFE 256	(3)	Second Field Experience (Kindergarten/Elementary)
EDFE 306	(8)	Third Field Experience (Kindergarten/Elementary)
EDFE 406	(7)	Fourth Field Experience (K/Elem)
EDPE 300	(3)	Educational Psychology
EDPI 309	(3)	Diverse Learners
EDPI 341	(3)	Instruction in Inclusive Schools
JWST 211	(3)	Jewish Studies 1: Biblical Period

# Complementary Courses (30 credits)

# **Equity Education**

### 3 credits from:

EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice

#### Teaching Methods (12 credits)

reacting methods (12 credits)		
3 credits from:		
EDEA 332	(3)	Art Curriculum and Instruction - Elementary
EDEA 342	(3)	Curriculum and Instruction in Drama Education
EDEA 345	(3)	Music Curriculum and Instruction for Generalists
9 credits from:		
EDER 252	(3)	Understanding and Teaching Jewish Life
EDER 318	(3)	Teaching the Jewish Liturgy
EDER 319	(3)	Teaching the Holocaust
EDER 401	(3)	Teaching Biblical Literature - Jewish School 1

## Kindergarten and Elementary - Subject Area: Jewish Studies (15 credits)

In consultation with the Jewish Studies option Program Adviser, students select 15 credits from the undergraduate course offerings of the Department of Jewish Studies, Faculty of Arts.

# Electives (3 credits)

# 5.8.2.14.1 B.Ed. Kindergarten and Elementary Program (Jewish Studies Option)

Students who wish to follow this option should contact:

Professor Eric Caplan Department of Integrated Studies in Education

Faculty of Education Telephone: 514-398-6544 Email: eric.caplan@mcgill.ca

Bac

Students should contact advisedise.education@mcgill.ca to indicate their Competency	r desire to transfer into this major and will need to provide proof of French Language

### **Complementary Courses (12 credits)**

12 credits selected as described below:

#### **Equity Education**

3 credits from:

EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice

#### **Ethics and Religious Culture**

3	credits	from:
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EDER 309	(3)	The Religious Quest
RELG 204	(3)	Judaism, Christianity and Islam
RELG 207	(3)	Introduction to the Study of Religions
RELG 309	(3)	World Religions and Cultures They Create
RELG 341	(3)	Introduction: Philosophy of Religion

#### French

6 credits selected from courses with a FREN or FRSL (400 level, except FRSL 407 or FRSL 408) prefix, QCST 336 or POLI 336, in consultation with an adviser and in keeping with individual student's French background.

## **Elective Courses (6 credits)**

The following courses are suggested:

EDEA 332	(3)	Art Curriculum and Instruction - Elementary
EDEA 342	(3)	Curriculum and Instruction in Drama Education
EDEA 345	(3)	Music Curriculum and Instruction for Generalists
EDEE 325	(3)	Children's Literature
EDKP 332	(3)	Physical Education Curriculum and Instruction
EDSL 501	(0)	Attestation de maîtrise langue française
MATH 111	(3)	Mathematics for Education Students

# 5.8.2.16 Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary (120 credits)

The Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120-credit program) for a total of 150 credits.

The program includes studies in language and language learning from linguistic, literary, social, cultural, and psychological perspectives, accompanied by field experiences. It prepares students to teach English as a Second Language (ESL) at both the elementary school level (including regular and intensive ESL) and the secondary school level elementary slum and Instructand the secondary sp and Iosu046 238ALAlemesh as and Language (ES1 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as and Language (ESI 0 0 1 353.18 2204.econdary sp and Iosu046 238ALAlemesh as a sp and Iosu046 238ALAlemesh

The Freshman year is the time to take introductory-level courses in the subject field, as well as to explore areas that are not normally taken as academic subjects within B.Ed. programs (e.g., Sociology, Psychology, Political Science, etc.). Students should also investigate the possibility of taking one of the First Year Seminar courses offered by the Faculty of Arts or the Faculty of Science.

In consultation with the Program Adviser, students may select courses from the recommended course list below or other courses. Included in the list are several French Second Language (FRSL) courses for which placement tests are required to determine the appropriate level. In Quebec, ESL is taught within the French school system. Thus, proficiency in French is an asset for student teaching placements, and is a requirement for employment in Quebec.

Other language courses (selected from CLAS Greek/Latin; EAST Korean/Chinese/Japanese; GERM German; HISP Spanish, ISLA Arabic; ITAL Italian; RUSS Russian/Polish) are also good choices for the Freshman year.

EDEC 203	(3)	Communication in Education
EDEE 325	(3)	Children's Literature
EDEM 220	(3)	Contemporary Issues in Education
ENGL 201	(3)	Survey of English Literature 2
FRSL 101	(3)	Beginners French 1
FRSL 102	(3)	Beginners French 2
FRSL 207D1	(3)	Elementary French 01
FRSL 207D2	(3)	Elementary French 01
FRSL 211D1	(3)	Oral and Written French 1
FRSL 211D2	(3)	Oral and Written French 1
LING 200	(3)	Introduction to the Study of Language
LING 201	(3)	Introduction to Linguistics

#### Required Courses (90 credits)

EDEC 215	(0)	English Exam for Teacher Certification
EDEC 233	(3)	Indigenous Education
EDEC 247	(3)	Policy Issues in Quebec and Indigenous Education
EDEC 260	(3)	Philosophical Foundations
EDEC 262	(3)	Media, Technology and Education
EDES 350	(3)	Classroom Practices
EDES 361	(3)	Teaching Secondary English 1
EDFE 209	(2)	First Field Experience (TESL)
EDFE 255	(3)	Second Field Experience (TESL)
EDFE 359	(8)	Third Field Experience (TESL)
EDFE 459	(7)	Fourth Field Experience (TESL)
EDPE 300	(3)	Educational Psychology
EDPI 309	(3)	Diverse Learners
EDPI 341	(3)	Instruction in Inclusive Schools
EDSL 210	(1)	First Professional Seminar
EDSL 215	(3)	Communication in Education for TESL in Quebec
EDSL 254	(1)	Second Professional Seminar (TESL)
EDSL 300	(3)	Foundations of L2 Education
EDSL 304	(3)	Sociolinguistics and L2 Education
EDSL 305	(3)	L2 Learning: Classroom Settings
EDSL 311	(3)	Pedagogical Grammar
EDSL 315	(2)	Third Year Professional Seminar

EDSL 330	(3)	Literacy 1:Teaching Reading in ESL
EDSL 332	(3)	Literacy 2: Teaching Writing in ESL
EDSL 334	(3)	Teaching Oral Skills in ESL
EDSL 350	(3)	Essentials of English Grammar
EDSL 412	(3)	Assessment in TESL
EDSL 415	(3)	Fourth Professional Seminar
EDSL 447	(3)	Methods in TESL 1
EDSL 458	(3)	Methods in TESL 2

# **Complementary Courses (24 credits)**

24 credits selected as described below:

3	credits	from:	

FRSL OR:

3 credits from:		
EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice
3 credits from:		
EDEA 332	(3)	Art Curriculum and Instruction - Elementary
EDEA 342	(3)	Curriculum and Instruction in Drama Education
EDEA 345	(3)	Music Curriculum and Instruction for Generalists
EDKP 332	(3)	Physical Education Curriculum and Instruction
3 credits from:		
LING 200	(3)	Introduction to the Study of Language
LING 201	(3)	Introduction to Linguistics
3 credits* from:		

Le français littéraire (franç

Foreign language courses (0-6 credits)

Other Complementary courses (0-6 credits)

### Electives (6 credits)

6 credits

# 5.8.2.17 Bachelor of Education (B.Ed.) - Teaching English as a Second Language - TESL Elementary and Secondary: Teaching Greek Language & Culture (120 credits)

This program requires 120 credits and leads to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120-credit program) for a total of 150 credits.

The program includes studies in language and language learning from linguistic, literary, social, cultural, and psychological perspectives, accompanied by field experiences. It prepares students to teach English as a Second Language (ESL) at both the elementary school level (including regular and intensive ESL) and the secondary school level (including regular ESL and ESLA - English Second Language Arts), and provides a base for adult and other ESL teaching. This program also prepares students to teach in Hellenic school settings. Students are encouraged to participate in a 'study away' semester in Greece.

Please note that graduates of teacher education programs are recommended by the University to the Quebec Ministry of Education for Quebec teacher certification. For more information about teacher certification in Quebec, please refer to the Faculty of Education section under "Overview of Faculty Programs", "Under

EDEC 247	(3)	Policy Issues in Quebec and Indigenous Education
EDEC 260	(3)	Philosophical Foundations
EDEC 262	(3)	Media, Technology and Education
EDES 350	(3)	Classroom Practices
EDFE 209	(2)	First Field Experience (TESL)
EDFE 255	(3)	Second Field Experience (TESL)
EDFE 359**	(8)	Third Field Experience (TESL)
EDFE 459**	(7)	Fourth Field Experience (TESL)
EDPE 300	(3)	Educational Psychology
EDPI 309	(3)	Diverse Learners
EDPI 341	(3)	Instruction in Inclusive Schools
EDSL 210	(1)	First Professional Seminar
EDSL 215	(3)	Communication in Education for TESL in Quebec
EDSL 254	(1)	Second Professional Seminar (TESL)
EDSL 300	(3)	Foundations of L2 Education
EDSL 304	(3)	Sociolinguistics and L2 Education
EDSL 305	(3)	L2 Learning: Classroom Settings
EDSL 311	(3)	Pedagogical Grammar
EDSL 315	(2)	Third Year Professional Seminar
EDSL 330	(3)	Literacy 1:Teaching Reading in ESL
EDSL 332	(3)	Literacy 2: Teaching Writing in ESL
EDSL 334	(3)	Teaching Oral Skills in ESL
EDSL 350	(3)	Essentials of English Grammar
EDSL 412	(3)	Assessment in TESL
EDSL 415	(3)	Fourth Professional Seminar
EDSL 447	(3)	Methods in TESL 1
EDSL 458	(3)	Methods in TESL 2

<sup>\*</sup> Note: Offered every 3rd year (alternating with CLAS 333, 335).

# **Complementary Courses (30 credits)**

30 credits selected as described below:

3	credits	from:
3	credits	пош

EDEC 248	(3)	Equity and Education
EDEC 249	(3)	Global Education and Social Justice
3 credits from:		
EDEA 332	(3)	Art Curriculum and Instruction - Elementary
EDEA 342	(3)	Curriculum and Instruction in Drama Education
EDEA 345	(3)	Music Curriculum and Instruction for Generalists
EDKP 332	(3)	Physical Education Curriculum and Instruction

<sup>\*\*</sup> Note: At least one of these Field Experiences must be completed in a Hellenic school.

3 credits from:		
LING 200	(3)	Introduction to the Study of Language
LING 201	(3)	Introduction to Linguistics
3 credits from* FRSL		
or		
FREN 201	(3)	Le français littéraire (français langue seconde)

(3)

Analyse de textes (français langue seconde)

The time limit for completion of the 60-credit Certificate in Education for First Nations and Inuit is 12 years. The University reserves the right to request that a student retake a course or courses after a five-year period if it is felt that too long a break has occurred in the ongoing nature of the training.

# Required Courses (27 credits)

EDEC 201	(1)	First Year Professional Seminar
EDEC 203	(3)	Communication in Education
EDEC 253	(1)	Second Professional Seminar (Kindergarten/Elementary)
EDEM 502	(3)	Indigenous Family Dynamics and Supporting Institutions
EDFE 200	(2)	First Field Experience (K/Elem and Secondary)
EDFE 256	(3)	Second Field Experience (Kindergarten/Elementary)
EDFE 306	(8)	Third Field Experience (Kindergarten/Elementary)
EDPE 300	(3)	Educational Psychology
EDPI 341	(3)	Instruction in Inclusive Schools

## Complementary Courses (33 credits)

6 credits from the following language courses according to language group and fluency:

la			

EDEC 270	(3)	Algonquin Heritage Language 1
EDEC 271	(3)	Algonquin Heritage Language 2
EDEC 272	(3)	Algonquin Language 1
EDEC 273	(3)	Algonquin Language 2
Cree		
EDEC 241	(3)	Cree Language 1

(3)

## Inuktitut

EDEC 242

EDEC 289	(3)	Inuktitut Orthography and Grammar
EDEC 342	(3)	Intermediate Indigenous Language
EDEC 344	(3)	Advanced Indigenous Language

Cree Language 2

## Mi'gmaw

EDEC 237	(3)	Mi'gmaw Heritage Language 1
EDEC 238	(3)	Mi'gmaw Heritage Language 2
EDEC 239	(3)	Mi'gmaw Language 1
EDEC 240	(3)	Mi'gmaw Language 2

## Mohawk

EDEC 275	(3)	Mohawk Heritage Language 1
EDEC 276	(3)	Mohawk Heritage Language 2
EDEC 277	(3)	Mohawk Language 1
EDEC 278	(3)	Mohawk Language 2

EDKP 494	(3)	Physical Education Curriculum Development
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and 6 credits from the following Physical Education courses:

EDKP 214	(2)	Basketball
EDKP 217	(3)	Track and Field
EDKP 218	(2)	Volleyball
EDKP 223	(3)	Games 1: Elementary Physical Education
EDKP 229	(1)	Ice Hockey 1

## Stream C: Culture and Language

27 credits from the following list	2.7	credits	from	the	fol!	lowing	list	
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27 credits from	the following list.	
EDEA 242	(3)	Cultural Skills 1
EDEA 243	(3)	Cultural Skills 2
EDEA 244	(3)	Cultural Skills - Fall
EDEA 245	(3)	Cultural Skills - Winter
EDEA 246	(3)	Cultural Skills - Spring
EDEA 247	(3)	Cultural Skills - Summer
EDEC 263	(3)	Information Communication Technology in Indigenous Literacy
EDEC 342	(3)	Intermediate Indigenous Language
EDEC 344	(3)	Advanced Indigenous Language
EDEE 230	(3)	Elementary School Mathematics 1
EDEE 245	(3)	Orientation to Education
EDEE 248	(3)	Reading and Writing Inuktitut/Cree
EDEE 270	(3)	Elementary School Science
EDEE 283	(3)	Social Studies Pedagogy
EDEE 332	(3)	Teaching Elementary Mathematics 2
EDEE 347	(3)	Grammar and Composition 1
EDEE 348	(3)	Grammar and Composition 2
EDEE 353	(3)	Third Year Professional Seminar (Kindergarten/Elementary)
EDEE 355	(3)	Classroom-based Evaluation
EDEE 370	(3)	Traditional Indigenous Life Skills
EDEE 371	(3)	Integrating Indigenous Storytelling and Creative Writing
EDEE 373	(3)	Traditional Healing
EDEE 383	(3)	Oral and Family History
EDKP 241	(3)	Indigenous Physical Activities

## 5.8.3.2.1 Admission to the Certificate in Education for First Nations and Inuit

Those intending to complete the program offered in cooperation with the Kativik Ilisarniliriniq must be fluent and literate in Inuktitut/Inuinnaqtun. Fluency in Algonquin, Cree, Mi'gmaw, Mohawk, or Naskapi is not a condition for acceptance for applicants from these communities, but is considered an asset. Courses are available in some of these languages for those teaching in immersion classes and other teaching situations where a knowledge of the first language is essential.

An applicant will normally be employed as a teacher or as a classroom assistant, have a valid teaching authorization from the appropriate teaching authority or a community education committee, be recommended by the school principal and an officer of the education authority, be recommended by a local community education committee, and be at least 21 years of age. Younger applicants will be considered for admission if they hold a Grade 12 Secondary School Diploma or a Diploma of Collegial Studies. The right of final decision for acceptance of candidates rests with McGill.

## 5.8.3.3 Certificate (Cert.) First Nations and Inuit Student Personnel Services (30 credits)

This program is offered by the Department of Educational and Counselling Psychology through Office First Nations and Inuit Education.

This 30-credit program is designed to provide Indigenous school personnel advisers with a training program that will enable them to learn about the principles and practice of personnel services as generally applied in educational settings, to help Indigenous student personnel advisers develop their personal skills, and to modify or adapt their services and the content to best suit the cultural and educational needs of Indigenous students; to encourage Indigenous student personnel advisers to take leadership in developing educational programs that address the social needs of their communities, to upgrade their academic qualifications and professional development; and to develop and make available, in English and in the languages of instruction, collections of professional and scholarly knowledge about students' needs, and services in Indigenous communities.

# **Complementary Courses (12 credits)**

12 credits from the list below or any other course approv

EDEA 242	(3)	Cultural Skills 1
EDEC 220	(3)	Curriculum Development
EDEC 403	(3)	The Dialects of Inuktitut
EDEE 223	(3)	Language Arts
EDEE 240	(3)	Use and Adaptation of Curricula
EDEE 243	(3)	Reading Methods in Inuktitut/Cree
EDEE 248	(3)	Reading and Writing Inuktitut/Cree
EDEE 345	(3)	Literature and Creative Writing 1
EDEE 346	(3)	Literature and Creative Writing 2
EDEE 347	(3)	Grammar and Composition 1
EDEE 348	(3)	Grammar and Composition 2
EDEE 373	(3)	Traditional Healing
EDEE 383	(3)	Oral and Family History
EDES 365	(3)	Experiences in Communications
EDPE 304	(3)	Measurement and Evaluation

### Electives (6 credits)

6 credits of suitable courses approved by the Director of Programs in First Nations and Inuit Education.

## 5.8.3.6.1 Admission to the Certificate in Indigenous Language and Literacy Education

Students admitted to this program will be recommended by their communities. If the program is used for professional development, students will be Indigenous teachers employed in local schools. They must be mature students, or hold a Secondary V diploma or equivalent. The right of final decision for acceptance of candidates rests with McGill.

Certificate (Cert.) Inc

Other courses may be approved by the Program Director. Further information may be obtained by emailing ecpundergrad.education@mcgill.ca. Courses listed above are not necessarily offered on a regular basis. Check Minerva for course availability.

#### **Adjunct Professors**

Philippe Dixon; Kazi Jamil

#### 5.8.4.4 Bachelor of Education (B.Ed.) - Physical and Health Education (120 credits)

The Bachelor of Education (B.Ed.) - Physical and Health Education is a 120-credit program leading to teacher certification. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the B.Ed. must also complete a minimum of 30 credits of Freshman courses (in addition to the 120 credit program) for a total of 150 credits.

The Physical and Health Education program prepares students to teach physical and health education at the elementary and secondary levels. In a unique structure interweaving academic studies, professional course work, and teaching practices over the course of study, students are rapidly given the opportunity to assume a teaching role; the extent of teaching involvement and expectations progressively building on additional academic and professional courses.

Please note that graduates of teacher education programs are recommended by the Uni

EDKP 293	(3)	Anatomy and Physiology
EDKP 307	(3)	Evaluation in Physical Education
EDKP 330	(3)	Physical Activity and Public Health
EDKP 342	(3)	Physical Education Methods
EDKP 391	(3)	Physiology in Sport and Exercise
EDKP 394	(3)	Historical Perspectives
EDKP 396	(3)	Adapted Physical Activity
EDKP 442	(3)	Physical Education Pedagogy
EDKP 443	(3)	Research Methods
EDKP 448	(3)	Exercise and Health Psychology
		Physical Education Curriculum Dev

MGPO 364	(3)	Entrepreneurship in Practice
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## **Complementary Courses (6 credits)**

6 credits from the following:

BUSA 465	(3)	Technological Entrepreneurship
EDKP 302	(3)	Kinesiology Clinic Internship 1
MGPO 438	(3)	Social Entrepreneurship and Innovation
MIMM 387	(3)	The Business of Science

# 5.8.4.6 Bachelor of Science (Kinesiology) (B.Sc.(Kinesiology)) - Kinesiology (90 credits)

The B.Sc.(Kinesiology) is a 90-credit program. Students who have not completed Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies are normally enrolled in a four-year B.Sc.(Kinesiology) program, which includes a 30-credit Freshman year for a total ear0M.Tjresr2udi2cte, O3)The rediology)) - nesioloinesio1 Tmrehense year of uni247.737e, O3)

MATH 141	(4)	Calculus 2
MATH 151	(4)	Calculus B

# One of the following Winter term PHYS courses:

PHYS 102	(4)	Introductory Physics - Electromagnetism
PHYS 142	(4)	Flectromagnetism and Ontics

# Required Courses (51 credits)

ANAT 315	(3)	Clinical Human Musculoskeletal Anatomy
ANAT 316	(3)	Clinical Human Visceral Anatomy
EDKP 206	(3)	Biomechanics of Human Movement
EDKP 215	(0)	Standard First Aid/Cardio-Pulmonary Resuscitation Level C
EDKP 250	(3)	Introductory Principles in Applied Kinesiology
EDKP 261	(3)	Motor Development
EDKP 292	(3)	Nutrition and Wellness
EDKP 330	(3)	Physical Activity and Public Health
EDKP 350	(3)	Physical Fitness Evaluation Methods
EDKP 395	(3)	Exercise Physiology
EDKP 396	(3)	Adapted Physical Activity
EDKP 443	(3)	Research Methods
EDKP 447	(3)	Motor Control
EDKP 448	(3)	Exercise and Health Psychology
EDKP 450	(3)	Advanced Principles in Applied Kinesiology
EDKP 498	(3)	Sport Psychology
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

## Complementary Courses (15-24 credits)

# 3 credits from Statistics:

BIOL 373	(3)	Biometry
EDPE 375	(3)	Introductory Statistics
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics
SOCI 350	(3)	Statistics in Social Research

## 3 credits from Psychosocial:

EDKP 394	(3)	Historical Perspectives
EDKP 405	(3)	Sport in Society
EDKP 548	(3)	Applied Exercise Psycholog

0-6 credits from Internships/Practicums:

MATH 139	(4)	Calculus 1 with Precalculus	
MATH 140	(3)	Calculus 1	
MATH 150	(4)	Calculus A	
In consultation with a progra	m adviser, one of	the following Fall term PHYS courses:	
PHYS 101	(4)	Introductory Physics - Mechanics	
PHYS 131	(4)	Mechanics and Waves	
Winter term BIOL and CHE	M courses:		
BIOL 112	(3)	Cell and Molecular Biology	
CHEM 120	(4)	General Chemistry 2	
One of the following Winter term MATH courses:			
MATH 141	(4)	Calculus 2	
MATH 151	(4)	Calculus B	
One of the following Winter	term PHYS cours	ses:	
PHYS 102	(4)	Introductory Physics - Electromagnetism	
PHYS 142	(4)	Electromagnetism and Optics	
Required Courses (60 credits)			
AN	(3)	Clinical Human Musculoskeletal Anatomy	

PHGY 210	(3)	Mammalian Physiology 2			
Complementary Courses					
15-24 credits					
3 credits of Statistics from	1:				
BIOL 373	(3)	Biometry			
MATH 203	(3)	Principles of Statistics 1			
PSYC 204	(3)	Introduction to Psychological Statistics			
SOCI 350	(3)	Statistics in Social Research			
3 credits of Psychosocial t	from:				
EDKP 394	(3)	Historical Perspectives			
EDKP 405	(3)	Sport in Society			
EDKP 548	(3)	Applied Exercise Psychology			
PSYC 471	(3)	Human Motivation			
0-6 credits of Internships/	Practicum from:				
EDKP 301	(3)	Kinesiology Internship 1			
EDKP 401	(3)	Kinesiology Internship 2			
EDKP 451	(3)	Personal Trainer Practicum			
EDKP 453	(3)	Research Practicum in Kinesiology			
3 credits of Biomechanics	/Motor Learning t	from:			
EDKP 444	(3)	Ergonomics			
EDKP 446	(3)	Physical Activity and Ageing			
EDKP 566	(3)	Advanced Biomechanics Theory			
POTH 434	(3)	Musculoskeletal Biomechanics			
6 credits of Exercise Phys	iology from:				
EDKP 445	(3)	Exercise Metabolism			
EDKP 449	(3)	Neuromuscular and Inflammatory Pathophysiology			
EDKP 485	(3)	Cardiopulmonary Exercise Pathophysiology			
EDKP 495	(3)	Scientific Principles of Training			
EDKP 542	(3)	Environmental Exercise Physiology			
PHGY 314	(3)	Integrative Neuroscience			
0-3 credits of Nutrition fro	om:				
NUTR 344	(4)	Clinical Nutrition 1			
NUTR 503	(3)	Nutrition and Exercise			

### **Elective Courses**

6-15 credits of any 200-level or higher courses, chosen in consultation with the Student Adviser.

# 6 Faculty of Engineering

### 6.1 About the Faculty of Engineering

The Faculty currently includes six engineering departments and two schools, and houses three institutes:

### **Departments**

Bioengineering

Chemical Engineering

Civil Engineering

Electrical and Computer Engineering

Mechanical Engineering

Mining and Materials Engineering

#### **Schools**

The Peter Guo-hua Fu School of Architecture

**Urban Planning** 

### Institutes

 $Trottier\ Institute\ for\ Sustainability\ in\ Engineering\ and\ Design\ (TISED)\ (Website:\ \textit{mcgill.ca/tised})$ 

McGill Institute for Advanced Materials (MIAM) (Website: mcgill.ca/miam) (established by the Faculties of Engineering and Science)

McGill Institute for Aerospace Engineering (MIAE) (Website: mcgill.ca/miae)

The Faculty serves approximately 3,300 undergraduate students and 1,300 graduate students in a wide variety of academic programs.

**Undergraduate programs** leading to professional bachelor's degrees are offered in all Engineering departments. These programs are designed to qualify graduates for immediate employment in a wide range of industries and for membership in the appropriate professional bodies. Additionally, a non-professional undergraduate degree is offered in the Sf4aduanal bachelor's de

For a detailed history of the Faculty from 1811 to 2003, see mcgill.ca/engineering/about-us/our-history.

Frank Dawson Adams Building, Suite 22

### **Associate Director, Student Affairs**

Nancy Lewis

### 6.6 Degrees and Requirements for Professional Registration

### Non-Professional

Bachelor of Science (Architecture)

The first professional degree in architecture is the Master of Architecture (Professional). Further information can be found in *Faculty of Engineering* > *Graduate*.

### **Professional**

Bachelor of Engineering

The B.Eng. programs are accredited by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada. Our accredited programs fulfil the **academic** requirements for admission to the provincial engineering professional organizations. Engineers Canada has also negotiated agreements with engineering organizations in other countries to grant Canadian licensed engineers the same privileges accorded to professional engineers in those countries. For more information, visit the Engineers Canada website at <a href="https://www.engineerscanada.ca">www.engineerscanada.ca</a>.

To become a professional engineer in Canada, a graduate must pass an examination on legal aspects and on the principles of professional practice, and acquire two to four years of engineering experience, depending on the province. Only persons duly registered may use the title "engineer" and perform the professional activities reserved for engineers by provincial laws and regulations.

In Quebec, the professional engineering body is the *Ordre des ingénieurs du Québec* (OIQ). In order to better prepare new graduates for the practice of their profession, McGill organizes seminars in cooperation with the OIQ on various aspects of the profession. The OIQ also has a student section. For more information, visit the OIQ website at <a href="https://www.oiq.qc.ca">www.oiq.qc.ca</a>.

# 6.7 Admission Requirements

# 6.10 Degrees and Programs Offered

### **Internship Program**

Engineering Internship Program

### **Co-op Programs**

Materials Engineering (B.Eng.)

Mining Engineering (B.Eng.)

Software Engineering (B.Eng)

### **Major Programs**

Architecture (B.Sc.(Arch.))

Bioengineering (B.Eng.)

Chemical Engineering (B.Eng.)

Civil Engineering (B.Eng.)

Computer Engineering (B.Eng.)

Electrical Engineering (B.Eng.)

Materials Engineering (B.Eng.)

Mechanical Engineering (B.Eng.)

Mining Engineering (B.Eng.)

### **Honours Programs**

Electrical Engineering (B.Eng.)

Mechanical Engineering (B.Eng.)

### Minors

Aerospace Engineering

Applied Artificial Intelligence

Arts

Biomedical Engineering

Biotechnology

Chemistry

Computer Science

Construction Engineering and Management

Economics

Environment

**Environmental Engineering** 

Management Minors: Minor in Finance, Minor in Management, Minor in Marketing, Minor in Operations Management

Materials Engineering

Mathematics

Mining Engineering

Musical Science and Technology

Nanotechnology

Physics

Software Engineering

#### Minors

Technological Entrepreneurship

## 6.11 Engineering Internship Program

Real world experiences await.

What is the EIP?

The McGill Engineering Internship Program (EIP) offers full-time undergraduate engineering students in non co-op degree programs the possibility of participating in industry-related internships and having their experiences formally recognized. With an increasing number of employers requiring applicants to be part of a formal university coop/internship program, the EIP enables non co-op students to be eligible and apply to those internship opportunities.

## 6.11.1 Eligibility Criteria

- Students must be registered full-time in their degree program before the proposed internship term and must be returning to full-time studies following
  the completion of the internship.
- Internships must meet a standard durational requirement of 4, 8, 12, or 16 months.
- Internships must be considered full-time (at least 35 hours per week).
- Internships must be a paid position with a salary based on the student's experience and level of study; unpaid internships are not eligible.
- Internships must be related to the student's degree program.
- International students are also eligible, but will require a co-op work permit to participate.
- Students cannot miss more than two academic terms for internships.
- Students may be eligible to pursue one academic course (maximum of 4 credits) while on an approved internship term, pending certain conditions.

### 6.12 Browse Academic Units & Programs

The programs and courses in the following sections have been approved for the 2023-2024 session as listed.

### 6.12.1 Architecture

#### 6.12.1.1 Location

Macdonald-Harrington Building, Room 201 815 Sherbrooke Street West Montreal QC H3A 0C2 Telephone: 514-398-6700

Fax: 514-398-7372

Website: mcgill.ca/architecture

#### 6.12.1.2 About the Peter Guo-hua Fu School of Architecture

Founded in 1896, the Peter Guo-hua Fu School of Architecture at McGill Uni

engages citizens' groups, local, provincial, and national governments, the private sector, and the profession toward the improvement of the built
environment.

### 6.12.1.3 Architectural Certification in Canada

In Canada, all provincial/territorial associations/institutes/orders recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the **Master of Architecture** (**M.Arch.**), and the **Bachelor of Architecture** (**B.Arch.**). A program may be granted a two-year, three-year, or six-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The M.Arch. (Professional) degree is accredited by the Canadian Architectural Certification Board (CACB), and is recognized as accredited by the National Council of Architectural Registration Boards (NCARB) in the United States.

### 6.12.1.4 Programs of Study

Students in the B.Sc.(Arch.) program who intend to proceed to the professional degree must satisfy certain minimum requirements. Students must:

- complete the B.Sc.(Arch.) degree, including the series of required and complementary courses stipulated for professional studies, with a minimum CGPA
  of 3.00. Please note that the minimum CGPA requirement does not guarantee entry into M.Arch program;
- submit a portfolio of work executed in the sequence of six design studios, as well as samples of professional and personal work; and
- complete the minimum period of relevant work experience according to the current Work Experience Guidelines (see <a href="http://www.mcgill.ca/architecture/programs/professional/workexperience">http://www.mcgill.ca/architecture/programs/professional/workexperience</a>).

Further information on the M.Arch. (Professional) program and application procedures is available at *mcgill.ca/architecture/programs/professional/prospective-students/application-procedures*.

### 6.12.1.4.1 Student Exchanges

A limited number of qualified students may participate in an exchange with schools of architecture at other universities that have agreements with the McGillities that ha

**Graduate Program Director** 

 $13\ credits\ from\ among\ any\ 100-\ or\ 200-level\ courses\ with\ the\ subject\ codes\ of\ AFRI\ (African\ Studies),\ ANTH\ (Anthropology),\ AR$ 

ARCH 520	(3)	Montreal: Urban Morphology
ARCH 523	(3)	Significant Texts and Buildings
ARCH 525	(3)	Seminar on Analysis and Theory
ARCH 526	(3)	Philosophy of Structure
ARCH 528	(3)	History of Housing
ARCH 531	(3)	Architectural Intentions Vitruvius - Renaissance
ARCH 532	(3)	Origins of Modern Architecture
ARCH 535	(3)	History of Architecture in Canada
ARCH 536	(3)	Heritage Conservation
ARCH 540	(3)	Selected Topics in Architecture 1
ARCH 541	(3)	Selected Topics in Architecture 2
ARCH 542	(3)	Selected Topics in Architecture 3
ARCH 543	(3)	Selected Topics in Architecture 4
ARCH 564	(3)	Design for Development
ARCH 566	(3)	Cultural Landscapes Seminar

# **Elective Courses (9 credits)**

9 credits of elective courses outside the School of Architecture must be completed, subject to approval by the Student Adviser.

# 6.12.2 Bioengineering

# 6.12.2.1 Location

McConnell Engineering Building

Room 350

3480 University Street Montreal QC H3A 0E9 Telephone: 514-398-3647 Fax: 514-398-7379

Email: studentaffairs.bioeng@mcgill.ca

Website20.982 Tm(studentaf)Tj1 0 0 1 134.879 320.m.949 665.3(studenlircm(s.bioen 431.611 Tm(6.12.2)Tj279sern)Tj1Ab59 392.6DepCultural Landsca32.41279

#### **Associate Professors**

Allen Ehrlicher; Adam Hendricks; J. Matt Kinsella; Georgios Mitsis

#### Assistant Professors

Codruta Ignea; Sara Mahshid; Natalie Reznikov; Caroline Wagner

### 6.12.2.4 Bachelor of Engineering (B.Eng.) - Bioengineering (142 credits)

Program credit weight: 142-152 credits

Program credit weight for Quebec CEGEP students: 122-123 credits Program credit weight for out-of-province students: 142-143 credits

The B.Eng.; Major in Bioengineering will 1) provide students with the ability to apply systematic knowledge of biology, physical sciences and mathematics; and sound engineering foundations in order to solve problems of a biological nature; and 2) prepare students for the broad area of bioengineering, incorporating both biology-focused biological engineering and medicine-focused biomedical engineering.

Students will acquire fundamental knowledge in bioengineering-related natural sciences and mathematics, as well as in the foundations of general engineering and bioengineering. Students will also acquire knowledge in one area of specialization of bioengineering: 1) biological materials and biomechanics; 2) biomolecular and cellular engineering; or 3) biological information and computation

### Required Year 0 (Freshman) Courses

29 credits

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credits for Year 0 (Freshman) courses, except BIOL 112, and enter a 122-123-credit program. Students from Quebec CEGEPs who have successfully completed a course at CEGEP that is equivalent to BIOL 112 may obtain transfer credits for this course by passing the McGill Science Placement Exam for BIOL 112. For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels and Science Placement Exams, see www.mcgill.ca/engineering/student/sao/newstudents and select your term of admission.

BIOL 112	(3)	Cell and Molecular Biology
CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

### **Required Non-Departmental Courses**

CHEM 212**	(4)	Introductory Organic Chemistry 1
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
FACC 100*	(1)	Introduction to the Engineering Profession
FACC 250	(0)	Responsibilities of the Professional Engineer
FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
MATH 203	(3)	Principles of Statistics 1
MATH 262	(3)	Intermediate Calculus
MATH 263	(3)	Ordinary Differential Equations for Engineers
MATH 264	(3)	Advanced Calculus for Engineers
MECH 210	(2)	Mechanics 1

PHYS 319	(3)	Introduction to Biophysics	
WCOM 206	(3)	Communication in Engineering	

<sup>\*</sup> Note FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Bioengineering Courses**

40				
48	CT	0	1	tc

BIEN 200	(2)	Introduction to Bioengineering
BIEN 210	(3)	Electrical and Optical Properties of Biological Systems
BIEN 219	(4)	Introduction to Physical Molecular and Cell Biology

Bioanalytical Methods3 63s3 63121 Tm(Electric9 i.R)Tj6rg3.2in3 .96Tm((4)uirements.)TMeasu 1 363 Laboratorion to

<sup>\*\*</sup> Students from a CEGEP background who have completed a CEGEP course equivalent to CHEM 212 may obtain transfer credits for this course by passing the McGill Placement Exam before the start of their first term. For information on Science Placement Exams, see www.mcgill.ca/exams/dates/science. CEGEP students who do not successfully complete the CHEM 212 Placement Exam must take CHEM 212 at McGill, as outlined in the program requirements.

List B:		
BIEN 330	(3)	Tissue Engineering and Regenerative Medicine
BIEN 414	(3)	Fundamentals and Rheology of Biological Fluids
BIEN 450	(3)	Biological Structures and Assemblies
BIEN 462	(3)	Engineering Principles in Physiological Systems
BIEN 500	(3)	Special Topics in Bioengineering 1
BIEN 510	(3)	Engineered Nanomaterials for Biomedical Applications
BIEN 515	(3)	Special Topics in Bioengineering 2
BIEN 525	(3)	Special Topics in Bioengineering 3
BIEN 530	(3)	Imaging and Bioanalytical Instrumentation
BIEN 535	(3)	Electron Microscopy and 3D Imaging for Biological Materials
BIEN 545	(3)	Diagnostic Devices at the Point-of-Care
BIEN 550	(3)	Biomolecular Devices
BIEN 580	(3)	Synthetic Biology
BIEN 585	(3)	Metabolic Engineering
BMDE 503	(3)	Biomedical Instrumentation
BMDE 504	(3)	Biomaterials and Bioperformance
BMDE 505	(3)	Cell and Tissue Engineering
BMDE 512	(3)	Finite-Element Modelling in Biomedical Engineering
CHEE 563*	(3)	Biofluids and Cardiovascular Mechanics
CIVE 281	(3)	Analytical Mechanics
MECH 321	(3)	Mechanics of Deformable Solids
MECH 547	(3)	Mechanics of Biological Materials
MECH 561	(3)	Biomechanics of Musculoskeletal Systems
MECH 563*	(3)	Biofluids and Cardiovascular Mechanics
MECH 572	(3)	Mechanics and Control of Robotic Manipulators
MIME 470	(3)	Engineering Biomaterials
MIME 473	(3)	Introduction to Computational Materials Design
SEAD 515	(3)	Climate Change Adaptation and Engineering Infrastructure
SEAD 520	(3)	Life Cycle-Based Environmental Footprinting
SEAD 530	(3)	Economics for Sustainability in Engineering and Design
SEAD 540	(3)	Industrial Ecology and Systems
SEAD 550	(3)	Decision-Making for Sustainability in Engineering and Design

\*Note: Students may choose only one of CHEE 563 and MECH 563 Biofluids and Cardiovascular Mechanics

NOTE: Maximum 6 credits of SEAD courses are allowed.

# Stream 2: Biomolecular and Cellular Engineering (24-25 credits)

12 credits from List A

12-13 credits from List B

List A

BIEN 310 (3) Introduction to Biomolecular Engineering

BIEN 320	(3)	Molecular, Cellular and Tissue Biomechanics
BIEN 550	(3)	Biomolecular Devices
BIEN 590	(3)	Cell Culture Engineering
List B		
BIEN 330	(3)	Tissue Engineering and Regenerative Medicine
BIEN 410	(3)	Computational Methods in Biomolecular Engineering
BIEN 414	(3)	Fundamentals and Rheology of Biological Fluids
BIEN 450	(3)	Biological Structures and Assemblies
BIEN 462	(3)	Engineering Principles in Physiological Systems
BIEN 500	(3)	Special Topics in Bioengineering 1
BIEN 510	(3)	Engineered Nanomaterials for Biomedical Applications
BIEN 515	(3)	Special Topics in Bioengineering 2
BIEN 525	(3)	Special Topics in Bioengineering 3
BIEN 530	(3)	Imaging and Bioanalytical Instrumentation
BIEN 535	(3)	Electron Microscopy and 3D Imaging for Biological Materials
BIEN 540	(3)	Information Storage and Processing in Biological Systems
BIEN 545	(3)	Diagnostic Devices at the Point-of-Care
BIEN 570	(3)	Active Mechanics in Biology
BIEN 580	(3)	Synthetic Biology
BIEN 585	(3)	Metabolic Engineering
BMDE 503	(3)	Biomedical Instrumentation
BMDE 508	(3)	Introduction to Micro and Nano-Bioengineering
CIVE 281	(3)	Analytical Mechanics
CIVE 557	(3)	Microbiology for Environmental Engineering
PHYS 534	(3)	Nanoscience and Nanotechnology
SEAD 510	(4)	Energy Analysis
SEAD 515	(3)	Climate Change Adaptation and Engineering Infrastructure
SEAD 520	(3)	Life Cycle-Based Environmental Footprinting
SEAD 530	(3)	Economics for Sustainability in Engineering and Design
SEAD 540	(3)	Industrial Ecology and Systems
SEAD 550	(3)	Decision-Making for Sustainability in Engineering and Design

NOTE: Maximum 6 credits of SEAD courses are allowed.

# Stream 3:Biological Information and Computation (24-25 credits)

12 credits from List A

12-13 credits from List B

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BIEN 310	(3)	Introduction to Biomolecular Engineering
BIEN 410	(3)	Computational Methods in Biomolecular Engineering
BIEN 530	(3)	Imaging and Bioanalytical Instrumentation
BIEN 540	(3)	Information Storage and Processing in Biological Systems

List B		
BIEN 414	(3)	Fundamentals and Rheology of Biological Fluids
BIEN 450	(3)	Biological Structures and Assemblies
BIEN 462	(3)	Engineering Principles in Physiological Systems
BIEN 500	(3)	Special Topics in Bioengineering 1
BIEN 515	(3)	Special Topics in Bioengineering 2
BIEN 525	(3)	Special Topics in Bioengineering 3
BIEN 535	(3)	Electron Microscopy and 3D Imaging for Biological Materials
BIEN 545	(3)	Diagnostic Devices at the Point-of-Care
BIEN 580	(3)	Synthetic Biology
BIEN 585	(3)	Metabolic Engineering
BMDE 502	(3)	BME Modelling and Identification
BMDE 503	(3)	Biomedical Instrumentation
BMDE 512	(3)	Finite-Element Modelling in Biomedical Engineering
BMDE 519	(3)	Biomedical Signals and Systems
CIVE 281	(3)	Analytical Mechanics
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 462	(3)	Computational Biology Methods
COMP 551	(4)	Applied Machine Learning
ECSE 415	(3)	Introduction to Computer Vision
MATH 240	(3)	Discrete Structures
MECH 513	(3)	Control Systems
MECH 572	(3)	Mechanics and Control of Robotic Manipulators
SEAD 510	(4)	Energy Analysis
SEAD 515	(3)	Climate Change Adaptation and Engineering Infrastructure
SEAD 520	(3)	Life Cycle-Based Environmental Footprinting
SEAD 530	(3)	Economics for Sustainability in Engineering and Design
SEAD 540	(3)	Industrial Ecology and Systems
SEAD 550	(3)	Decision-Making for Sustainability in Engineering and Design

NOTE: Students in Stream 3 may only take one of the two 4 credit list B TCs (either COMP 551 or SEAD 510 or another 3 credit list B TC)

NOTE: Maximum 6 credits of SEAD courses are allowed.

# **Complementary Studies**

9 credits

# Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems

GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at www.mcgill.ca/importantdates.

### Group B - Humanities and Social Science, Management Studies and Law

Generally, students admitted to Engineering from Quebec CEGEP's are granted transfer credits for 3 credits (one course) from the Complementary Studies Group B list.

6 credits of courses at the 200-level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew)\*\*\*

School of Social Work (SWRK)

Sociology (excluding SOCI 350)

OR from the following courses:

ARCH 528	(3)	History of Housing
BUSA 465*	(3)	Technological Entrepreneurship
CLAS 203	(3)	Greek Mythology
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
FACC 220	(3)	Law for Architects and Engineers
FACC 500	(3)	Technology Business Plan Design
FACC 501	(3)	Technology Business Plan Project
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

 $*\ Note: Management\ courses\ have\ limited\ enrolment\ and\ registration\ dates.\ See\ Important\ Dates:\ www.mcgill.ca/important dates.$ 

The **B.Eng.** curriculum also provides the preparation necessary to undertake postgraduate studies leading to **M.Eng.**, **M.Sc.**, or **Ph.D.** degrees in Chemical Engineering. Students completing this curriculum acquire a broad, balanced education in the natural sciences with the accent on application. Thus, for those who do not continue in Chemical Engineering, it provides an exceptionally balanced education in applied science. For others, it will form the basis of an educational program that may continue with a variety of studies such as business administration, medicine, or law. Versatility is, therefore, one of the most valuable characteristics of Chemical Engineering program graduates.

#### 6.12.3.3 Academic Programs

The Chemical Engineering program comprises 143 credits (114 credits for those who completed the Quebec CEGEP program in Pure and Applied Sciences). Students must obtain a grade of C or better in all core courses. For the Department of Chemical Engineering, core courses include all required courses (departmental and non-departmental) as well as technical complementary courses.

### 6.12.3.4 Canadian Society for Chemical Engineering

The Chemical Engineering Student Society has for many years been affiliated with both the CSChE (Canadian Society for Chemical Engineering) which is one of the member societies of the Chemical Institute of Canada (CIC) and with the AIChE (American Institute of Chemical Engineers). CSChE membership is free for all full-time undergraduate students at McGill (www.cheminst.ca/membership/fees). CSChE and AIChE members gain access to a range of benefits, including registration rates at the Canadian Chemical Engineering Conference, as well as member rates in the American Chemical Society (ACS) and affiliated events. The student chapter also organizes a series of local social, educational, and sporting events. Recent events have included student—professor banquets, parties, speakers, broomball games, and joint e

Students must obtain a grade of C or better in all core courses. For the Department of Chemical Engineering, core courses include all required courses (departmental and non-departmental) as well as technical complementary courses.

# Note to CEGEP students

CHEE 231	(3)	Data Analysis and Design of Experiments
CHEE 291	(4)	Instrumentation and Measurement 1
CHEE 310	(3)	Physical Chemistry for Engineers
CHEE 314	(3)	Fluid Mechanics
CHEE 315	(3)	Heat and Mass Transfer
CHEE 351	(3)	Separation Processes
CHEE 370	(3)	Elements of Biotechnology
CHEE 380	(3)	Materials Science
CHEE 390	(3)	Computational Methods in Chemical Engineering
CHEE 400	(3)	Principles of Energy Conversion
CHEE 401	(3)	Energy Systems Engineering
CHEE 423	(3)	Chemical Reaction Engineering
CHEE 440	(3)	Process Modelling
CHEE 453	(4)	Process Design
CHEE 455	(3)	Process Control
CHEE 456D1	(4.5)	Design Project
CHEE 456D2	(4.5)	Design Project
CHEE 474	(3)	Biochemical Engineering
CHEE 484	(3)	Materials Engineering
CHEE 491	(4)	Instrumentation and Measurement 2

# **Technical Complementaries**

### 9 credits

The purpose of this requirement is to provide students with an area of specialization within the broad field of chemical engineering. Alternatively, students use the technical complementaries to increase the breadth of their chemical engineering training.

#### List A

# 3-9 credits from the following:

CHEE 301	(3)	Resource Recovery and Circular Use
CHEE 511	(3)	Catalysis for Sustainable Fuels and Chemicals
CHEE 512	(3)	Stem Cell Bioprocess Engineering
CHEE 515	(3)	Interface Design: Biomimetic Approach
CHEE 521+	(3)	Nanomaterials and the Aquatic Environment
CHEE 541	(3)	Electrochemical Engineering
CHEE 543	(3)	Plasma Engineering
CHEE 563+	(3)	Biofluids and Cardiovascular Mechanics
CHEE 582	(3)	Polymer Science and Engineering
CHEE 584	(3)	Polymer Processing
CHEE 585	(3)	Foundations of Soft Matter
CHEE 587	(3)	Chemical Processing: Electronics Industry
CHEE 591	(3)	Environmental Bioremediation
CHEE 593+	(3)	Industrial Water Pollution Control
CIVE 430+	(3)	Water Treatment and Pollution Control
CIVE 521+	(3)	Nanomaterials and the Aquatic Environment

MECH 534+	(3)	Air Pollution Engineering
MECH 563+	(3)	Biofluids and Cardiovascular Mechanics

- + Students may choose only one course in each of the following sets:
- CHEE 521 or CIVE 521
- CHEE 563 or MECH 563
- CHEE 593 or CIVE 430

# List B

# 0-6 credits from the following:

BIEN 550	(3)	Biomolecular Devices
BIOT 505*	(3)	Selected Topics in Biotechnology
BREE 325	(3)	Food Process Engineering
BREE 522	(3)	Bio-Based Polymers
CHEE 363**	(2)	Projects Chemical Engineering 1
CHEE 494**	(3)	Research Project and Seminar 1
	(4)	Research Project and Seminar 2

PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

# Group B - Humanities and Social Sciences, Management Studies and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (e

### 6.12.3.6.1 More about B.Eng. Degree in Chemical Engineering

Courses CHEE 582 and CHEE 584 comprise a **Polymeric Materials** course sequence, while courses CHEE 380 and CHEE 484 present fundamental aspects of materials science and engineering, respectively. Additional courses in the polymer materials area are available in the Chemistry Department (e.g., CHEM 574). The Department has considerable expertise in the polymer area.

Courses CHEE 370 and CHEE 474 make up a sequence in **Biochemical Engineering and Biotechnology**. Students interested in this area may take additional courses, particularly those offered by the *section 6.12.2: Bioengineering* (Faculty of Engineering); by the *section 2.7.4: Department of Food Science and Agricultural Chemistry* (Faculty of Agricultural and Environmental Sciences); and courses in biochemistry and microbiology. The food, beverage, and pharmaceutical industries are large industries in the Montreal area, and these courses are relevant to these industries and to the new high-technology applications of biotechnology.

A third sequence of courses is offered in **Energy**, comprising CHEE 400 Principles of Energy Conversion and CHEE 401 Energy Systems Engineering. Additional courses that offer topics related to energy are CHEE 511 Catalysis for Sustainable Fuels and Chemicals and CHEE 541 Electrochemical Engineering.

The fourth area in which there is a sequence of courses is **Pollution Control**. The Department offers three courses in this area: CHEE 521, CHEE 591, and CHEE 593. As some water pollution control problems are solved by microbial processes, course CHEE 474 is also relevant to the pollution control area. Additional courses in this area are listed in the *section 6.12.10.11: Bachelor of Engineering (B.Eng.) - Minor Environmental Engineering (21 credits)*.

A Minor in Biotechnology is also offered by the Faculties of Engineering and Science with emphasis on molecular biology and chemical engineering processes. A full description of the program appears in the section 6.12.10.5: Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) (24 credits).

**Note:** Many of the technical complementaries are offered only in alternate years. Students should, therefore, plan their complementaries as far ahead as possible. With the approv

- Environmental Engineering;
- Geotechnical and Geoenvironmental Engineering;
- Water Resources and Hydraulic Engineering;
- · Structural Engineering;
- Transportation Engineering.

Guidance on the sequence in which required core courses should be taken is provided for students in the form of a sample program which covers the entire period of study. The technical complementary courses selected, usually in the last two terms of the program, will depend upon the student's interests. All students must *meet with their adviser* each term to confirm the courses for which they are registered.

Courses taken in Term 3 or later will depend on a student's interests and ability. Information and advice concerning different possibilities are made available in the Department prior to registration. All programs require the approval of a staff adviser. Programs for students transferring into the Department with Advanced Standing will be dependent upon the academic credit previously achieved, and such a program will be established only after consultation with a staff adviser.

### 6.12.4.4 Civil Engineering Faculty

#### Chair

Mohamed A. Meguid

### Associate Chair (Student Affairs)

Jinxia Liu

#### **Emeritus Professors**

M. Saeed Mirza, Ghyslaine McClure, Denis Mitchell, Yixin Shao, Suresh C. Shrivastava

#### **Professors**

Vincent H. Chu, Luc E. Chouinard, Susan J. Gaskin, Subhasis Ghoshal, Mohamed A. Meguid, Van-Thanh-Van Nguyen, James Nicell, Colin Rogers, A. Patrick S. Selvadurai, Laxmi Sushama

#### **Associate Professors**

Andrew J. Boyd, Dominic Frigon (on sabbatical), Sarah Jordaan, Jinxia Liu, Luis Miranda-Moreno

#### **Assistant Professor**

Matiyas Bezabeh, Mary Kang, Stephanie Loeb, Daniele Malomo, Yi Shao, Lijun Sun, Yazhou (Tim) Xie

#### 6.12.4.5 Bachelor of Engineering (B.Eng.) - Civil Engineering (139 credits)

Program credit weight: 139 credits

Program credit weight for Quebec CEGEP students: 110 credits

The Civil Engineering program is comprehensive in providing the fundamentals in mechanics and engineering associated with the diverse fields of the profession, in offering choices of specialization, and in fully reflecting the advances in science, mathematics, engineering, and computing that have transformed all fields of engineering in recent years. The resulting knowledge and training enables graduates to not only enter the profession thoroughly well prepared, but also to adapt to further change.

CHEM 120	(4)	General Chemistry 2	
MATH 133	(3)	Linear Algebra and Geometry	
MATH 140	(3)	Calculus 1	
MATH 141	(4)	Calculus 2	
PHYS 131	(4)	Mechanics and Waves	
PHYS 142	(4)	Electromagnetism and Optics	

CIVE 324	(3)	Sustainable Project Management
CIVE 327	(4)	Fluid Mechanics and Hydraulics
CIVE 418	(4)	Design Project
CIVE 432	(1)	Technical Paper

# **Complementary Courses**

21 credits

# List A - Design Technical Complementaries

6-15 credits from the following:

CIVE 416	(3)	Geotechnical Engineering
CIVE 421	(3)	Municipal Systems
CIVE 428	(3)	Water Resources and Hydraulic Engineering
CIVE 430	(3)	Water Treatment and Pollution Control
CIVE 440	(3)	Traffic Engineering and Simulation
CIVE 462	(3)	Design of Steel Structures
CIVE 463	(3)	Design of Concrete Structures

# List B - General Technical Complementaries

 $0\mbox{-}9$  credits from the following, or from other suitable undergraduate or 500-level courses:

CHEE 521*	(3)	Nanomaterials and the Aquatic Environment
CIVE 446	(3)	Construction Engineering
CIVE 460	(3)	Matrix Structural Analysis
CIVE 470	(3)	Undergraduate Research Project
CIVE 512	(3)	Advanced Civil Engineering Materials
CIVE 520	(3)	Groundwater Hydrology
CIVE 521*	(3)	Nanomaterials and the Aquatic Environment
CIVE 527	(3)	Renovation and Preservation: Infrastructure
CIVE 540	(3)	Urban Transportation Planning
CIVE 542	(3)	Transportation Network Analysis
CIVE 546	(3)	Selected Topics in Civil Engineering 1
CIVE 550	(3)	Water Resources Management
CIVE 555	(3)	Environmental Data Analysis
CIVE 557	(3)	Microbiology for Environmental Engineering
CIVE 560	(3)	Transportation Safety and Design

 $Greenhouse\ Gas\ Em Analysis\ Greenhouse\ Tm((3)) Tjble\ Pro1e\ 1\ s195.943\ Tm((00.o.46)-(3)) Tj1\ 0\ 4er\ 3)$ 

# **Complementary Studies**

6 credits

### **Group A - Impact of Technology on Society**

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

### Group B - Humanities and Social Sciences, Management Studies, and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) \*\*\*

School of Social Work (SWRK)

Sociology (excluding SOCI 350)

OR one of the following:

ARCH 528	(3)	History of Housing
BUSA 465*	(3)	Technological Entrepreneurship
CLAS 203	(3)	Greek Mythology
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
FACC 220	(3)	Law for Architects and Engineers
FACC 500	(3)	Technology Business Plan Design
FACC 501	(3)	Technology Business Plan Project

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HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

#### 6.12.5 Electrical and Computer Engineering

### 6.12.5.1 Location

Department of Electrical and Computer Engineering Undergraduate Programs Office McConnell Engineering Building, Room 602 3480 University Street Montreal QC H3A 0E9

Telephone: 514-398-3943
Email: undergrad.ece@mcgill.ca

Website: mcgill.ca/ece

# 6.12.5.2 About the Department of Electrical and Computer Engineering

The Department of Electrical and Computer Engineering offers undergraduate degree programs in:

- Electrical Engineering
- Electrical Engineering (Honours)
- Computer Engineering
- Software Engineering Co-op

All programs provide students with a strong background in mathematics, natural sciences, engineering science, engineering design, and complementary studies, in conformity with the requirements of the *Canadian Engineering Accreditation Board* (CEAB).

In addition to technical complementary courses, students in all three programs take general complementary courses in humanities and social sciences and/or management studies and law. These courses allow students to develop specific interests in areas such as psychology, economics, management, or political science.

### 6.12.5.3 Electrical and Computer Engineering Faculty

#### Chair

Warren Gross

### Associate Chair, Academic

Ioannis Psaromiligkos

<sup>\*\*</sup> Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.

<sup>\*\*\*</sup> If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Associate Chair, Under

MATH 141	(4)	Calculus 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B)

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Non-Departmental Courses**

• -	44.	
16	credit	c

CIVE 281	(3)	Analytical Mechanics
COMP 202	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
FACC 100*	(1)	Introduction to the Engineering Profession
FACC 250	(0)	Responsibilities of the Professional Engineer
FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
MATH 262	(3)	Intermediate Calculus
MATH 263	(3)	Ordinary Differential Equations for Engineers

# Complementary Courses (23-26 credits)

# **Technical Complementaries**

17-20 credits (5 courses) must be taken, chosen as follows:

8 credits (2 courses) from List A

9-12 credits (3 courses) from List A or List B

# List A: Technical Complementaries with Laboratory Experience

8-20 credits

ECSE 335	(4)	Microelectronics
ECSE 403	(4)	Control
ECSE 408	(4)	Communication Systems
ECSE 416	(4)	Telecommunication Networks
ECSE 433	(4)	Physical Basis of Transistor Devices
ECSE 444	(4)	Microprocessors
ECSE 470	(4)	Electromechanical and Static Conversion Systems

# **List B: Technical Complementaries**

0-12 credits

COMP 551 <sup>^</sup>	(AB)	Applied Machine Learning
COMP 559	(4)	Fundamentals of Computer Animation

ECSE 468*	(3)	Electricité industrielle (Industrial Power Systems)
ECSE 469*	(3)	Protection des réseaux électriques
ECSE 472	(3)	Fundamentals of Circuit Simulation and Modelling
ECSE 500	(3)	Mathematical Foundations of Systems
ECSE 501	(3)	Linear Systems
ECSE 507	(3)	Optimization and Optimal Control
ECSE 508	(3)	Multi-Agent Systems
ECSE 509	(3)	Probability and Random Signals 2
ECSE 510	(3)	Filtering and Prediction for Stochastic Systems
ECSE 516	(3)	Nonlinear and Hybrid Control Systems
ECSE 519	(3)	Semiconductor Nanostructures and Nanophotonic Devices
ECSE 521	(3)	Digital Communications 1
ECSE 526	(3)	Artificial Intelligence
ECSE 532	(4)	Computer Graphics
ECSE 543	(3)	Numerical Methods in Electrical Engineering
ECSE 544	(4)	Computational Photography
ECSE 551^	(4)	Machine Learning for Engineers
ECSE 552	(4)	Deep Learning
ECSE 554	(4)	Applied Robotics
ECSE 557	(3)	Introduction to Ethics of Intelligent Systems
ECSE 562**	(4)	Low-Carbon Power Generation Engineering
ECSE 563	(3)	Power Systems Operation and Planning
ECSE 565***	(3)	Introduction to Power Electronics
ECSE 575	(3)	Heterogeneous Integration Systems
PHYS 434	(3)	Optics

<sup>\*</sup> Courses taught in French.

# **Complementary Studies**

6 credits

# **Group A - Impact of Technology on Society**

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment

Economics of Cl2 cannot b582 Tm((3))Tj1 0 0 0 1 165.864 395.O(3)

<sup>\*\*</sup> ECSE 463 and ECSE 562 cannot both be taken.

<sup>\*\*\*</sup> ECSE 465 and ECSE 565 cannot both be taken.

<sup>^</sup> ECSE 551 and COMP 551 cannot both be taken.

MGPO 440*	(3)	Strategies for Sustainability	
PHIL 343	(3)	Biomedical Ethics	
RELG 270	(3)	Religious Ethics and the Environment	
SOCI 235	(3)	Technology and Society	
SOCI 312	(3)	Sociology of Work and Industry	

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

### **Elective Course**

One 3-credit course at the 200-level or higher from any department at McGill, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering.

#### **Enhanced Power Concentration**

Students following this program must complete 16-17 credits of technical complementary courses.

The Institute for Electrical Power Engineering was recently established as a province-wide centre for electrical power engineering education. It is funded by industry, mostly Hydro-Québec, and provides a comprehensive program, state-of-the-art laboratory facilities, and a point of contact between industry and universities involved in power engineering.

Note: This program is open to students in the regular Electrical Engineering program only.

Here are some benefits of the concentration:

A complete and up-to-date final-year program in electrical power engineering, with industry-sponsored and supported courses

Access to industry-sponsored projects, internships, and new employment opportunities

#### ELIGIBILITY CRITERIA

Admission to the program is granted only in the Fall semester of every academic year. To be considered, the applicant must:

- be registered in the B.Eng. program (regular Electrical Engineering);
- have a cumulative GPA of at least 2.5;
- have completed or be registered in ECSE 362 (Fundamentals of Power Engineering);
- be able to complete the degree requirements within three semesters after initial registration in the concentration (excluding summer semesters);
- agree to follow the curriculum requirements set out below.

### SELECTION CRITERIA

The number of students selected, expected to be between five and ten, will be subject to a specific agreement between the University and the Institute. Selection criteria for admission to the Institute will be based on the CGPA and on the curriculum vitae. The selection process for the scholarship may involve an interview with the committee presided by Hydro-Québec and the industrial partners. There is a possibility of an internship with Hydro-Québec.

### CURRICULUM REQUIREMENTS FOR SELECTED STUDENTS

Generally, unless the University has authorized specific substitutions, students must complete the de

MIME 262	(3)	Properties of Materials in Electrical Engineering
WCOM 206	(3)	Communication in Engineering

<sup>\*</sup> Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Electrical Engineering Courses**

61 credits

ECSE 200	(3)	Electric Circuits 1
ECSE 205	(3)	Probability and Statistics for Engineers
ECSE 206	(3)	Introduction to Signals and Systems
ECSE 210	(3)	Electric Circuits 2
ECSE 211	(3)	Design Principles and Methods
ECSE 222	(3)	Digital Logic

3 credits from the following:

(3) Anthropology of Development

MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.83296 Tm(gll.ca/it Dates See Im 0 1 67.52 639.96 Tm(3

FACC 100*	(1)	Introduction to the Engineering Profession
FACC 250	(0)	Responsibilities of the Professional Engineer
FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
MATH 240	(3)	Discrete Structures
MATH 262	(3)	Intermediate Calculus
	(3)	Ordinary Differential Equations for Engineers

ECSE 335	(4)	Microelectronics
ECSE 403	(4)	Control
ECSE 408	(4)	Communication Systems
ECSE 412	(3)	Discrete Time Signal Processing
ECSE 415	(3)	Introduction to Computer Vision
ECSE 416	(4)	Telecommunication Networks
ECSE 420	(3)	Parallel Computing
ECSE 428	(3)	Software Engineering Practice
ECSE 435	(3)	Mixed-Signal Test Techniques
ECSE 439	(3)	Software Language Engineering
ECSE 508	(3)	Multi-Agent Systems
ECSE 510	(3)	Filtering and Prediction for Stochastic Systems
ECSE 544	(4)	Computational Photography

# List B

0-12 credits from the following:

COMP 424**	(3)	Artificial Intelligence
COMP 445	(3)	Computational Linguistics
COMP 520	(4)	Compiler Design
COMP 550	(3)	Natural Language Processing
COMP 551*	(4)	Applied Machine Learning
COMP 559	(4)	Fundamentals of Computer Animation
COMP 579	(4)	Reinforcement Learning
ECSE 343	(3)	Numerical Methods in Engineering
ECSE 421	(3)	Embedded Systems
ECSE 422	(3)	Fault Tolerant Computing
ECSE 424	(3)	Human-Computer Interaction
ECSE 429	(3)	Software Validation
ECSE 437	(3)	Software Delivery
ECSE 446	(3)	Realistic Image Synthesis
ECSE 472	(3)	Fundamentals of Circuit Simulation and Modelling
ECSE 500	(3)	Mathematical Foundations of Systems

Linear Systems

MATH 247 (3) Honours Applied Linear Algebra

#### **Complementary Studies**

# Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

## Group B - Humanities and Social Sciences, Management Studies, and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)  $\,$ 

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) \*\*\*

School of Social Work (SWRK)

Sociology (excluding SOCI 350)

OR 3 credits from the following:

ARCH 528	(3)	History of Housing
BUSA 465*	(3)	Technological Entrepreneurship
CLAS 203	(3)	Greek Mythology
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
FACC 220	(3)	Law for Architects and Engineers
FACC 500	(3)	Technology Business Plan Design

<sup>\*</sup> ECSE 551 and COMP 551 cannot both be taken.

<sup>\*\*</sup> COMP 424 and ECSE 526 cannot both be taken.

FACC 501	(3)	Technology Business Plan Project
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

#### **Elective Course**

One 3-credit course at the 200-level or higher from any department at McGill, approved by the Undergraduate Programs Office in the Department of Electrical and Computer Engineering.

## 6.12.5.7 Bachelor Engineering (B.Eng.) - Co-op in Software Engineering (141 credits)

Program credit weight: 141-144 credits

Program credit weight for Quebec CEGEP students: 113-116 credits Program credit weight for out-of-province students: 141-144 credits

#### Required Year 0 (Freshman) Courses

28 credits

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 113- to 116-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.

CHEM 120	(4)	General Chemistry 2
MATH 133	(3)	Linear Algebra and Geometry
MA	(3)	Calculus 1

<sup>\*\*</sup> Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.

<sup>\*\*\*</sup> If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

Earth System Science (ESYS)

Physics (PHYS)

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Non-Departmental Courses**

COMP 202	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 251	(3)	Algorithms and Data Structures
COMP 302	(3)	Programming Languages and Paradigms
COMP 360	(3)	Algorithm Design
COMP 421	(3)	Database Systems
FACC 100**	(1)	Introduction to the Engineering Profession
FACC 250	(0)	Responsibilities of the Professional Engineer
FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
MATH 240	(3)	Discrete Structures

ECSE 458D1	(3)	Capstone Design Project
ECSE 458D2	(3)	Capstone Design Project

Note: ECSE 458N1 and ECSE 458N2 can be taken instead of ECSE 458D1 and ECSE 458D2.

# **Complementary Courses**

15-18 credits

# **Technical Complementaries**

9-12 credits (3 courses) must be taken, chosen as follows:

3-4 credits (1 course) from List A

6-8 credits (2 courses) from List A or List B

\* COMP 350 and ECSE 343 cannot both be taken

\*\* ECSE 551 and COMP 551 cannot both be taken

\*\*\* COMP 424 and ECSE 526 cannot both be taken

#### List A

3-12 credits from the following:

ECSE 325	(3)	Digital Systems
ECSE 415	(3)	Introduction to Computer Vision
ECSE 416	(4)	Telecommunication Networks
ECSE 439	(3)	Software Language Engineering
ECSE 444	(4)	Microprocessors
ECSE 544	(4)	Computational Photography

# List B

0-8 credits from the following:

COMP 330	(3)	Theory of Computation
COMP 350*	(3)	Numerical Computing
COMP 409	(3)	Concurrent Programming
COMP 417	(3)	Introduction Robotics and Intelligent Systems
COMP 424***	(3)	Artificial Intelligence
COMP 512	(4)	Distributed Systems
COMP 520	(4)	Compiler Design
COMP 521	(4)	Modern Computer Games
COMP 525	(3)	Formal Verification
COMP 529	(4)	Software Architecture
COMP 533	(3)	Model-Driven Software Development
COMP 550	(3)	Natural Language Processing
COMP 551*	(4)	Applied Machine Learning
COMP 559	(4)	Fundamentals of Computer Animation
ECSE 343*	(3)	Numerical Methods in Engineering
ECSE 421	(3)	Embedded Systems
ECSE 422	(3)	Fault Tolerant Computing
ECSE 424	(3)	Human-Computer Interaction

ECSE 425	(3)	Computer Architecture
ECSE 437	(3)	Software Delivery
ECSE 446	(3)	Realistic Image Synthesis
ECSE 507	(3)	Optimization and Optimal Control
ECSE 509	(3)	Probability and Random Signals 2
ECSE 526***	(3)	Artificial Intelligence
ECSE 532	(4)	Computer Graphics
ECSE 551**	(4)	Machine Learning for Engineers
ECSE 552	(4)	Deep Learning
ECSE 557	(3)	Introduction to Ethics of Intelligent Systems
MATH 247	(3)	Honours Applied Linear Algebra

## **Complementary Studies**

6 credits

# Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

 $<sup>*\</sup> Note: Management\ courses\ have\ limited\ enrolment\ and\ registration\ dates.\ See\ Important\ Dates\ at\ http://www.mcgill.ca/important dates.$ 

# Group B - Humanities and Social Sciences, Management Studies, and Law

 $3\ credits$  at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)  $\,$ 

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) \*\*\*

# School of Social Work (SWRK)

Sociology (excluding SOCI 350)

# OR 3 credits from the following:

OK 3 credits from the i	onowing.	
ARCH 528	(3)	History of Housing
BUSA 465*	(3)	Technological Entrepreneurship
CLAS 203	(3)	Greek Mythology
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
FACC 220	(3)	Law for Architects and Engineers
FACC 500	(3)	Technology Business Plan Design
FACC 501	(3)	Technology Business Plan Project
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour

Many mechanical engineers follow other career paths, including sales, finance, and management. Graduate studies are useful for the specialists working in research establishments, consulting firms, or in corporate research and development.

To prepare the mechanical engineer for a wide range of career possibilities, there is a heavy emphasis in our curriculum on the fundamental analytical disciplines. This is balanced by a sequence of experimental and design engineering courses, which include practice in design, manuf

Program credit weight for out-of-province students: 142 credits

To prepare the mechanical engineer for a wide range of career possibilities, there is a heavy emphasis in our curriculum on the fundamental analytical disciplines. This is balanced by a sequence of experimental and design engineering courses which include practice in design, manufacturing, and experimentation. In these courses, students learn how to apply their analytical groundwork to the solution of practical problems.

Special interests are satisfied by selecting appropriate complementary courses from among those offered with a specific subject concentration, such as management, industrial engineering, computer science, controls and robotics, bio-engineering, aeronautics, combustion, systems engineering, etc.

## Required Year 0 (Freshman) Courses

29 credits

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 113-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.

CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
		3sI020

MECH 240	(3)	Thermodynamics 1
MECH 262	(3)	Statistics and Measurement Laboratory
MECH 290	(3)	Design Graphics for Mechanical Engineering
MECH 292	(3)	Design 1: Conceptual Design
MECH 309	(3)	Numerical Methods in Mechanical Engineering
MECH 314	(3)	Dynamics of Mechanisms
MECH 315	(4)	Mechanics 3
MECH 321	(3)	Mechanics of Deformable Solids
MECH 331	(3)	Fluid Mechanics 1
MECH 341	(3)	Thermodynamics 2
MECH 346	(3)	Heat Transfer
MECH 360	(3)	Principles of Manufacturing
	(2)	Mechanical Laboratory 1

3 credits chosen from courses at the 300 level or higher (approved by the Department) in the Faculty of Engineering (including MECH courses) or from courses in the Faculty of Science, including MATH courses.

#### **Complementary Studies**

6 credits

## Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

#### Group B - Humanities and Social Sciences, Management Studies, and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227, and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) \*\*\*

School of Social Work (SWRK)

Sociology (excluding SOCI 350)

OR one of the following:

ARCH 528	(3)	History of Housing
BUSA 465*	(3)	Technological Entrepreneurship
CLAS 203	(3)	Greek Mythology
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
FACC 220	(3)	Law for Architects and Engineers
FACC 500	(3)	Technology Business Plan Design

<sup>\*</sup> Students select either CHEE 563 or MECH 563.

FACC 501	(3)	Technology Business Plan Project
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
	(3)	Human Resources Management

MATH 141 (4) Calculus 2

PHYS 131 (4) Mechanics and Waves

MECH 430	(3)	Fluid Mechanics 2
MECH 494	(3)	Honours Design Project

# **Technical Complementary Courses**

18 credits

3 credits from the following, chosen with the approval of either the thesis supervisor or the coordinator of the Honours program, when a thesis supervisor has not yet been secured:

MATH 323	(3)	Probability
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 417	(3)	Linear Optimization
MATH 478	(3)	Computational Methods in Applied Mathematics

# 6 credits from the following:

MECH 513	(3)	Control Systems
MECH 546	(3)	Finite Element Methods in Solid Mechanics
MECH 559*	(3)	Engineering Systems Optimization
MECH 562	(3)	Advanced Fluid Mechanics
MECH 578	(3)	Advanced Thermodynamics
MECH 579*	(3)	Multidisciplinary Design Optimization

<sup>\*</sup>Note: Students select either MECH 559 or MECH 579.

6 credits at the 300 level or higher, chosen from Mechanical Engineering courses (subject code MECH). One of these two courses (3 credits) must be from the following list:

CHEE 563*	(3)	Biofluids and Cardiovascular Mechanics
MECH 497	(3)	Value Engineering
MECH 498	(3)	Interdisciplinary Design Project 1
MECH 499	(3)	Interdisciplinary Design Project 2
MECH 513	(3)	Control Systems
MECH 530	(3)	Mechanics of Composite Materials
MECH 532	(3)	Aircraft Performance, Stability and Control
MECH 535	(3)	Turbomachinery and Propulsion
MECH 536	(3)	Aerospace Structures
MECH 543	(3)	Design with Composite Materials
MECH 544	(3)	Processing of Composite Materials
MECH 553	(3)	Design and Manufacture of Microdevices
MECH 559	(3)	Engineering Systems Optimization
MECH 560	(3)	Eco-design and Product Life Cycle Assessment
MECH 563*	(3)	Biofluids and Cardiovascular Mechanics
MECH 564	(3)	Thermal Radiation and Solar Energy Systems
MECH 565	(3)	Fluid Flow and Heat Transfer Equipment
MECH 573	(3)	Mechanics of Robotic Systems

3 credits chosen from courses at the 300-level or higher (approved by the Department) in the Faculty of Engineering (including MECH courses) or from MIME 260 or from courses at the 300 level or higher in the Faculty of Science, including MATH courses.

## **Complementary Studies**

6 credits

## Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

## Group B: Humanities and Social Sciences, Management Studies and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (e3ph3phlcours 0 1 2 0 1 67.52 666 255122043 TphSWRK(ee

<sup>\*</sup>Students choose either CHEE 563 or MECH 563

FACC 501	(3)	Technology Business Plan Project
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

## **Typical Program of Study**

Students entering the program from Quebec CEGEPs follow a different course of study from those entering from outside the province. Students will be advised by the Department as to which courses they should select from the course lists above.

For a detailed curriculum, please see

http://www.mcgill.ca/mecheng/undergrad/curriculum.

For all minors and concentrations, students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the minor or concentration.

# 6.12.6.6 Bachelor of Engineering (B.Eng.) - Mechanical Engineering - Design (15 credits)

Students in this concentration take five courses in the area of design, including the completion of an interdisciplinary project.

Students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the concentration.

Total concentration credit weight: 15-16 credits

# **Required Courses**

6	credits
U	CICUIT

MECH 498	(3)	Interdisciplinary Design Project 1
MECH 499	(3)	Interdisciplinary Design Project 2

## **Complementary Courses**

9-10 credits from the following:

ARCH 515	(3)	Sustainable Design
CHEE 453	(4)	Process Design
MECH 497	(3)	Value Engineering
MECH 528	(3)	Product Design
MECH 530	(3)	Mechanics of Composite Materials
MECH 543	(3)	Design with Composite Materials

<sup>\*\*</sup> Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.

<sup>\*\*\*</sup> If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams building, Room 22) or email an adviser.

MECH 565	(3)	Fluid Flow and Heat Transfer Equipment
MECH 579	(3)	Multidisciplinary Design Optimization

#### 6.12.6.7 Bachelor of Engineering (B.Eng.) - Honours Mechanical Engineering - Design (15 credits)

Students in this concentration take five courses in the area of design, including the completion of an interdisciplinary project.

Students should complete a Course Authorization Form, available from the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) or from the Undergraduate Program Coordinator, indicating their intention to take the concentration.

Total concentration credit weight: 15-16 credits

## **Required Courses**

MECH 498	(3)	Interdisciplinary Design Project 1
MECH 499	(3)	Interdisciplinary Design Project 2

#### **Complementary Courses**

9-10 credits from the following:

ARCH 515	(3)	Sustainable Design
CHEE 453	(4)	Process Design
MECH 497	(3)	Value Engineering
MECH 528	(3)	Product Design
MECH 530	(3)	Mechanics of Composite Materials
MECH 543	(3)	Design with Composite Materials
MECH 565	(3)	Fluid Flow and Heat Transfer Equipment
MECH 579	(3)	Multidisciplinary Design Optimization

# 6.12.7 Mining and Materials Engineering

## 6.12.7.1 Location

#### **General Office:**

Wong Building, Room 2140 3610 University Street Montreal QC H3A 0C5 Website: mcgill.ca/minmat

#### **Materials:**

Wong Building, Room 2140 3610 University Street Montreal QC H3A 0C5 Telephone: 514-398-1040 Fax: 514-398-4492

Email: coordinator.minmat@mcgill.ca

Website: mcgill.ca/materials

# Mining:

Frank Dawson Adams Building, Room 125

3450 University Street Montreal QC H3A 0E8 Telephone: 514-398-2215 Fax: 514-398-7099

rax: 314-396-7099

Email: admin.mining@mcgill.ca

Website: mcgill.ca/mining

#### 6.12.7.2 About the Department of Mining and Materials Engineering

The Department of Mining and Materials Engineering offers programs leading to the Bachelor of Engineering degree in Materials Engineering or Mining Engineering. In addition to regular courses and laboratories, the curriculum includes seminars, colloquia, and student projects reinforced by field trips to industrial operations.

For more information, refer to:

- Materials Engineering section 6.12.7.4.3: Bachelor of Engineering (B.Eng.) Materials Engineering (148 credits) and section 6.12.7.4.4: Bachelor of Engineering (B.Eng.) Co-op in Materials Engineering (148 credits)
- Mining Engineering and section 6.12.7.5.3: Bachelor of Engineering (B.Eng.) Mining Engineering (144 credits) and section 6.12.7.5.4: Bachelor of Engineering (B.Eng.) Co-op in Mining Engineering (150 credits)

#### 6.12.7.2.1 Scholarships

The Department offers renewable Entrance Scholarships every year. A substantial number of other scholarships and bursaries are also awarded by the Department, as well as by the Canadian Mineral Industry Education Foundation, Canadian Institute of Mining Foundation, Quebec Mining Association, and others

Please refer to the Faculty of Engineering website's Scholarships and Financial Aid section for more information.

#### 6.12.7.3 Mining and Materials Engineering Faculty

#### **Department Chair**

Richard Chromik

#### **Associate Chair, Materials Engineering**

Jun Song

#### **Associate Chair and Graduate Program Director**

Mathieu Brochu

#### **Graduate Program Coordinator**

Barbara Hanley

#### **Emeritus Professors**

James A. Finch; John E. Gruzleski; John J. Jonas; Gordon W. Smith

#### Professors

Marta Cerruti; Richard Chromik; George P. Demopoulos; Roussos Dimitrakopoulos; Raynald Gauvin; Roderick I.L. Guthrie; Faramarz (Ferri) P. Hassani; Hani S. Mitri; Mihriban Pekguleryuz; Stephen Yue

#### **Associate Professors**

Kirk Bevan; Mathieu Brochu; Mainul Hasan; Mustafa Kumral; Showan Nazhat; Sidney Omelon; Nathaniel Quitoriano; Agus Pulung Sasmito; Jun Song; Kristian Waters

#### **Assistant Professor**

Jinhyuk Lee; Alessandro Navarra; Philippe Ouzilleau

## **Adjunct Professors**

Behnam Ashrafi; Salim Brahimi; Alexandros Charitos; Michel Gamache; Ahmad Hemami; Alice Jarry; Luis Javier Montiel Petro; Amina Lamghari; Jimi Sauw-Yoeng Tjong; Michel Trudeau; Priti Wanjara; Karim Zaghib

## **Senior Faculty Lecturer**

Florence Paray

## Faculty Lecturer - Mining

Shahe Shnorhokian

#### Co-op Program Liaison Officers

Genevieve Snider (Materials); Lisa Thiess (Mining)

# 6.12.7.4 About Materials Engineering 6.12.7.4.1 Co-op in Materials Engineering

The Materials Engineering degree is a cooperative program leading to a **B.Eng.** and includes formal industrial work periods. It is built on a strong background of mathematics, basic sciences, computer skills and applications, and specific engineering and design courses to provide up-to-date training in materials engineering. Students take core courses covering processing, fabrication, applications, and performance of materials.

The program is fully accredited by the Canadian Engineering Accreditation Board (CEAB) and is designed to offer students exceptional training for employment in the field.

The core courses are supplemented by complementary courses, which provide a diverse selection of specialties for the graduating engineer. The course structure is reinforced with laboratory exercises. Graduates find employment in a wide range of industries, including the resource and manufacturing sectors. Students in the Co-op program benefit from practical learning experience gained from work-term employment in meaningful engineering jobs, as well as non-tangible learning experiences arising from the responsibilities required to obtain and successfully complete the work terms.

Regarding the Co-op **program fees**, an amount of \$258.05 will be billed during ten consecutive terms for a total amount of \$2,580.50 before graduation. These fees cover expenses directly related to the operation of the Co-op program. Students must register for each of their industrial training courses within the university registration period for returning students or late fees will apply. Before registering for any work term course, students must contact the Co-op in Materials Engineering Liaison Officer for approval.

#### 6.12.7.4.2 Student Advising

Students entering this program must plan their schedule of studies in consultation with one of the departmental advisers. Appointments may be obtained by contacting the Administrative and Student Affairs Coordinator.

For more information, please refer to the *Academic Advising* section of our website.

#### 6.12.7.4.3 Bachelor of Engineering (B.Eng.) - Materials Engineering (148 credits)

Program credit weight: 148 credits

Program credit weight for Quebec CEGEP students: 119 credits

Students wanting to study Materials Engineering may only be admitted into the B.Eng.; Co-op in Materials Engineering program. There is no direct admission to the B.Eng.; Materials Engineering program (which does not include the work terms required for the Co-op program). Students can transfer from the B.Eng.; Co-op in Materials Engineering to the B.Eng.; Materials Engineering program once they have met certain requirements and obtained approval from the departmental adviser.

The department offers a Major in Materials Engineering leading to an accredited B.Eng. degree in Materials Engineering. Materials are used to enact every human technology and have shaped key eras in history. Major in Materials Engineering students will have the opportunity to learn the fundamental science and engineering of materials through the materials processing pipeline, including how to enrich mineral-poor ore, how to process the materials into the desired microstructures and compositions, and how to use these materials in various applications (aerospace, electronics, and biological systems). With the choice of technical complementary courses, students have an opportunity to specialize and strengthen key materials technologies or broaden their horizons and take courses from several interdisciplinary areas.

Students entering this program must plan their schedule of studies in consultation with a departmental adviser.

## Required Year 0 (Freshman) Courses

29 credits

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 119-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.

CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B).

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Non-Departmental Courses**

36 credits

CHEM 233	(3)	Topics in Physical Chemistry
CIVE 205	(3)	Statics
CIVE 207	(4)	Solid Mechanics
	(3)	Computer Programming for Physical Sciences and Engineering

# **Complementary Courses (21 credits)**

# **Technical Complementaries**

15 credits

9-15 credits from the following:

CHEE 515*	(3)	Interface Design: Biomimetic Approach
CIVE 512	(3)	Advanced Civil Engineering Materials
MECH 530	(3)	Mechanics of Composite Materials
MIME 410	(3)	Materials Research Project
MIME 442	(3)	Analysis, Modelling and Optimization in Mineral Processing
MIME 512	(3)	Corrosion and Degradation of Materials
MIME 515*	(3)	(Bio)material Surface Analysis and Modification
MIME 526	(3)	Mineral Economics
MIME 542	(3)	Transmission Electron Microscopy
MIME 544	(3)	Analysis: Mineral Processing Systems 1
MIME 545	(3)	Analysis: Mineral Processing Systems 2
MIME 551	(3)	Electrochemical Processing
MIME 556	(3)	Sustainable Materials Processing
MIME 558	(3)	Engineering Nanomaterials
MIME 559	(3)	Aluminum Physical Metallurgy
MIME 560	(3)	Joining Processes
MIME 561	(3)	Advanced Materials Design
MIME 563	(3)	Hot Deformation of Metals
MIME 565	(3)	Aerospace Metallic-Materials and Manufacturing Processes
MIME 568	(3)	Topics in Advanced Materials
MIME 569	(3)	Electron Beam Analysis of Materials
MIME 570	(3)	Micro- and Nano-Fabrication Fundamentals
MIME 571	(3)	Surface Engineering
MIME 572	(3)	Computational Thermodynamics
MIME 580	(3)	Additive Manufacturing Using Metallic and Ceramic Materials

<sup>\*</sup> Students choose either CHEE 515 or MIME 515, offered in alternate years.

6 credits may be taken from courses outside of the Department of Mining and Materials Engineering, with department approval.

## **Complementary Studies**

6 credits

# Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems

GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

## Group B - Humanities and Social Sciences, Management Studies, and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) \*\*\*

School of Social Work (SWRK)

Sociology (excluding SOCI 350)

OR 3 credits from the following:

ARCH 528	(3)	History of Housing
BUSA 465*	(3)	Technological Entrepreneurship
CLAS 203	(3)	Greek Mythology
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
FACC 220	(3)	Law for Architects and Engineers
FACC 500	(3)	Technology Business Plan Design
FACC 501	(3)	Technology Business Plan Project
HISP 225	(3)	Hispanic Civilization 1
HISP 226	(3)	Hispanic Civilization 2
INDR 294*	(3)	Introduction to Labour-Management Relations
INTG 201**	(3)	Integrated Management Essentials 1
INTG 202**	(3)	Integrated Management Essentials 2
MATH 338	(3)	History and Philosophy of Mathematics
MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

 $<sup>*\</sup> Management\ courses\ have\ limited\ enrolment\ and\ registration\ dates.\ See\ Important\ Dates\ at\ http://www.mcgill.ca/important dates.$ 

- \*\* Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.
- \*\*\* If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams b

MECH 289	(3)	Design Graphics
WCOM 206	(3)	Communication in Engineering

<sup>\*</sup> Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Materials Engineering Courses**

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MIME 209	(3)	Mathematical Applications
MIME 212	(3)	Engineering Thermodynamics
MIME 250	(3)	Introduction to Extractive Metallurgy
MIME 261	(3)	Structure of Materials
MIME 280	(2)	Industrial Training 1
MIME 311	(3)	Modelling and Automatic Control
MIME 317	(3)	Analytical and Characterization Techniques
MIME 341	(3)	Introduction to Mineral Processing
MIME 345	(3)	Applications of Polymers
MIME 350	(3)	Extractive Metallurgical Engineering
MIME 352	(3)	Hydrochemical Processing
MIME 356	(4)	Heat, Mass and Fluid Flow
MIME 360	(3)	Phase Transformations: Solids
MIME 362	(3)	Mechanical Properties
MIME 380	(2)	Industrial Training 2
MIME 452	(4)	Process and Materials Design
MIME 455	(3)	Advanced Process Engineering
MIME 456	(3)	Steelmaking and Steel Processing
		Metallic and Ceramic Powders Processing

MIME 526 (3) Mineral Economics

MIME 542 (3) Transmission Electron Microscopy

\* Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

## Group B - Humanities and Social Sciences, Management Studies, and Law

3 credits at the 200 level or higher from the following departments:

Anthropology (ANTH)

Economics (any 200- or 300-level course excluding ECON 227 and ECON 337)

History (HIST)

Philosophy (excluding PHIL 210 and PHIL 310)

Political Science (POLI)

Psychology (excluding PSYC 204 and PSYC 305, but including PSYC 100)

Religious Studies (RELG) (excluding courses that principally impart language skills, such as Sanskrit, Tibetan, Tamil, New Testament Greek, and Biblical Hebrew) \*\*\*

School of Social Work (SWRK)

Sociology (excluding SOCI 350)

OR 3 credits from the following:

ARCH 528 (3) History of Housing

B (3) Technological Entrepreneurship

The Department offers a co-operative program leading to an accredited **B.Eng.** 

CIVE 207	(4)	Solid Mechanics
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
ECSE 209	(3)	Electrotechnology
EPSC 221	(3)	General Geology
EPSC 225	(1)	Properties of Minerals
FACC 100*	(1)	Introduction to the Engineering Profession
FACC 250	(0)	Responsibilities of the Professional Engineer
FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
MATH 262	(3)	Intermediate Calculus
MATH 263	(3)	Ordinary Differential Equations for Engineers
MATH 264	(3)	Advanced Calculus for Engineers
MECH 289	(3)	Design Graphics
WCOM 206	(3)	Communication in Engineering

st Note: FACC (Introduction to the Engineering Profession) must be taken during the first year of study.

# **Required Mining Engineering Courses (47 credits)**

MIME 200	(3)	Introduction to the Minerals Industry
MIME 203	(2)	Mine Surveying
MIME 209	(3)	Mathematical Applications
MIME 260	(3)	Materials Science and Engineering
MIME 322	(3)	Fragmentation and Comminution
MIME 323	(3)	Rock and Soil Mass Characterization
MIME 325	(3)	Mineral Industry Economics
MIME 333	(3)	Materials Handling
MIME 340	(3)	Applied Fluid Dynamics
MIME 341	(3)	Introduction to Mineral Processing
MIME 413	(3)	Strategic Mine Planning With Uncertainty
MIME 419	(3)	Surface Mining
MIME 422	(3)	Mine Ventilation
MIME 425	(3)	Applied Stochastic Orebody Modelling
MIME 426	(6)	Mine Design and Prefeasibility Study

# **Complementary Courses**

31-32 credits

17 credits from one of Stream A or Stream B

# Stream A - CEGEP Students

CEGEP students must tak

MPMC 330*	(3)	Géotechnique minière	
MPMC 421*	(3)	Exploitation en souterrain	

<sup>\*</sup> Mining courses taken at Polytechnique Montréal

# Stream B - Non-CEGEP Students

Non-CEGEP students must take the following courses:

CIVE 208	(3)	Civil Engineering System Analysis
MIME 329	(2)	Mining Geology
MIME 330	(3)	Mining Geotechnics
MIME 421	(3)	Rock Mechanics
MIME 424	(3)	Underground Mining Methods
MIME 428	(3)	Environmental Mining Engineering

# **Technical Complementaries**

8-9 credits can be chosen from the following or from any other approved technical courses in Engineering, Ma70ME 428ariesrom Science. 0 0 1 67.52 687.145 5142Nc

ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change
ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
MGPO 440*	(3)	Strategies for Sustainability
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Environment
SOCI 235	(3)	Technology and Society
SOCI 312	(3)	Sociology of Work and Industry
URBP 201	(3)	Planning the 21st Century City

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.735 514.2 Tmha

MGCR 222*	(3)	Introduction to Organizational Behaviour
MGCR 352*	(3)	Principles of Marketing
ORGB 321*	(3)	Leadership
ORGB 423*	(3)	Human Resources Management

<sup>\*</sup> Note: Management courses have limited enrolment and registration dates. See Important Dates at http://www.mcgill.ca/importantdates.

Note regarding language courses: Language courses are not accepted to satisfy the Complementary Studies Group B requirement, effective for students who entered the program as of Fall 2017.

## 6.12.7.5.4 Bachelor of Engineering (B.Eng.) - Co-op in Mining Engineering (150 credits)

Program credit weight: 150-151 credits

Program credit weight for Quebec CEGEP students: 121-122 credits

The Department offers a Co-op in Mining Engineering Program leading to an accredited B.Eng. degree in Mining Engineering. The program focuses on the science and engineering of sustainable extraction of mineral resources. It contains two streams: English for non-CEGEP students and Bilingual (six courses in French) for CEGEP students, in collaboration with the mining engineering program at Polytechnique Montreal. The program includes projects that are reinforced by field trips to industrial operations as well as three industrial work terms. Students must register for each work term (MIME 290, MIME 291, MIME 392) and pay associated fees by the Course Change (add/drop) registration deadline. Before registering for any work term course, students must contact the Mining Co-op Liaison Officer for approval.

## Required Year 0 (Freshman) Courses

29 credits

Generally, students admitted to Engineering from Quebec CEGEPs are granted transfer credit for these Year 0 (Freshman) courses and enter a 121- to 123-credit program.

For information on transfer credit for French Baccalaureate, International Baccalaureate exams, Advanced Placement exams, Advanced Levels, and Science Placement Exams, see http://www.mcgill.ca/engineering/current-students/undergraduate/new-students and select your term of admission.

CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics

AND 3 credits selected from the approved list of courses in Humanities and Social Sciences, Management Studies, and Law, listed below under Complementary Studies (Group B)

Note: FACC 100 (Introduction to the Engineering Profession) must be taken during the first year of study.

#### **Required Non-Departmental Courses**

3/ credits		
CIVE 205	(3)	Statics
CIVE 207	(4)	Solid Mechanics
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
ECSE 209	(3)	Electrotechnology
EPSC 221	(3)	General Geology
EPSC 225	(1)	Properties of Minerals
FACC 100*	(1)	Introduction to the Engineering Profession
FACC 250	(0)	Responsibilities of the Professional Engineer

<sup>\*\*</sup> Note: INTG 201 and INTG 202 are not open to students who have taken certain Management courses. Please see the INTG 201 and INTG 202 course information for a list of these courses.

<sup>\*\*\*</sup> If you are uncertain whether or not a course principally imparts language skills, please see an adviser in the McGill Engineering Student Centre (Frank Dawson Adams Building, Room 22) or email an adviser.

FACC 300	(3)	Engineering Economy
FACC 400	(1)	Engineering Professional Practice
MATH 262	(3)	Intermediate Calculus
MATH 263	(3)	Ordinary Differential Equations for Engineers
MATH 264	(3)	Advanced Calculus for Engineers
MECH 289	(3)	Design Graphics
WCOM 206	(3)	Communication in Engineering

\* Note: FA

### Stream B - Non-CEGEP Students

Non-CEGEP students must take the following courses:

CIVE 208	(3)	Civil Engineering System Analysis
MIME 329	(2)	Mining Geology
MIME 330	(3)	Mining Geotechnics
MIME 421	(3)	Rock Mechanics
MIME 424	(3)	Underground Mining Methods
MIME 428	(3)	Environmental Mining Engineering

## **Technical Complementaries**

8-9 credits can be chosen from the following or from any other approved technical courses in Engineering, Management, or Science (including mathematics courses).

Note: Not all courses are given annually; see the "Courses" section of this eCalendar to know if a course is offered.

CFIN 410	(3)	Investment and Portfolio Management
CIVE 416	(3)	Geotechnical Engineering
CIVE 421	(3)	Municipal Systems
CIVE 584	(3)	Mechanics of Groundwater Flow
EPSC 320	(3)	Elementary Earth Physics
EPSC 549	(3)	Hydrogeology
FINE 482	(3)	International Finance 1
MIME 320	(3)	Extraction of Energy Resources
MIME 442	(3)	Analysis, Modelling and Optimization in Mineral Processing
MIME 484	(3)	Mining Project
MIME 494	(2)	Industrial Work Period 4
MIME 511	(3)	Advanced Subsurface Ventilation and Air Conditioning
MIME 514	(3)	Sustainability Analysis of Mining Systems
MIME 520	(3)	Stability of Rock Slopes
MIME 527	(3)	Selected Topics in Mineral Resource Engineering
MIME 544	(3)	Analysis: Mineral Processing Systems 1
MIME 545	(3)	Analysis: Mineral Processing Systems 2
MIME 588	(3)	Reliability Analysis of Mining Systems
MPMC 320*	(3)	CAO et informatique pour les mines

<sup>\*</sup> Mining course taken at Polytechnique Montréal

## **Complementary Studies**

6 credits

## Group A - Impact of Technology on Society

3 credits from the following:

ANTH 212	(3)	Anthropology of Development
BTEC 502	(3)	Biotechnology Ethics and Society
ECON 225	(3)	Economics of the Environment
ECON 347	(3)	Economics of Climate Change

ENVR 201	(3)	Society, Environment and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
	(3)	Strategies for Sustainability

AERO 460D1	(3)	Aerospace Project
AERO 460D2	(3)	Aerospace Project
ECSE 458D1*	(3)	Capstone Design Project
ECSE 458D2*	(3)	Capstone Design Project
ECSE 478D1*	(3)	Electrical Engineering Honours Thesis
ECSE 478D2*	(3)	Electrical Engineering Honours Thesis
MECH 403D1*	(3)	Thesis (Honours)
MECH 403D2*	(3)	Thesis (Honours)
MECH 463D1*	(3)	Design 3: Mechanical Engineering Project
MECH 463D2*	(3)	Design 3: Mechanical Engineering Project

<sup>\*</sup> An aerospace engineering project or honours thesis will be defined for students enrolled in the Minor and approved by the Minor Adviser.

And

12 credits from one of the following streams:

Students may take one complementary course outside of their stream, but their selection must be approved by the Minor Adviser prior to the registration for the course.

## **Aerodynamics and Propulsion Stream**

MECH 447	(3)	Combustion
MECH 516	(3)	Computational Gasdynamics
MECH 532	(3)	Aircraft Performance, Stability and Control
MECH 533	(3)	Subsonic Aerodynamics
MECH 535	(3)	Turbomachinery and Propulsion
MECH 539	(3)	Computational Aerodynamics
MECH 562	(3)	Advanced Fluid Mechanics
MECH 566	(3)	Fluid-Structure Interactions
MECH 579	(3)	Multidisciplinary Design Optimization

#### Aircraft Structures Stream

MECH 530	(3)	Mechanics of Composite Materials
MECH 536	(3)	Aerospace Structures
MECH 543	(3)	Design with Composite Materials
MECH 544	(3)	Processing of Composite Materials
MECH 546	(3)	Finite Element Methods in Solid Mechanics
MECH 550	(3)	Vibrations of Continuous Systems
MECH 551	(3)	Nonlinear Dynamics of Shell Structures
MECH 567	(3)	Structural Dynamics of Turbomachines
MIME 560	(3)	Joining Processes
MIME 565	(3)	Aerospace Metallic-Materials and Manufacturing Processes

### **Spacecraft and Systems Stream**

GEOG 308	(3)	Remote Sensing for Earth Observation
MECH 513	(3)	Control Systems
MECH 536	(3)	Aerospace Structures

MECH 542	(3)	Spacecraft Dynamics
MECH 546	(3)	Finite Element Methods in Solid Mechanics
MECH 550	(3)	Vibrations of Continuous Systems
MECH 559	(3)	Engineering Systems Optimization
MIME 565	(3)	Aerospace Metallic-Materials and Manufacturing Processes
PHYS 320	(3)	Introductory Astrophysics

## Material and Processes Stream

CHEE 515*	(3)	Interface Design: Biomimetic Approach
CHEE 541	(3)	Electrochemical Engineering
CHEE 543	(3)	Plasma Engineering
MECH 544	(3)	Processing of Composite Materials
MIME 512	(3)	Corrosion and Degradation of Materials
MIME 515*	(3)	(Bio)material Surface Analysis and Modification
MIME 559	(3)	Aluminum Physical Metallurgy
MIME 560	(3)	Joining Processes
MIME 563	(3)	Hot Deformation of Metals
MIME 565	(3)	Aerospace Metallic-Materials and Manufacturing Processes
MIME 571	(3)	Surface Engineering
MIME 580	(3)	Additive Manufacturing Using Metallic and Ceramic Materials

 $<sup>\</sup>ensuremath{^{*}}$  Students may choose only one of CHEE 515 or MIME 515.

### Avionics Stream

ECSE 403	(4)	Control
ECSE 408	(4)	Communication Systems
ECSE 412	(3)	Discrete Time Signal Processing
ECSE 420	(3)	Parallel Computing
ECSE 421	(3)	Embedded Systems
ECSE 422	(3)	Fault Tolerant Computing
ECSE 425	(3)	Computer Architecture
ECSE 427	(3)	Operating Systems
ECSE 429	(3)	Software Validation
ECSE 444	(4)	Microprocessors
ECSE 465	(3)	Power Electronic Systems
ECSE 501	(3)	Linear Systems
ECSE 507	(3)	Optimization and Optimal Control
ECSE 511	(3)	Introduction to Digital Communication
ECSE 512	(3)	Digital Signal Processing 1
ECSE 513	(3)	Robust Control Systems
ECSE 516	(3)	Nonlinear and Hybrid Control Systems
		Interconnects and Signal Intego7Dt

## 6.12.10.2 Bachelor of Engineering (B.Eng.) - Minor Applied Artificial Intelligence (22-25 credits) (25 credits)

The B.Eng.; Minor in Applied Artificial Intelligence, open to all engineering students, is designed to provide the foundation for applications of AI techniques in  $\nu$ 

BIOC 212*	(3)	Molecular Mechanisms of Cell Function
BIOL 200	(3)	Molecular Biology
BIOL 201*	(3)	Cell Biology and Metabolism
BIOL 219**	(4)	Introduction to Physical Molecular and Cell Biology
CHEM 212***	(4)	Introductory Organic Chemistry 1
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

<sup>\*</sup> Students can choose one of ANA

BIEN 330	(3)	Tissue Engineering and Regenerative Medicine
BIEN 510	(3)	Engineered Nanomaterials for Biomedical Applications
BIEN 550	(3)	Biomolecular Devices
BIEN 560	(3)	Design of Biosensors
BMDE 504	(3)	Biomaterials and Bioperformance
BMDE 505	(3)	Cell and Tissue Engineering
BMDE 508	(3)	Introduction to Micro and Nano-Bioengineering
CHEE 380	(3)	Materials Science
ECSE 424	(3)	Human-Computer Interaction
MECH 553	(3)	Design and Manufacture of Microdevices
MIME 360	(3)	Phase Transformations: Solids
MIME 362	(3)	Mechanical Properties
MIME 470	(3)	Engineering Biomaterials
PHYS 534	(3)	Nanoscience and Nanotechnology

BIEN 350*	(4)	Biosignals, Systems and Control
BIEN 462	(3)	Engineering Principles in Physiological Systems
BMDE 501	(3)	Selected Topics in Biomedical Engineering
BMDE 502	(3)	BME Modelling and Identification
BMDE 503	(3)	Biomedical Instrumentation
BMDE 519	(3)	Biomedical Signals and Systems
ECSE 206*	(3)	Introduction to Signals and Systems
ECSE 517	(3)	Neural Prosthetic Systems
ECSE 526	(3)	Artificial Intelligence
PHYS 413	(3)	Physical Basis of Physiology

<sup>\*</sup> Students choose either BIEN 350 or ECSE 206.

0-6 credits can be taken by permission of the Departmental Adviser and approval of the Minor Adviser.

## 6.12.10.5 Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) (24 credits)

Minor Adviser: Faculty Student Adviser in the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson

ANAT 541	(3)	Cell and Molecular Biology of Aging
EXMD 504	(3)	Biology of Cancer
PATH 300	(3)	Human Disease
Chemistry		
CHEM 482	(3)	Organic Chemistry: Natural Products
CHEM 502	(3)	Advanced Bio-Organic Chemistry
CHEM 552	(3)	Physical Organic Chemistry

## General

## **Immunology**

ANAT 261 (4) Introduction to Dynamic Histology

Biochemistry of 9 T(T n6neease)Tj1 0 0 1 165.864 643.923 Tm(Bioc)

# Molecular Biology (Biochemistry)

BIOC 311	(3)	Metabolic Biochemistry
BIOC 312	(3)	Biochemistry of Macromolecules
BIOC 450	(3)	Protein Structure and Function
BIOC 454	(3)	Nucleic Acids
PSYT 455	(3)	Neurochemistry

# Physiology

Physiology and Biochemistry Endoca3221.949 587e System 1 165.864 653.441 Tm(ysiology a 0 0 1 70.52 637.721 Tm(

### 6.12.10.7.2 Bachelor of Engineering (B.Eng.) - Minor Computer Science

24-25 credits

This program gives students in Engineering an introduction to core computer science concepts. The Minor is open to B.Eng. and B.Sc.(Arch.) students in Engineering who have already taken ECSE 202, COMP 202, or COMP 208. These courses are all considered equivalent as prerequisites for COMP 250. This program is not open to students in the B.S.E. program. All courses in the Minor must be passed with a grade of C or better. The Minor program requires the completion of 24 credits, of which no more than 6 credits may overlap with the primary program.

Students who are interested in this Minor should consult with the Undergraduate Program Coordinator in the School of Computer Science (ENGMC 320) for administrative matters, and should consult with both the Minor Adviser in Computer Science and with their department adviser for approval of their course selection. Forms must be submitted and approved before the end of the drop/add period of the student's final term.

## **Required Courses**

6 credits		
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
Complementary Course	s	
18-19 credits		
3 credits from the following:		
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
3 credits from the following:		
COMP 273	(3)	Introduction to Computer Systems
ECSE 222*	(3)	Digital Logic
3-4 credits from the following	g:	
CHEE 390	(3)	Computational Methods in Chemical Engineering
CIVE 320	(4)	Numerical Methods
COMP 350	(3)	Numerical Computing
ECSE 343	(3)	Numerical Methods in Engineering
MATH 317	(3)	Numerical Analysis
MECH 309	(3)	Numerical Methods in Mechanical Engineering
9 credits from:		
COMP 251	(3)	Algorithms and Data Structures
MATH 240	(3)	Discrete Structures

COMP courses at the 300 level or above except COMP 396, COMP 400.

It is strongly recommended that students take COMP 251, as it is a prerequisite of many later computer science courses.

<sup>\*</sup> Students who have taken ECSE 221 may use it instead of ECSE 222 or COMP 273.

A maximum of 12 credits of coursework in the student's major may double-count with the Minor.

Minor Adviser: Prof. L. Chouinard, Macdonald Engineering Building, Room 491 (Telephone: 514-398-6446)

Minor program credit weight: 24 credits

Note: This Minor is particularly designed for Civil Engineering students, but is open to all B.Eng. and B.Sc.(Arch.) students.

All courses in the Minor must be passed with a grade of C or better.

### **Prerequisites**

CIVE 208	(3)	Civil Engineering System Analysis
CIVE 302	(3)	Probabilistic Systems
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
FACC 300	(3)	Engineering Economy

## Required Courses: Management and Law (15 credits)

CIVE 324	(3)	Sustainable Project Management
FACC 220	(3)	Law for Architects and Engineers
INDR 294	(3)	Introduction to Labour-Management Relations
MGCR 211	(3)	Introduction to Financial Accounting
MGCR 341	(3)	Introduction to Finance

## **Complementary Courses (9 credits)**

3 credits from List A 6 credits from List B

List A:

Energy, En

to complete a minor in economics are required to complete the following program rather than one of the minor concentrations offered by the Department of Economics in the Faculty of Arts section of this eCalendar, unless they have obtained permission from the Faculty of Engineering.

All courses in the Minor must be passed with a grade of C or better.

#### **Required Courses**

_	4.
u	credits

ECON 209*	(3)	Macroeconomic Analysis and Applications
ECON 230D1**	(3)	Microeconomic Theory
ECON 230D2**	(3)	Microeconomic Theory

<sup>\*</sup> This requirement is waived for students who choose ECON 330D1/ECON 330D2 from the list of complementary courses. Students may not take both ECON 209 and ECON 330D1/ECON 330D2.

### **Complementary Courses**

9 credits from:		
ECON 225	(3)	Economics of the Environment
ECON 303	(3)	Canadian Economic Policy
ECON 304	(3)	Financial Instruments and Institutions
ECON 305	(3)	Industrial Organization
ECON 306	(3)	Labour Markets and Wages
ECON 308	(3)	Governmental Policy Towards Business
ECON 313	(3)	Economic Development 1
ECON 314	(3)	Economic Development 2
ECON 316	(3)	The Underground Economy
ECON 326	(3)	Ecological Economics
ECON 330D1	(3)	Macroeconomic Theory
ECON 330D2	(3)	Macroeconomic Theory
ECON 335	(3)	The Japanese Economy
ECON 336	(3)	The Chinese Economy
ECON 337	(3)	Introductory Econometrics 1
ECON 344	(3)	Industrial Revolution and Economic Development
ECON 345	(3)	The International Economy since 1914
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
ECON 406	(3)	Topics in Economic Policy
ECON 408	(3)	Public Sector Economics 1
ECON 409	(3)	Public Sector Economics 2
ECON 411	(3)	Economic Development: A World Area
ECON 416	(3)	Topics in Economic Development 2
ECON 420	(3)	Topics in Economic Theory
ECON 426	(3)	Labour Economics
ECON 434	(3)	Current Economic Problems
ECON 440	(3)	Health Economics
ECON 468	(3)	Econometrics 1 - Honours

<sup>\*\*</sup> Students may, with consent of the instructor, take ECON 250D1/ECON 250D2 Introduction to Economic Theory: Honours, in place of ECON 230D1/ECON 230D2.

ECON 469	(3)	Econometrics 2 - Honours
ECON 525	(3)	Project Analysis
ECON 546	(3)	Game Theory

Note: Mining Engineering students are permitted to include MIME 526 Mineral Economics among the Complementary Courses.

#### 6.12.10.10 Minor in Environment

Environmental studies focus on the interactions between humans and their natural and technological environments. Environmental problems are complex, and their satisfactory solutions require the synthesis of social, scientific, and institutional knowledge.

The Minor in Environment is offered and administered by the Bieler School of Environment.

Since the program comprises a total of 18 credits for the Minor, additional credits beyond those needed for the B.Eng. degree are required. Students wishing to complete the Minor should prepare a program and have it approved by both their regular Engineering departmental adviser and the Minor program adviser. For program details, see *Bieler School of Environment > Undergraduate > Browse Academic Programs > section 7.7.1: Minor in Environment*.



**Note:** Engineering students interested in this Minor must submit a completed Course Authorization Form to the *McGill Engineering Student Centre* (Student Affairs Office; Frank Dawson Adams Building, Room 22).

Minor Adviser: Students interested in this Minor should contact:

Kathy Roulet

Bieler School of Environment Program Adviser

Telephone: 514-398-4306 Email: kathy.roulet@mcgill.ca

### 6.12.10.11 Bachelor of Engineering (B.Eng.) - Minor Environmental Engineering (21 credits)

Minor Adviser: Prof. S. Ghoshal, Prof. D. Frigon Macdonald Engineering Building, Room 569C

Minor program credit weight: 21-22 credits

The Environmental Engineering Minor is administered by the Department of Civil Engineering and is offered for all students in Engineering and in the Department of Bioresource Engineering wishing to pursue studies in this area.

A maximum of 12 credits of coursework in the student's major may double-count with the Minor.

To complete the Minor in Environmental Engineering, students must obtain a grade of C or better in all approved courses in the Minor, and satisfy the requirements of both the Minor and their major program.

Note: Not all courses listed are offered every year. Students should see the "Courses" section of this eCalendar to know if a course is offered.

### **Complementary Courses**

21-22 credits

18 credits from Stream A, B, or C below

and

One course (3-4 credits) from the following list:

BREE 327 (3) wing list:
Bio-Environmental Engineering
CIVE 225 (4) Environmental Engineering

#### Stream A

15 credits\* from the Engineering Course List and 3 credits from the Non-Engineering Course List below

\* A minimum of 6 credits must be from outside the student's department. A maximum of 6 credits of research project courses may be counted toward this category, provided the project has sufficient environmental engineering content (project requires approval of project supervisor and coordinator of the Minor).

### Stream B

15 credits of courses that make up the "Barbados Field Study Semester" below, provided the project for CIVE/AGRI/URBP 519 Sustainable Development Plans has sufficient environmental engineering content (project requires approval of the Coordinator of the Minor);

AND

One course (3-4 credits) chosen from the Engineering Course List below, excluding CHEE 496.

McGill Uni 1065

# **Barbados Field Study Courses**

## **Required Courses**

6 credits

CHEE 592	(3)	Industrial Air Pollution Control
CHEE 593	(3)	Industrial Water Pollution Control
CIVE 225	(4)	Environmental Engineering
CIVE 323**	(3)	Hydrology and Water Resources
CIVE 421	(3)	Municipal Systems
CIVE 428	(3)	Water Resources and Hydraulic Engineering
CIVE 430	(3)	Water Treatment and Pollution Control
CIVE 550	(3)	Water Resources Management
CIVE 555	(3)	Environmental Data Analysis
CIVE 557	(3)	Microbiology for Environmental Engineering
CIVE 572	(3)	Computational Hydraulics
CIVE 573	(3)	Hydraulic Structures
CIVE 574	(3)	Fluid Mechanics of Water Pollution
CIVE 577	(3)	River Engineering
CIVE 584	(3)	Mechanics of Groundwater Flow
MECH 447	(3)	Combustion
MECH 534	(3)	Air Pollution Engineering
MECH 535	(3)	Turbomachinery and Propulsion
MIME 422	(3)	Mine Ventilation
MIME 512	(3)	Corrosion and Degradation of Materials
MPMC 328	(3)	Environnement et gestion des rejets miniers
URBP 506	(3)	Environmental Policy and Planning

<sup>\*\*</sup> Not open to students who have passed BREE 217.

## Non-Engineering Course List

Courses offered at the Macdonald campus:

LSCI 230+	(3)	Introductory Microbiology
MICR 331+	(3)	Microbial Ecology
MICR 341	(3)	Mechanisms of Pathogenicity
RELG 270	(3)	Religious Ethics and the Environment
SOIL 331	(3)	Environmental Soil Physics
WILD 375	(3)	Issues: Environmental Sciences

<sup>+</sup> Not open to students who have passed CHEE 370.

Courses offered at the Downtown campus:

ANTH 206	(3)	Environment and Culture
BIOL 205	(3)	Functional Biology of Plants and Animals
BIOL 432	(3)	Limnology
CMPL 580	(3)	Environment and the Law
ECON 225	(3)	Economics of the Environment
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change

EPSC 549	(3)	Hydrogeology
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 203	(3)	Environmental Systems
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 302	(3)	Environmental Management 1
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 321	(3)	Climatic Environments
GEOG 404	(3)	Environmental Management 2
MIMM 211	(3)	Introductory Microbiology

#### 6.12.10.12 Minor Programs in Finance, Management, Marketing, and Operations Management (Currently Under Review)

#### Prerequisite: None

Minors for Non-Management Students: Students considering one of these Minor programs should consult a Faculty Student Adviser in the *McGill Engineering Student Centre* (Student Affairs Office; Frank Dawson Adams Building, Room 22) before applying to the Desautels Faculty of Management.

Many engineers begin to assume management functions within a few years of graduation. They can, at this stage, take up the study of economics, behavioural science, and other management subjects. Students wishing to include such studies in their undergraduate program can take suitable courses from Engineering and Management.

Each Minor comprises 18 credits of courses available from the core program of the Desautels Faculty of Management (subject to timetable requirements). Some courses from the Management core program have considerable overlap with Engineering courses and thus are not available to Engineering students.

Students embarking on a minor must be prepared to take credits additional to their Engineering program. Students in a B.Eng. program may be able to count up to 6 credits of Complementary Studies Group B courses (Humanities and Social Sciences, Management Studies, and Law courses) toward both their Engineering major program and a Management minor where applicable. More information about Complementary Studies is given in each individual academic program listing for the B.Eng. degree (see *section 6.12: Browse Academic Units & Programs*).

Admission requirements for the Management Minors change annually. Please consult the Desautels Faculty of Management website for more details.

Students planning to take any course with statistics as a prerequisite must have completed MGCR 271 (Business Statistics) or an equivalent course approved by the BCom Student Affairs Office.

### **Application and Program Requirements**

Detailed information on the following Minor programs can be found in *Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.7: Minors for Non-Management Students*:

- section 9.8.7.3: Bachelor of Commerce (B.Com.) Minor Finance (For Non-Management Students) (18 credits)
- section 9.8.7.4: Bachelor of Commerce (B.Com.) Minor Management (For Non-Management Students) (18 credits)
- section 9.8.7.5: Bachelor of Commerce (B.Com.) Minor Marketing (For Non-Management Students) (18 credits)
- section 9.8.7.6: Bachelor of Commerce (B.Com.) Minor Operations Management (F

MIME 467 (3) Electronic Properties of Materials

## **Complementary Courses**

9 credits from the following:

CHEE 587	(3)	Chemical Processing: Electronics Industry
ECSE 545	(3)	Microelectronics Technology
MECH 530	(3)	Mechanics of Composite Materials
MIME 360	(3)	Phase Transformations: Solids
MIME 512	(3)	Corrosion and Degradation of Materials
MIME 560	(3)	Joining Processes
MIME 561	(3)	Advanced Materials Design
MIME 563	(3)	Hot Deformation of Metals
MIME 569	(3)	Electron Beam Analysis of Materials

### 6.12.10.14 Bachelor of Engineering (B.Eng.) - Minor Mathematics (18 credits)

The B.Eng.; Minor in Mathematics provides students with an even stronger foundation in mathematics to further develop their knowledge of this subject. Students enrolled in the B.Eng.; Minor in Mathematics complete a series of mathematics courses offered by the Department of Mathematics and Statistics, or other units offering mathematics courses.

Minor Adviser: Faculty Student Adviser in the McGIII Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22) AND an adviser designated by the Department of Mathematics and Statistics. (Please consult the Department of Mathematics and Statistics for the name of this adviser.) Selection of courses must be undertaken in conjunction with the Minor Advisers, normally beginning in the U2 year.

Note: The B.Eng.; Minor in Mathematics is open to all students in the Faculty of Engineering (including students registered in the B.Sc.(Arch.)). A maximum of 9 credits of overlap (double-counting) with the degree program is allowed.

Engineering students must obtain a grade of C or better in courses approved for this Minor.

## Required Course (3 credits)

MATH 242 (3) Analysis 1

#### Complementary Courses (15 credits)

3 credits selected from:

MATH 223	(3)	Linear Algebra
MATH 247	(3)	Honours Applied Linear Algebra

### 6-12 credits selected from:

ECSE 205*	(3)	Probability and Statistics for Engineers
MATH 204	(3)	Principles of Statistics 2
MATH 240	(3)	Discrete Structures
MATH 243	(3)	Analysis 2
MATH 264	(3)	Advanced Calculus for Engineers
MATH 271**	(3)	Linear Algebra and Partial Differential Equations
MATH 316	(3)	Complex Variables
MATH 319**	(3)	Partial Differential Equations
MATH 323*	(3)	Probability

<sup>\*</sup> Students choose either CHEE 380 or MIME 260.

MIME 521	(3)	Stability of Underground Openings
MIME 526	(3)	Mineral Economics
MIME 588	(3)	Reliability Analysis of Mining Systems

# List B: Mechanical Engineering

0-6 credits from the following:

MECH 497 (3) Value Engineering

(3) Mechanics and Control of Robotic Manipulators

CHEM 531	(3)	Chemistry of Inorganic Materials
CHEM 582	(3)	Supramolecular Chemistry
CHEM 585	(3)	Colloid Chemistry
Electrical Engineering		
ECSE 423	(3)	Fundamentals of Photonics
ECSE 430	(3)	Photonic Devices and Systems
ECSE 433	(4) Se3)	Physical Basis of Transistor Devices
	563)	Semiconductor Nano2 60Ftorur and Syno2 ptonic De

- CHEE 515 or MIME 515
- CHEE 521 or CIVE 521
- CHEM 534 or PHYS 534
- BIOL 319 or PHYS 319
- ^ A research-based course (maximum 4cr) with the focus on nanotechnology taken at McGill University may be considered for credits towards this Minor; students must obtain the approval of the research project from the Minor adviser prior to taking the course in order for the course to be counted as part of the Minor credits.
- \*\* A 3.0 or higher CGPA is required in order to take these courses.
- \*\*\* When topic is appropriate, with approval from the Minor Adviser.

6.12.10.18 Bachelor of Engineering (B.Eng.) - Minor Physics (18 credits)

#### **Complementary Courses**

3 credits from the following:

COMP 250*	(3)	Introduction to Computer Science
ECSE 250*	(3)	Fundamentals of Software Development

6 credits from the following:

COMP 302	(3)	Programming Languages and Paradigms
COMP 409	(3)	Concurrent Programming
COMP 421	(3)	Database Systems
COMP 424*	(3)	Artificial Intelligence
COMP 527	(3)	Logic and Computation
ECSE 326	(3)	Software Requirements Engineering
ECSE 420	(3)	Parallel Computing
ECSE 421	(3)	Embedded Systems
ECSE 422	(3)	Fault Tolerant Computing
ECSE 424	(3)	Human-Computer Interaction
ECSE 425	(3)	Computer Architecture
ECSE 427	(3)	Operating Systems
ECSE 429	(3)	Software Validation
ECSE 437	(3)	Software Delivery
ECSE 439*	(3)	Software Language Engineering
ECSE 446*+	(3)	Realistic Image Synthesis
ECSE 526*+	(3)	Artificial Intelligence
ECSE 539*+	(4)	Advanced Software Language Engineering
ECSE 546*+	(4)	Advanced Image Synthesis

<sup>\*</sup>Students may choose only one course in each of the following sets:

- COMP 250 and ECSE 250
- COMP 424 and ECSE 526
- ECSE 439 and ECSE 539
- ECSE 446 and ECSE 546
- + Restricted to Honours students or Computer Engineering or

Electrical Engineering students with CGPA of at least 3.0 and B+ or better in prerequisites

#### 6.12.10.20 Bachelor of Engineering (B.Eng.) - Minor Technological Entrepreneurship (18 credits)

Minor Adviser: Faculty Student Adviser in the McGill Engineering Student Centre (Student Affairs Office) (Frank Dawson Adams Building, Room 22).

This Minor is a collaboration of the Faculty of Engineering and Desautels Faculty of Management and is designed to provide Engineering (B.Eng. and B.Sc. (Arch.)) students with an understanding of how to conceptualize, develop, and manage successful new ventures – including for-profit private companies, social enterprises, and cooperatives as well as intrapreneurship initiatives. The program covers the essentials of management and is multidisciplinary and integrative. Many courses in the Minor will address a mix of students from across multiple McGill faculties.

B.Eng. students may double-count up to two courses (6 credits) of Complementary Studies (Group B., Humanities, and Social Science courses) toward the Minor. B.Eng. Mechanical Engineering students may double-count up to 6 credits of Complementary Studies Group B courses and/or Elective courses (for Mechanical Engineering students from a CEGEP background) toward the Minor.

This Minor is restricted to students in Year 2 or higher. Students in this Minor are not permitted to takT111tie63rS8ra1 Tit 1 221.949 394165.811tie63rS8ra,nUnd1 0 0 1

#### **Required Courses (12 credits)**

FACC 500	(3)	Technology Business Plan Design
INTG 201	(3)	Integrated Management Essentials 1
INTG 202	(3)	Integrated Management Essentials 2
MGPO 362	(3)	Fundamentals of Entrepreneurship

#### **Complementary Courses (6 credits)**

3-6	credits	from	the	foll	owing	
5-0	credits	пош	une	1011	owille	

FACC 501	(3)	Technology Business Plan Project
MGPO 364	(3)	Entrepreneurship in Practice

#### 0-3 credits from the following:

BUSA 465	(3)	Technological Entrepreneurship
LAWG 570	(3)	Innovation for Non-Law Students
MGPO 438	(3)	Social Entrepreneurship and Innovation
ORGB 321	(3)	Leadership

## 7 Bieler School of Environment

### 7.1 About the Bieler School of Environment

McGill's Faculties of Agricultural and Environmental Sciences, Arts, and Science have forged a unique approach to the study of environment through the interfaculty, trans-disciplinary Bieler School of Environment. The growth of technology, globalising economies, and rapid increases in population have had dramatic and significant environmental impacts. These changes have been accompanied by an increasing awareness of the relationship between human activity and the environment. Environmental problems range from local and short-term degradation through to perturbations observed over the entire globe over the span of many years. The importance of human-environment relations for environmental and social well-being, and the complexity and conflict involved in environmental analysis and decision making, requires a depth and breadth of knowledge. The Bieler School of Environment has developed its programs with the approach of introducing students to a broad range of ideas early in the program to provide a foundation and an openness upon which more specialized, disciplinary knowledge can be built.

### 7.2 Mission of the School

The mission of the Bieler School of Environment is:

- to provide a program that will develop a broad-based environmental literacy in the undergraduate population;
- to develop opportunities for graduate students to pursue studies of the environment at an advanced level to create future leaders and researchers; and
- to generate new ideas, new insights, new technologies, and new approaches to understanding and redressing environmental problems through academic research and outreach that draws on the University's existing strength in research and spans disciplinary boundaries.

Through a range of research and educational initiatives, the School aims to aid society in making environmental choices, in the context of diverse environmental world views that will sustain healthy societies within a flourishing biosphere.

The Bieler School of Environment focuses on four themes:

- Health in a Changing Environment
- · Ecosystems, Biodiversity, and Conservation
- Citizens, Communities, Institutions, and the Environment

#### **Associate Professors**

Madhav Badami, Christopher Barrington-Leigh, Jeffrey Cardille, Frédéric Fabry, Nicolas Kosoy, Brian Leung, Kevin Manaugh, Raja Sengupta, Renée Sieber, Ismael Vaccaro

#### **Assistant Professors**

Amy Janzwood, Fiona Soper

#### **Faculty Lecturers**

Julia Freeman, Christie Lovat, Kathryn Roulet

#### **Associate Members**

Anthropology: John Galaty

Architecture, School of: Nik Luka

Atmospheric and Oceanic Sciences: Parisa Ariya

Biology: Lauren Chapman, Andrew Gonzalez, Irene Gregory-Eaves, Catherine Potvin

Bioresource Engineering: Jan Adamowski, Grant Clark, Mark Lefsrud, Chandra Madramootoo

Chemical Engineering: Nathalie Tufenkji, Viviane Yargeau

Chemistry: Christopher Barrett

Civil Engineering: Susan Gaskin, Van-Thanh-Van Nguyen, Jim Nicell

Earth and Planetary Sciences: Nagissa Mahmoudi

Economics: Chris Green, Tom Naylor

Electrical and Computer Engineering: Geza Joos

Epidemiology, Biostatistics, and Occupational Health: Jonathan Che

#### Admission, Registration, and Regulations

section 7.4.2: Degree Requirements

section 7.4.3: Important Information about Program Selection

section 7.4.4: Examination Regulations

section 7.4.5: Courses Outside the Student's Faculty

#### 7.4.1 Admission

You may be admitted to a B.A., B.A. & Sc., B.Sc.(Ag.Env.Sc.), or B.Sc. program offered by the Bieler School of Environment on the University's two campuses: the Macdonald Campus (B.Sc.(Ag.Env.Sc.) program) and the Downtown Campus (B.A., B.A.&Sc., and B.Sc. programs). You register as a student within your faculty of admission and are governed by all rules and regulations of your faculty.

If you have already completed a bachelor or an equivalent degree, you may be admitted to the Diploma in Environment through the Faculty of Agricultural and Environmental Sciences, the Faculty of Arts, or the Faculty of Science. You register as a student within your faculty of admission and are governed by all rules and regulations of your faculty relative to the Diploma.

Please see the Undergraduate Admissions Guide, found at mcgill.ca/applying.

## 7.4.2 Degree Requirements

To be eligible for a **B.A.** degree, you must fulfil all the faculty and program requirements as indicated in *Faculty of Arts > Undergraduate > section* 3.6: *Faculty Degree Requirfor a* 

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- Arts students, see Faculty of Arts > Undergraduate > Faculty of Arts Degree Requirements > Course Requirements > section 3.6.5.3: Programs Outside the Faculties of Arts or Science For Arts Students.
- Arts and Science students, see Bachelor of Arts and Science Under

#### 7.7.1 Minor in Environment

The Minor in Environment is intended to complement an expertise obtained through a major, major concentration, Faculty program, or Interfaculty program offered by an academic unit **other than** the Bieler School of Environment\*. Students taking the Minor (or Minor Concentration) in Environment are exposed to different approaches, perspectives, and world views that will help them gain an understanding of the complexity and conflicts that underlie environmental problems.

Students, after consulting with their adviser in their major program or concentration and the Environment Program Adviser, can declare their intention to do a Minor (or Minor Concentration) in Environment.



\* Note: Students in Arts, Law, and Management should complete the Minor Concentration Environment. Students in Agricultural and Environmental Sciences, Engineering, and Science should complete the Minor Environment.

# 7.7.1.1 Bachelor of Arts (B.A.) - Minor Concentration Environment (18 credits)

This 18-credit Minor Concentration Environment is intended for Arts students in the multi-track system, Law and Management students. Students in Agricultural & Environmental Sciences, Engineering, and Science should complete the Minor Environment.

#### **Advising Note:**

Consultation with the Program Adviser for approval of course selection to meet program requirements is obligatory. No overlap is allowed between this program and the student's major program or concentration, or a second minor program.

For more information, contact:

Ms. Kathy Roulet, Program Adviser

Email: kathy.roulet@mcgill.ca Telephone: 514-398-4306

## **Complementary Courses (18 credits)**

18 credits of complementary courses, all of which must fall outside the discipline or field of the student's major program or concentration, and which must be 200-level or above, selected as follows:

#### 12 credits of MSE core courses:

The core ENVR courses are taught at both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought

6 credits of environmentally related courses selected with the approval of the Program Adviser (at least 3 credits must be in natural sciences). A list of Suggested Courses is given below.

#### **Suggested Course List**

The Suggested Course List is divided into twvA list of

# **Social Sciences and Policy**

Economic Systems of

BIOL 418	(3)	Freshwater Invertebrate Ecology
BIOL 432	(3)	Limnology
BIOL 436	(3)	Evolution and Society
BIOL 465**	(3)	Conservation Biology
BREE 217**	(3)	Hydrology and Water Resources
BREE 322	(3)	Organic Waste Management
BREE 327	(3)	Bio-Environmental Engineering
BREE 518	(3)	Ecological Engineering
CHEM 212	(4)	Introductory Organic Chemistry 1
CHEM 281	(3)	Inorganic Chemistry 1
CIVE 225	(4)	Environmental Engineering
CIVE 323**	(3)	Hydrology and Water Resources
CIVE 550	(3)	Water Resources Management
COMP 202**	(3)	Foundations of Programming
COMP 204**	(3)	Computer Programming for Life Sciences
ENVB 210	(3)	The Biophysical Environment
ENVB 301	(3)	Meteorology
ENVB 305**	(3)	Population and Community Ecology
ENVB 410	(3)	Ecosystem Ecology
ENVB 415	(3)	Ecosystem Management
ENVB 529**	(3)	GIS for Natural Resource Management
ENVR 200	(3)	The Global Environment
ENVR 202	(3)	The Evolving Earth
ENVR 422	(3)	Montreal Urban Sustainability Analysis
		Und584.08 Tm(g)T 0 gementENVR 202

MIMM 214 (3) Introductory Immunology: Elements of Immunity
Microbial Ph

This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Bieler School of Environment Program Adviser.

Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students). If in doubt, ask the Program Adviser.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

## **Social Sciences and Policy**

AGEC 231	(3)	Economic Systems of Agriculture
AGEC 333	(3)	Resource Economics
AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development
AGRI 411	(3)	Global Issues on Development, Food and Agriculture
ANTH 206	(3)	Environment and Culture
ANTH 212	(3)	Anthropology of Development
ANTH 339	(3)	Ecological Anthropology
ANTH 418	(3)	Environment and Development
ANTH 512	(3)	Political Ecology
ECON 205	(3)	An Introduction to Political Economy
ECON 225	(3)	Economics of the Environment
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
EDER 494	(3)	Human Rights and Ethics in Practice
ENVB 437	(3)	Assessing Environmental Impact
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geography
GEOG 301	(3)	Geography of Nunavut
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 370	(3)	Protected Areas
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 423	(3)	Dilemmas of Development
GEOG 530	(3)	Global Land and Water Resources
HIST 249	(3)	Health and the Healer in Western History

HIST 292	(3)	History and the Environment
NRSC 221	(3)	Environment and Health
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 237	(3)	Contemporary Moral Issues
PHIL 334	(3)	Ethical Theory
PHIL 341	(3)	Philosophy of Science 1
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
POLI 212	(3)	Government and Politics - Developed World
POLI 227	(3)	Developing Areas/Introduction
POLI 345	(3)	International Organizations
POLI 350	(3)	Global Environmental Politics
POLI 412	(3)	Canadian Voting/Public Opinion
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 474	(3)	Inequality and Development
PSYC 215	(3)	Social Psychology
RELG 270	(3)	Religious Ethics and the Environment
RELG 370	(3)	Religion and Human Rights
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 235	(3)	Technology and Society
SOCI 254	(3)	Development and Underdevelopment
SOCI 307	(3)	Globalization
SOCI 365	(3)	Health and Development
SOCI 366	(3)	Neighborhoods and Inequality
SOCI 386	(3)	Contemporary Social Movements
URBP 201	(3)	Planning the 21st Century City
URBP 504	(3)	Planning for Active Transportation
URBP 506	(3)	Environmental Policy and Planning
URBP 530	(3)	Urban Infrastructure and Services in International Context
URBP 551	(3)	Urban Design and Planning
WCOM 314	(3)	Communicating Science

# **Natural Sciences and Technology**

\*\* Note: you may take LSCI 230 or MIMM 211, but not both: you may take ENVB 529 or GEOG 201, but not both: you make take one of BREE 217, CIVE 323 or GEOG 322: you may take BIOL 308 or ENVB 305, but not both: you may take BIOL 465 or WILD 421, but not both: you may take COMP 202 or

BIOL 240	(3)	Monteregian Flora
BIOL 305	(3)	Animal Diversity
BIOL 308**	(3)	Ecological Dynamics
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 342	(3)	Global Change Biology of Aquatic Ecosystems
BIOL 418	(3)	Freshwater Invertebrate Ecology
BIOL 432	(3)	Limnology
BIOL 436	(3)	Evolution and Society
BIOL 465**	(3)	Conservation Biology
BREE 217**	(3)	Hydrology and Water Resources
BREE 322	(3)	Organic Waste Management
BREE 327	(3)	Bio-Environmental Engineering
BREE 518	(3)	Ecological Engineering
CHEM 212	(4)	Introductory Organic Chemistry 1
CHEM 281	(3)	Inorganic Chemistry 1
CIVE 225	(4)	Environmental Engineering
CIVE 323**	(3)	Hydrology and Water Resources
CIVE 550	(3)	Www.Er 356 sources Management
		Fou3DN1 0 0 1 2E 225CIVE 550

we are to be successful in our efforts to assure health of individuals and societies in the future. Recognizing the key role that nutritional status plays in maintaining a healthy body, and the increasing importance of infection as a health risk linked intimately with the environment, this domain prepares students to contribute to the solution of problems of nutrition and infection by tying the relevant natural sciences to the social sciences.

## **Program Prerequisites or Corequisites**

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisf

GEOG 310	(3)	Development and Livelihoods
SOCI 254	(3)	Development and Underdevelopment
SOCI 365	(3)	Health and Development

# List B:

6 credits from List B (maximum 3 credits from any one category):

# **Advanced Ecology**

 $\ensuremath{^{*}}$  Note: You may take BIOL 451 or NRSC 451, but not both.

AEBI 421	(3)	Tropical Horticultural Ecology
BIOL 451*	(3)	Research in Ecology and Development in Africa
BIOL 465	(3)	Conservation Biology
BIOL 553	(3)	Neotropical Environments
ENVB 410	(3)	Ecosystem Ecology
ENVB 500	(3)	Advanced Topics in Ecotoxicology
NRSC 451*	(3)	Research in Ecology and Development in Africa

# **Pollution Control and Pest Management**

ENTO 350	(3)	Insect Biology and Control
ENTO 352	(3)	Biocontrol of Pest Insects
NRSC 333	(3)	Pollution and Bioremediation
PARA 515	(3)	Water, Health and Sanitation

# **Techniques and Management**

\* Note: You may take ENVB 529 or GEOG 201, but not both.

AEBI 423	(3)	Sustainable Land Use
ENVB 529*	(3)	GIS for Natural Resource Management
ENVR 422	(3)	Montreal Urban Sustainability Analysis
GEOG 201*	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
WILD 421	(3)	Wildlife Conservation

or, advanced quantitative methods course (with approval of Adviser).

# Social Change and Influences

ANTH 227	(3)	Medical Anthropology
ENVR 430	(3)	The Economics of Well-Being
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 406	(3)	Human Dimensions of Climate Change
GEOG 514	(3)	Climate Change Vulnerability and Adaptation
HIST 249	(3)	Health and the Healer in Western History
SOCI 307	(3)	Globalization

## **Immunology and Infectious Disease**

\* Note: You may take MIMM 413 or WILD 424, but not both.

MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 314	(3)	Intermediate Immunology
MIMM 324	(3)	Fundamental Virology
MIMM 413*	(3)	Parasitology
PARA 424*	(3)	Fundamental Parasitology
PARA 438	(3)	Immunology
PPHS 501	(3)	Population Health and Epidemiology

## **Populations and Place**

\* Note: You may take ANTH 451 or GEOG 451, but not both.

ANTH 451*	(3)	Research in Society and Development in Africa
EDKP 204	(3)	Health Education
GEOG 451*	(3)	Research in Society and Development in Africa
GEOG 498	(3)	Humans in Tropical Environments
HIST 335	(3)	Science and Medicine in Canada
HIST 510	(3)	Environmental History of Latin America (Field)
SOCI 520	(3)	Migration and Immigrant Groups
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 550	(3)	Developing Societies

## 7.7.2.2 Economics and the Earth's Environment Concentration

This concentration is open only to students in the B.A. Faculty Program in Environment.

## 7.7.2.2.1 Bachelor of Arts (B.A.) - Faculty Program Environment - Economics and the Earth's Environment (54 credits)

Understanding Earth's geologic processes provides us with the knowledge to mitigate many of our society's environmental impacts due to resource extraction and waste disposal. This knowledge is not always enough, as economics often plays a controlling role in how we use and abuse our environment.

This domain educates students in the fundamentals of economics and Earth sciences. The fundamentals of economics are provided, as is their application to the effects of economic choices on Earth's environment. Examples of these applications include the economic effects of public policy toward resource industries and methods of waste disposal, and the potential effects of global warming on the global economy. Students also learn of minerals, rocks, soils, and waters that define much of Earth's environment and how these materials interact with each other and with the atmosphere. Courses in specific subdisciplines of Earth sciences combined with courses presenting a global vision of how the Earth and its environment operate provide the student with the necessary knowledge of geologic processes. Examples of this knowledge include the effects of mineral and energy extraction on the environment and how industrial waste interacts with solids and liquids in the environment. The Earth science and economics studies merge in the final year when the students apply what they have learned in the domain to current environmental issues.

### **Program Prerequisites or Corequisites**

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisfactory option. See:

http://www.mcgill.ca/study/university\_regulations\_and\_resources/undergraduate/gi\_courses\_taken\_under\_the\_satisfactory\_unsatisfactory\_option for details.

## Numeracy

3 credits, one of the following, or equivalent (e.g., CEGEP objective OOUN):

MATH 139	(4)	Calculus 1 with Precalculus
MATH 140	(3)	Calculus 1

## **Basic Science**

1094

3 credits of Basic Science, one of the following, or their equiv

(3)

#### **Area 2: Environmental Resources**

\* Note: You can take BREE 217 or GEOG 322 but not both; you can take BIOL 308 or ENVB 305 but not both.

ATOC 341	(3)	Caribbean Climate and Weather
BIOL 308*	(3)	<b>Ecological Dynamics</b>
BIOL 343	(3)	Biodiversity in the Caribean
BREE 217*	(3)	Hydrology and Water Resources
ENVB 305*	(3)	Population and Community Ecology
EPSC 355	(3)	Sedimentary Geology
EPSC 549	(3)	Hydrogeology
GEOG 305	(3)	Soils and Environment
GEOG 322*	(3)	Environmental Hydrology
SOIL 300	(3)	Geosystems

#### 7.7.2.3 Environment and Development Concentration

This concentration is open only to students in the B.A. Faculty Program in Environment.

## 7.7.2.3.1 Bachelor of Arts (B.A.) - Faculty Program Environment - Environment and Development (54 credits)

The quest for sustainable paths to economic development requires scholars and practitioners to transcend the boundaries of traditional disciplines. This domain offers students sufficient depth and breadth of study to acquire a strong grasp of current theories, concepts, and approaches to environment and development. It prepares them for graduate study in interdisciplinary programs (e.g., development studies or environmental studies) as well as in integrative social sciences (e.g., anthropology, geography, etc.).

#### **Program Prerequisites or Corequisites**

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisfactory option. See:

http://www.mcgill.ca/study/university\_regulations\_and\_resources/undergraduate/gi\_courses\_taken\_under\_the\_satisfactory\_unsatisfactory\_option for details.

## Calculus

3 credits of calculus from the following, or equivalent (e.g., CEGEP objective OOUN):

MATH 139	(4)	Calculus 1 with Precalculus
MATH 140	(3)	Calculus 1

## **Basic Science**

3 credits of basic science from the following, or equivalent (e.g., CEGEP objectives: Biology OOUK, Chemistry OOUL, Physics OOUR):

BIOL 111	(3)	Principles: Organismal Biology
CHEM 110	(4)	General Chemistry 1
PHYS 101	(4)	Introductory Physics - Mechanics

## Suggested First Year (U1) Courses

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Ms. Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

### **Program Requirements**

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the domain prerequisites or corequisites listed above.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

## Core: Required Courses (18 credits)

Location Note: Core required courses are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

# Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

AEBI 427	(6)	Barbados Interdisciplinary Project
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

**Domain: Required Courses (12 credits)** 

ANTH 418	(3)	Environment and Development
GEOG 310	(3)	Development and Livelihoods
GEOG 408	(3)	Geography of Development
GEOG 409	(3)	Geographies of Developing Asia
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
URBP 520	(3)	Globalization: Planning and Change

# **Natural Sciences**

3 credits from:

<sup>\*</sup> Note: You may take BIOL 308 or ENVB 305 but not both; you may take BIOL 465 or WILD 421 but not both; you may tak

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geography
GEOG 311	(3)	Economic Geography
GEOG 331	(3)	Urban Social Geography
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 404	(3)	Environmental Management 2
GEOG 406	(3)	Human Dimensions of Climate Change
GEOG 416	(3)	Africa South of the Sahara
GEOG 451	(3)	Research in Society and Development in Africa
GEOG 496	(3)	Geographical Excursion
GEOG 498	(3)	Humans in Tropical Environments
GEOG 510	(3)	Humid Tropical Environments
GEOG 514	(3)	Climate Change Vulnerability and Adaptation
HIST 510	(3)	Environmental History of Latin America (Field)
INTD 360	(3)	Environmental Challenges in Development
MGPO 440	(3)	Strategies for Sustainability
NRSC 221*	(3)	Environment and Health
POLI 445	(3)	International Political Economy: Monetary Relations

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# **Program Requirements**

- 1. Students are required to take a maximum of 21 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes required courses.
- 2. Students must complete at least 21 credits in the Faculty of Arts and at least 21 in the Faculty of Science as part of their interfaculty program and their minor or minor concentration. ENVR courses are considered courses in both Arts and Science, and so the credits are split between the two faculties for the purpose of this regulation.

Location Note: When planning your schedule and re

BIOL 432	(3)	Limnology
BIOL 441	(3)	Biological Oceanography
BIOL 540*	(3)	Ecology of Species Invasions
ENVB 305*	(3)	Population and Community Ecology
ENVB 410	(3)	Ecosystem Ecology
ENVB 500	(3)	Advanced Topics in Ecotoxicology
ENVR 540*	(3)	Ecology of Species Invasions
GEOG 350	(3)	Ecological Biogeography
PLNT 460	(3)	Plant Ecology

# Area 2: Biodiversity and Conservation

BIOL 305	(3)	Animal Diversity
BIOL 343	(3)	Biodiversity in the Caribean
BIOL 355	(3)	Trees: Ecology and Evolution
BIOL 427	(3)	Herpetology
BIOL 465	(3)	Conservation Biology
MICR 331	(3)	Microbial Ecology
PLNT 358	(3)	Flowering Plant Diversity
WILD 307	(3)	Natural History of Vertebrates
WILD 350	(3)	Mammalogy
WILD 420	(3)	Ornithology

# Area 3: Field Studies in Ecology and Conservation

BIOL 240	(3)	Monteregian Flora
BIOL 331	(3)	Ecology/Behaviour Field Course
BIOL 334D1	(1.5)	Applied Tropical Ecology
BIOL 334D2	(1.5)	Applied Tropical Ecology
BIOL 553	(3)	Neotropical Environments
GEOG 495	(3)	Field Studies - Physical Geography
GEOG 499	(3)	Subarctic Field Studies
WILD 475	(3)	Desert Ecology

# Area 4: Hydrology and Water Resources

* Note: You may take only	one of: GEOG 322,	BREE 217,	or CIVE 323.
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BREE 217*	(3)	Hydrology and Water Resources
CIVE 323*	(3)	Hydrology and Water Resources
EPSC 549	(3)	Hydrogeology
GEOG 322*	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments
GEOG 537	(3)	Advanced Fluvial Geomorphology

# Area 5: Human Health

NUTR 307	(3)	Metabolism and Human Nutrition
PARA 410	(3)	Environment and Infection
PATH 300	(3)	Human Disease
PHAR 303	(3)	Principles of Toxicology

# Area 6: Earth and Soil Sciences

ATOC 215	(3)	Oceans, Weather and Climate
ATOC 341	(3)	Caribbean Climate and Weather
EPSC 201	(3)	Understanding Planet Earth
GEOG 272	(3)	Earth's Changing Surface
GEOG 305	(3)	Soils and Environment
GEOG 321	(3)	Climatic Environments
SOIL 326	(3)	Soils in a Changing Environment

# Area 7: Economics

<sup>\*</sup> Note: You may take AGEC 200 or ECON 208, but not both.

AGEC 200*	(3)	Principles of Microeconomics
AGEC 333	(3)	Resource Economics
ECON 208*	(3)	Microeconomic Analysis and Applications
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
GEOG 216	(3)	Geography of the World Economy

# Area 8: Development and Underdevelopment

ANTH 212 (3) Anthropology of Development
Environment and De

GEOG 300	(3)	Human Ecology in Geography
GEOG 303	(3)	Health Geography
PHIL 343	(3)	Biomedical Ethics
SOCI 225	(3)	Medicine and Health in Modern Society
SOCI 309	(3)	Health and Illness

# Area 11: Spirituality, Philosophy, and Thought

EDER 461	(3)	Society and Change
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 237	(3)	Contemporary Moral Issues
PHIL 341	(3)	Philosophy of Science 1
PHIL 348	(3)	Philosophy of Law 1
RELG 270	(3)	Religious Ethics and the Environment
RELG 370	(3)	Religion and Human Rights

## Area 12: Environmental Management

AGRI 435	(3)	Soil and Water Quality Management
ENVB 437	(3)	Assessing Environmental Impact
ENVR 422	(3)	Montreal Urban Sustainability Analysis
GEOG 302	(3)	Environmental Management 1
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 404	(3)	Environmental Management 2
NRSC 333	(3)	Pollution and Bioremediation
WILD 401	(4)	Fisheries and Wildlife Management
WOOD 441	(3)	Integrated Forest Management

# 7.7.3.2 Bachelor of Arts and Science (B.A. & Sc.) - Interfaculty Program in Sustainability, Science and Society

The Interfaculty Program in Sustainability, Science and Society is open only to students in the B.A. & Sc. degree.

# Adviser:

Michelle Maillet

 ${\bf Email:}~advisor.geog@mcgill.ca$ 

For further information about this program, see Bachelor of Arts and Science > Undergraduate > Browse Academic Units & Programs > Sustainability, Science and Society > section 4.11.35.3: Bachelor of Arts and Science (B.A. & Sc.) - Interfaculty Program in Sustainability, Science and Society (54 credits).

## 7.7.4 Major in Environment - B.Sc.(Ag.Env.Sc.) and B.Sc.

Students in the Faculty of Agricultural and Environmental Sciences B.Sc.(Ag.Env.Sc.) program and students in the Faculty of Science B.Sc. program can register in the Major in Environment.

The Major comprises two course components: Core and Concentration.

1. Core: In the Core, the four introductory courses and an intermediate-level course expose students to different interdisciplinary perspectives, approa3073.T7.183 Tm.7

• Biodiversity and Conservation

ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

# Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

AEBI 427	(6)	Barbados Interdisciplinary Project
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

# **Domain: Complementary Courses (43 credits)**

42-43 credits of complementary courses are selected as follows:

9 credits - basic courses in the Biological Principles of Diversity, Systematics, and Conservation

3 credits - Ecology

3 credits - Statistics

9 credits - Interface between Science, Policy, and Management

3-4 credits - Field Courses

6 credits - General Scientific Principles

3 credits - Social Science

6 credits - Organisms and Diversity

# **Biological Principles of Diversity/Systematics/Conservation:**

(3)

9 credits are chosen from basic courses in the biological principles of diversity, systematics, and conservation as follows:

Evolution and Phylogeny

3 credits from: AEBI 212

BIOL 304	(3)	Evolution
3 credits from:		
AEBI 211	(3)	Organisms 2
BIOL 305	(3)	Animal Diversity
3 credits from:		
BIOL 465	(3)	Conservation Biology
	(3)	Wildlife Conservation

WILD 475	(3)	Desert Ecology
WOOD 441	(3)	Integrated Forest Management

# **General Scientific Principles**

6 credits of general scientific principles selected from the following:

<sup>\*\*\*</sup> Note: You may take ANSC 326 or BIOL 324, but not both.

ANSC 326***	(3)	Fundamentals of Population Genetics
ATOC 341	(3)	Caribbean Climate and Weather
BIOL 202	(3)	Basic Genetics
BIOL 324***	(3)	Ecological Genetics
BIOL 342	(3)	Global Change Biology of Aquatic Ecosystems
BIOL 432	(3)	Limnology
BIOL 434	(3)	Theoretical Ecology
BIOL 441	(3)	Biological Oceanography
BIOL 515	(3)	Advances in Aquatic Ecology
BREE 217**	(3)	Hydrology and Water Resources
BREE 529*	(3)	GIS for Natural Resource Management
ENVB 313	(3)	Phylogeny and Biogeography
ENVB 529*	(3)	GIS for Natural Resource Management
GEOG 272	(3)	Earth's Changing Surface
GEOG 314*	(3)	Geospatial Analysis
GEOG 321	(3)	Climatic Environments
GEOG 322**	(3)	Environmental Hydrology
GEOG 350	(3)	Ecological Biogeography
LSCI 204	(3)	Genetics
MICR 331	(3)	Microbial Ecology

A second field course from the domain curriculum may also be taken.

## Social Science:

3 credits from:

<sup>\*</sup> Note: You may take ANTH 451 or GEOG 451, but not both.

AGEC 333	(3)	Resource Economics
AGRI 411	(3)	Global Issues on Development, Food and Agriculture
ANTH 339	(3)	Ecological Anthropology
ANTH 416	(3)	Environment/Development: Africa
ANTH 451*	(3)	Research in Society and Development in Africa
ECON 326	(3)	Ecological Economics
ENVR 421	(3)	Montreal: Environmental History and Sustainability
ENVR 519	(3)	Global Environmental Politics
GEOG 404	(3)	Environmental Management 2
GEOG 451*	(3)	Research in Society and Development in Africa

<sup>\*</sup> Note: You may take only one of BREE 529, ENVB 529 or GEOG 314.

 $<sup>\</sup>ast\ast$  Note: You may take GEOG 322 or BREE 217, but not both.

GEOG 498	(3)	Humans in Tropical Environments
URBP 520	(3)	Globalization: Planning and Change

# Organisms and Diversity:

6 credits of organisms and diversity selected as follows:

 $\ast$  Note: You may take only one of ENTO 330, BIOL 350 or ENTO 350.

 $<sup>\</sup>ensuremath{^{**}}$  Note: You may take BIOL 540 or ENVR 540, but not both.

AEBI 421	(3)	Tropical Horticultural Ecology
AGRI 340	(3)	Principles of Ecological Agriculture
ANTH 311	(3)	Primate Behaviour and Ecology
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 343	(3)	Biodiversity in the Caribean
BIOL 350*	(3)	Insect Biology and Control
BIOL 355	(3)	Trees: Ecology and Evolution
BIOL 427	(3)	Herpetology
BIOL 540**	(3)	Ecology of Species Invasions
ENTO 330*	(3)	Insect Biology
ENTO 350*	(3)	Insect Biology and Control
ENTO 352	(3)	Biocontrol of Pest Insects
ENVR 540**	(3)	Ecology of Species Invasions
PE4 221.949 411.061 Tm310(33)i		Fundamental Parasitology

#### **Program Requirements**

Note: You are required to take a maximum of 33 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

## Core: Required Courses (18 credits)

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

## Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

AEBI 427	(6)	Barbados Interdisciplinary Project
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

# **Domain: Required Course (6 credits)**

GEOG 403	(3)	Global Health and Environmental Change
PARA 410	(3)	Environment and Infection

# **Domain: Complementary Courses (36 credits)**

36 credits of the complementary courses are selected as follows:

18 credits - Fundamentals, 3 credits from each category

12 credits - Human Health, maximum of 3 credits from any one category

6 credits - Natural Environment, maximum of 3 credits from any one category

## Fundamentals:

18 credits of Fundamentals, 3 credits from each category.

#### Health, Society, and Environment

\* Note: You may take GEOG 221 or NRSC 221, but not both.

GEOG 221*	(3)	Environment and Health
GEOG 303	(3)	Health Geography
GEOG 503	(3)	Advanced Topics in Health Geography
NRSC 221*	(3)	Environment and Health
PPHS 529	(3)	Global Environmental Health and Burden of Disease
SOCI 234	(3)	Population and Society

SOCI 309	(3)	Health and Illness
SOCI 331	(3)	Population and Environment

# **Cellular Biology**

<sup>\*</sup> Note: You will not receive credit for either LSCI 211 or LSCI 202 if you have already received credit for both BIOL 200 and BIOL 201; you will not recei

ANSC 400	(3)	Eukaryotic Cells and Viruses
MIMM 324	(3)	Fundamental Virology
MIMM 413*	(3)	Parasitology
PARA 424*	(3)	Fundamental Parasitology
PPHS 501	(3)	Population Health and Epidemiology
Toxicology		
ANSC 312	(3)	Animal Health and Disease
ENVB 500	(3)	Advanced Topics in Ecotoxicology
NUTR 512	(3)	Herbs, Foods and Phytochemicals
PHAR 300	(3)	Drug Action
PHAR 303	(3)	Principles of Toxicology

#### **Hormones**

\* Note: You will not receive credit for ANSC 424 if you have already received credit for both PHGY 209 and PHGY 210; you will not receive credit for PHGY 210 if you have already received credit for both ANSC 323 and ANSC 424.

ANSC 424*	(3)	Metabolic Endocrinology
PHGY 210*	(3)	Mammalian Physiology 2
PSYC 342	(3)	Hormones and Behaviour

## **Physiology**

\* Note: You will not receive credit ANSC 323 if you have already received credit for both PHGY 209 and PHGY 210; you will not receive credit for PHGY 209 if you have already received credit for both ANSC 323 and ANSC 424.

ANSC 323*	(3)	Mammalian Physiology
PHGY 209*	(3)	Mammalian Physiology 1

## **Natural Environment:**

6 credits chosen from the Natural Environment, maximum of 3 credits from any one category:

## **Hydrology and Climate**

\* Note: You may take BREE 217 or GEOG 322, but not both.

ATOC 341	(3)	Caribbean Climate and Weather
BREE 217*	(3)	Hydrology and Water Resources
GEOG 321	(3)	Climatic Environments
GEOG 322*	(3)	Environmental Hydrology

# **Techniques and Management**

AEBI 423	(3)	Sustainable Land Use
ENVB 437	(3)	Assessing Environmental Impact
ENVR 422	(3)	Montreal Urban Sustainability Analysis
GEOG 302	(3)	Environmental Management 1
GEOG 340	(3)	Sustainability in the Caribbean
NUTR 450	(3)	Research Methods: Human Nutrition

or, advanced quantitative methods course (with approval of Adviser).

## **Pest Management**

\* Note: You may take BIOL 350 or ENTO 350, but not both.

BIOL 350*	(3)	Insect Biology and Control
ENTO 350*	(3)	Insect Biology and Control
ENTO 352	(3)	Biocontrol of Pest Insects

# **Pollution Control and Management**

BREE 322	(3)	Organic Waste Management
BREE 518	(3)	<b>Ecological Engineering</b>
NRSC 333	(3)	Pollution and Bioremediation
PARA 515	(3)	Water, Health and Sanitation

## **Ecology**

\* Note: You may take ENVR 540 or BIOL 540, but not both; you many take BIOL 451 or NRSC 451, but not both.

AEBI 421	(3)	Tropical Horticultural Ecology
BIOL 343	(3)	Biodiversity in the Caribean
BIOL 432	(3)	Limnology
BIOL 451*	(3)	Research in Ecology and Development in Africa
BIOL 465	(3)	Conservation Biology
BIOL 540*	(3)	Ecology of Species Invasions
BIOL 553	(3)	Neotropical Environments
ENVB 410	(3)	Ecosystem Ecology
ENVR 540*	(3)	Ecology of Species Invasions
MICR 331	(3)	Microbial Ecology
NRSC 451*	(3)	Research in Ecology and Development in Africa
PLNT 304	(3)	Biology of Fungi
PLNT 460	(3)	Plant Ecology

# 7.7.4.2.2 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment - Ecological Determinants of Health- Population (63 credits)

The Population concentration in this domain is open only to students in the B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment program.

This domain considers the interface between the environment and human well-being, with particular focus on the triad that ties human health to the environment

Note: You are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

#### Core: Required Courses (18 credits)

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

# Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

AEBI 427	(6)	Barbados Interdisciplinary Project
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

#### **Domain: Required Course (3 credits)**

PARA 410 (3) Environment and Infection

## **Domain: Complementary Courses (39 credits)**

39 credits of complementary courses are selected as follows:

24 credits - Fundamentals, maximum of 3 credits from each category

6 credits - List A categories, maximum of 3 credits from any one category

9 credits - List B categories, maximum of 3 credits from any one category

## Fundamentals:

24 credits of fundamentals, 3 credits from each category:

## **Health and Environment**

GEOG 221	(3)	Environment and Health
GEOG 303	(3)	Health Geography
NRSC 221	(3)	Environment and Health

## **Health and Society**

GEOG 403	(3)	Global Health and Environmental Change
GEOG 503	(3)	Advanced Topics in Health Geography
PPHS 529	(3)	Global Environmental Health and Burden of Disease
SOCI 234	(3)	Population and Society
SOCI 309	(3)	Health and Illness

SOCI 331	(3)	Population and Environment
Toxicology		
ANSC 312	(3)	Animal Health and Disease
ENVB 500	(3)	Advanced Topics in Ecotoxicology
NUTR 512	(3)	Herbs, Foods and Phytochemicals
PHAR 303	(3)	Principles of Toxicology
ANSC 312 ENVB 500 NUTR 512	(3)	Advanced Topics in Ecotoxic Herbs, Foods and Phytochem

## **Cellular Biology**

Note: You will not receive credit for either LSCI 211 or LSCI 202, if you have already received credit for both BIOL 200 and BIOL 201; you will not receive credit for either BIOL 200 or BIOL 201 if you have already received credit for LSCI 202 and LSCI 211.

ANSC 234	(3)	Biochemistry 2
BIOL 201	(3)	Cell Biology and Metabolism
LSCI 202	(3)	Molecular Cell Biology

## Molecular Biology

Note: You will not receive credit for either LSCI 211 or LSCI 202 if you have already received credit for both BIOL 200 and BIOL 201; you will not receive credit for either BIOL 200 or BIOL 201 if you have already received credit for both LSCI 202 and LSCI 211.

BIOL 200	(3)	Molecular Biology
LSCI 211	(3)	Biochemistry 1

#### **Statistics**

**AEMA 310** 

**MATH 203** 

**NUTR 307** 

One of the following Statistics courses or equivalent:

(3)

(3)

(3)

Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

Nutrition		
ANSC 433	(3)	Animal Nutrition and Metabolism
NUTR 207	(3)	Nutrition and Health

## **Advanced Ecology**

\* Note: You may take ENVR 540 or BIOL 540, but not both; you make take BIOL 451 or NRSC 451, but not both.

Statistical Methods 1

Principles of Statistics 1

Metabolism and Human Nutrition

AEBI 421	(3)	Tropical Horticultural Ecology
BIOL 451*	(3)	Research in Ecology and Development in Africa
BIOL 465	(3)	Conservation Biology
BIOL 540*	(3)	Ecology of Species Invasions
BIOL 553	(3)	Neotropical Environments
ENVB 410	(3)	Ecosystem Ecology
ENVR 540*	(3)	Ecology of Species Invasions
MICR 331	(3)	Microbial Ecology

NRSC 451*	(3)	Research in Ecology and Development in Africa
PLNT 460	(3)	Plant Ecology

## List A:

6 credits from the following List A categories, maximum of 3 credits from any one category:

## Hydrology, Climate, and Agriculture

\* Note: You may take BREE 217 or GEOG 322, but not both.

AGRI 340	(3)	Principles of Ecological Agriculture
AGRI 550	(3)	Sustained Tropical Agriculture
ATOC 341	(3)	Caribbean Climate and Weather
BREE 217*	(3)	Hydrology and Water Resources
GEOG 321	(3)	Climatic Environments
GEOG 322*	(3)	Environmental Hydrology

# **Decision Making, Techniques and Management**

\* Note: You may take AGEC 200 or ECON 208, but not both; you may take ENVB 529 or GEOG 201, but not both.

AEBI 423	(3)	Sustainable Land Use
AGEC 200*	(3)	Principles of Microeconomics
AGEC 333	(3)	Resource Economics
ECON 208*	(3)	Microeconomic Analysis and Applications
ENVB 437	(3)	Assessing Environmental Impact
ENVB 529*	(3)	GIS for Natural Resource Management
ENVR 422	(3)	Montreal Urban Sustainability Analysis
GEOG 201*	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 404	(3)	Environmental Management 2
PHIL 343	(3)	Biomedical Ethics

or, advanced quantitative methods course (with approval of Adviser).

# **Development and History**

ANTH 212	(3)	Anthropology of Development
EDER 461	(3)	Society and Change
HIST 292	(3)	History and the Environment
NUTR 501	(3)	Nutrition in Developing Countries
SOCI 254	(3)	Development and Underdevelopment
URBP 520	(3)	Globalization: Planning and Change

# List B:

9 credits from the following List B categories, maximum of 3 credits from any one category:

# **Immunology and Infectious Disease**

ANSC 400	(3)	Eukaryotic Cells and Viruses
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 314	(3)	Intermediate Immunology
MIMM 324	(3)	Fundamental Virology
MIMM 413	(3)	Parasitology
PARA 424	(3)	Fundamental Parasitology
PARA 438	(3)	Immunology
PPHS 501	(3)	Population Health and Epidemiology

### **Populations and Place**

\* Note: You may take ANTH 451 or GEOG 451, but not both.

AGRI 411	(3)	Global Issues on Development, Food and Agriculture
ANTH 451*	(3)	Research in Society and Development in Africa
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 300	(3)	Human Ecology in Geography
GEOG 451*	(3)	Research in Society and Development in Africa
GEOG 498	(3)	Humans in Tropical Environments
NUTR 341	(3)	Global Food Security

### **Pollution Control and Pest Management**

\* Note: You may take BIOL 350 or ENTO 350, but not both.

BIOL 350*	(3)	Insect Biology and Control
BREE 322	(3)	Organic Waste Management
ENTO 350*	(3)	Insect Biology and Control
ENTO 352	(3)	Biocontrol of Pest Insects
NRSC 333	(3)	Pollution and Bioremediation
PARA 515	(3)	Water, Health and Sanitation

### Genetics

BIOL 202	(3)	Basic Genetics
LSCI 204	(3)	Genetics

### 7.7.4.3 Environmetrics Concentration

 $This \ concentration \ is \ open \ only \ to \ students \ in \ B.Sc. (Ag. Env. Sc.) \ Major \ Environment \ or \ B.Sc. \ Major \ Environment.$ 

Bachelor of Science (Agricultural and En

statistics and their expertise in environmental sciences by taking complementary courses along each of two axes: statistics and mathematics, and environmental sciences. An internship is also offered to students to provide them with preliminary professional experience.

### Suggested First Year (U1) Courses

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

Prerequisites and equivalent courses are common with Math courses, so check with your adviser when choosing your courses. Be especially careful with Statistics courses, as you will receive no credit (and no warning!) for a course that is considered equivalent to one you have already taken. Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

Statistics courses BIOL 373 OR AEMA 310 can be taken in U1, but do not take them if you want to follow Option 1 (below), as they overlap with MATH 324.

#### **Program Requirements**

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses.

Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

#### Core: Required Courses (18 credits)

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course if you want to take it on the Downtown campus, and in Section 051 of an ENVR course if you want to take it on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

#### Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

### **Domain: Required Courses (6 credits)**

AEMA 403	(3)	Environmetrics Stage
AEMA 414	(3)	Temporal and Spatial Statistics 01

#### **Domain - Complementary Courses (36 credits)**

36 credits of complementary courses are selected as follows:

12 credits - Fundamentals

3 credits - Basic Environmental Science

6 credits - Statistics, one of two options

15 credits - List 1 and List 2

#### Fundamentals:

12 credits of Fundamentals, 3 credits from each category.

Ecology		
BIOL 308	(3)	Ecological Dynamics
ENVB 305	(3)	Population and Community Ecology
Impact		
ENVB 437	(3)	Assessing Environmental Impact
GEOG 340	(3)	Sustainability in the Caribbean
MIME 308	(3)	Social Impact of Technology
Modelling		
BIOL 309	(3)	Mathematical Models in Biology
ENVB 506	(3)	Quantitative Methods: Ecology
GIS Techniques		
ENVB 529	(3)	GIS for Natural Resource Management
GEOG 201	(3)	Introductory Geo-Information Science

### **Basic Environmental Science:**

One of:		
BREE 217	(3)	Hydrology and Water Resources
CIVE 323	(3)	Hydrology and Water Resources
ENVB 210	(3)	The Biophysical Environment
GEOG 305	(3)	Soils and Environment
GEOG 322	(3)	Environmental Hydrology
GEOG 350	(3)	Ecological Biogeography

### Statistics:

6 credits of Statistics are selected from one of the following two options.

Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science. Several Statistics courses overlap (especially with MATH 324) and cannot be taken together. These rules do not apply to B.Sc.(Ag.Env.Sc.) students.

### Option 1

MATH 323	(3)	Probability
MATH 324	(3)	Statistics

### Option 2

### One of:

AEMA 310	(3)	Statistical Methods 1
BIOL 373	(3)	Biometry

And	Ona	ot.

AEMA 411	(3)	Experimental Designs 01
CIVE 555	(3)	Environmental Data Analysis
GEOG 351	(3)	Quantitative Methods
SOCI 461	(3)	Quantitative Data Analysis

A total of 15 credits are chosen from the following two lists.

#### List 1

3 credits minimum of statistics and mathematics chosen from:

 $<sup>\</sup>ast$  Note: or equivalent courses to BREE 252 or BREE 319.

BIOL 434	(3)	Theoretical Ecology
BREE 252*	(3)	Computing for Engineers
BREE 319*	(3)	Engineering Mathematics
GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation
MATH 223	(3)	Linear Algebra
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 423	(3)	Applied Regression
MATH 447	(3)	Introduction to Stochastic Processes
MATH 525	(4)	Sampling Theory and Applications
SOCI 504	(3)	Quantitative Methods 1
SOCI 580	(3)	Social Research Design and Practice

### List 2

3 credits minimum of environmental sciences chosen from:

AGRI 550	(3)	Sustained Tropical Agriculture
ATOC 341	(3)	Caribbean Climate and Weather
BIOL 331	(3)	Ecology/Behaviour Field Course
BIOL 343	(3)	Biodiversity in the Caribean
BIOL 553	(3)	Neotropical Environments
ENVB 313	(3)	Phylogeny and Biogeography
ENVB 500	(3)	Advanced Topics in Ecotoxicology
ENVR 421	(3)	Montreal: Environmental History and Sustainability
ENVR 422	(3)	Montreal Urban Sustainability Analysis
GEOG 300	(3)	Human Ecology in Geography
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
GEOG 494	(3)	Urban Field Studies
GEOG 499	(3)	Subarctic Field Studies
NRSC 333	(3)	Pollution and Bioremediation
PLNT 460	(3)	Plant Ecology
WILD 401	(4)	Fisheries and Wildlife Management

### 7.7.4.4 Food Production and Environment Concentration

 $This \ concentration \ is \ open \ only \ to \ students \ in \ B.Sc. (Ag. Env. Sc.) \ Major \ Environment \ or \ B.Sc. \ Major \ Environment.$ 

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### **Domain: Required Courses (6 credits)**

AEBI 210	(3)	Organisms 1
AGRI 340	(3)	Principles of Ecological Agriculture

### **Domain: Complementary Courses (36 credits)**

36 credits of complementary courses selected as follows:

18 credits - Fundamentals

12 credits - Applied Sciences

6 credits - Social Sciences/Humanities

The Applied and Social Sciences courses are grouped according to subtopics. Students can choose their courses from one subtopic, or a combination of subtopics.

### Fundamentals (18 credits)

One of the following Statistics courses or equivalent:

Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

AEMA 310	(3)	Statistical Methods 1
MATH 203	(3)	Principles of Statistics 1
One of:		
ANSC 250	(3)	Principles of Animal Science
PLNT 300	(3)	Cropping Systems
One of:		
BIOL 202	(3)	Basic Genetics
LSCI 204	(3)	Genetics
One of:		

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### Food and Human Health

 $\ast$  Note: Students take FDSC 200 or NUTR 207, but not both.

AGRI 411	(3)	Global Issues on Development, Food and Agriculture
FDSC 200*	(3)	Introduction to Food Science
MICR 331	(3)	Microbial Ecology
NUTR 207*	(3)	Nutrition and Health
NUTR 501	(3)	Nutrition in Developing Countries
NUTR 505	(3)	Public Health Nutrition
PARA 410	(3)	Environment and Infection
PHAR 303	(3)	Principles of Toxicology

### **Food Production**

AEBI 421	(3)	Tropical Horticultural Ecology
AEBI 425	(3)	Tropical Energy and Food
AGRI 215	(3)	Agro-Ecosystems Field Course
AGRI 325	(3)	Sustainable Agriculture and Food Security
AGRI 550	(3)	Sustained Tropical Agriculture

Plant Growth and Dev

#### Social Science (6 credits)

#### **Economic and Resource Policy**

\* Note: Students take AGEC 333 or ECON 405, but not both.

AGEC 320	(3)	Intermediate Microeconomic Theory
AGEC 333*	(3)	Resource Economics
AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development
ECON 225	(3)	Economics of the Environment
ECON 405*	(3)	Natural Resource Economics

#### **Social Change and Human Impacts**

ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 406	(3)	Human Dimensions of Climate Change
GEOG 410	(3)	Geography of Underdevelopment: Current Problems
GEOG 498	(3)	Humans in Tropical Environments
GEOG 510	(3)	Humid Tropical Environments
HIST 510	(3)	Environmental History of Latin America (Field)
SOCI 254	(3)	Development and Underdevelopment

#### **Environment Management**

st Note: Students may take only one of BREE 529, ENVB 529, or GEOG 201.

AEBI 423	(3)	Sustainable Land Use
ANTH 418	(3)	Environment and Development
BREE 529*	(3)	GIS for Natural Resource Management
ENVB 437	(3)	Assessing Environmental Impact
ENVB 529*	(3)	GIS for Natural Resource Management
ENVR 422	(3)	Montreal Urban Sustainability Analysis
GEOG 201*	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
GEOG 530	(3)	Global Land and Water Resources
MGPO 440	(3)	Strategies for Sustainability

#### 7.7.4.5 Land Surface Processes and Environmental Change Concentration

This concentration is open only to students in B.Sc.(Ag.Env.Sc.) Major Environment or B.Sc. Major Environment.

# 7.7.4.5.1 Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Major Environment-Land Surface Processes and Environmental Change (63 credits)

This domain (63 credits including core) is open only to students in the B.Sc.(Ag.Env.Sc.) Major in Environment or B.Sc. Major in Environment programs.

The thin soil layer on the planet's land surfaces controls the vital inputs of water, nutrients, and energy to terrestrial and freshwater aquatic ecosystems. Widespread occurrences around the globe of desertification, soil erosion, deforestation, and land submergence over water reservoirs indicate that this dynamic system is under increasing pressure from population growth and changes in climate and land uses. Production of key greenhouse gases (water vapour, CO2, and methane) is controlled by complex processes operating at the land surface, involving climate change feedbacks that need to be fully understood, given current global warming trends.

GEOG 202	(3)	Statistics and Spatial Analysis
MATH 203	(3)	Principles of Statistics 1
	(5)	Time-pies of Statistics T
Geographic Information	n Systems	
3 credits from:	•	
ENVB 529	(3)	GIS for Natural Resource Management
GEOG 201	(3)	Introductory Geo-Information Science
Weather and Climate		
3 credits from:		
ATOC 215	(3)	Oceans, Weather and Climate
ATOC 341	(3)	Caribbean Climate and Weather
ENVB 301	(3)	Meteorology
Fundamental Land Surf		
9 credits total of fundamenta	al land surface pro	ocesses chosen as follows:
0-3 credits chosen from:	(2)	
GEOG 321	(3)	Climatic Environments
0-3 credits from:		
GEOG 272	(3)	Earth's Changing Surface
SOIL 300	(3)	Geosystems
0-3 credits from:		
ENVB 210	(3)	The Biophysical Environment
GEOG 305	(3)	Soils and Environment
0-3 credits from:		
BREE 217	(3)	Hydrology and Water Resources
GEOG 322	(3)	Environmental Hydrology
Environment and Reso	urce Managem	ent:
3 credits from:		
* Note: You may take BIOL	308 or ENVB 30	5, but not both.
AGRI 550	(3)	Sustained Tropical Agriculture
BIOL 308*	(3)	Ecological Dynamics
BIOL 465	(3)	Conservation Biology

CIVE 225

ENVB 305\*

**ENVB 437** 

**ENVB 530** 

(4)

(3)

(3)

(3)

# 2023-2024, Undergraduate Programs, Courses and University Regulations, McGill University (Published March

Environmental Engineering

Population and Community Ecology

Advanced GIS for Natural Resource Management

Assessing Environmental Impact

ENVR 422	(3)	Montreal Urban Sustainability Analysis
ESYS 301	(3)	Earth System Modelling
GEOG 302	(3)	Environmental Management 1
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 404	(3)	Environmental Management 2
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 530	(3)	Global Land and Water Resources
SOIL 315	(3)	Soil Nutrient Management
WILD 421	(3)	Wildlife Conservation
		Integrated F

BIOL 432	(3)	Limnology
ENVB 410	(3)	Ecosystem Ecology
GEOG 372	(3)	Running Water Environments
GEOG 470	(3)	Wetlands
		Historical Ecology T

#### Suggested First Year (U1) Courses

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Ms. Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

#### **Program Requirements**

Note: Students are required to take a maximum of 30 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the domain prerequisites or corequisites listed above.

Location Note: When planning their schedule and registering for courses, students should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

#### Core: Required Courses (18 credits)

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

#### Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

### **Domain: Complementary Courses (42 credits)**

42 credits of complementary courses are selected as follows:

9 credits - Basic Principles of Ecosystem Processes and Diversity

6 credits - 3 credits from each category of Statistics and GIS

6 credits - Advanced Ecosystem Components

6 credits - Advanced Ecological Processes

6 credits - Social Processes

9 credits - Ecosystem Components or Management of Ecosystems

### **Basic Principles of Ecosystem Processes:**

9 credits of basic principles of ecosystem processes and diversity are selected as follows:

One of:		
AEBI 210	(3)	Organisms 1
AEBI 211	(3)	Organisms 2
BIOL 305	(3)	Animal Diversity
One of:		
BIOL 308	(3)	Ecological Dynamics

(3)	Population and Community Ecology
(3)	The Biophysical Environment
(3)	Soils and Environment
(3)	Statistical Methods 1
(3)	Biometry
(3)	GIS for Natural Resource Management
(3)	Introductory Geo-Information Science
	(3) (3) (3) (3)

# **Advanced Ecosystem Components:**

 $\boldsymbol{6}$  credits of advanced ecosystem components selected from:

BIOL 553	(3)	Neotropical Environments
GEOG 372	(3)	Running Water Environments
PLNT 358	(3)	Flowering Plant Diversity
SOIL 326	(3)	Soils in a Changing Environment
WILD 307	(3)	Natural History of Vertebrates

### **Advanced Ecological Processes:**

 $\boldsymbol{6}$  credits of advanced ecological processes selected from:

 $<sup>\</sup>ensuremath{^{*}}$  Note: you can take BREE 217 or GEOG 322, but not both.

BIOL 343	(3)	Biodiversity in the Caribean
BIOL 432	(3)	Limnology
BIOL 465	(3)	Conservation Biology
BREE 217*	(3)	Hydrology and Water Resources
	(3)	Ecosystem Ecology

AGEC 333*	(3)	Resource Economics
ANTH 339	(3)	Ecological Anthropology
ECON 405*	(3)	Natural Resource Economics
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 340	(3)	Sustainability in the Caribbean
GEOG 382	(3)	Principles Earth Citizenship
GEOG 498	(3)	Humans in Tropical Environments
RELG 270	(3)	Religious Ethics and the Environment

# **Ecosystem Components or Management of Ecosystems:**

 $9\ credits$  of ecosystem components or management of ecosystems selected from:

AGRI 435	(3)	Soil and Water Quality Management
AGRI 452	(3)	Water Resources in Barbados
AGRI 550	(3)	Sustained Tropical Agriculture
ENVB 437	(3)	Assessing Environmental Impact

Montreal Urban Sustainability Analysi 10 0 1 228.947 534.5

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

### Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

AEBI 427	(6)	Barbados Interdisciplinary Project
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project
GEOG 451	(3)	Research in Society and Development in Africa

### **Domain: Required Courses (3 credits)**

ATOC 214 (3) Introduction: Physics of the Atmosphere

### **Domain: Complementary Courses (36 credits)**

36 credits of complementary courses are selected as follows:

3 credits - Meteorology

6 credits - Hydrology and Ecology

3 credits - Statistics

3 credits - Field Course

3 credits - Social Sciences and Policy

18 credits chosen in total from List A: Water Environments and Habitats, and List B: Surface and

### Statistics:

3 credits from:

\* Note: Other appropriate statistics courses may be approved as substitutes by the Program Adviser. Credit for Statistics courses is subject to certain restrictions. Students in the Faculty of Arts or the Faculty of Science should consult "Course Ov

18 credits chosen in total from List A and List B as follows:

### List A (Water Environments and Habitats)

9-12 credits chosen from:

\* Note: you may take BIOL 540 or ENVR 540, but not both; you may take ENVB 210 or GEOG 305, but not both,

BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 342	(3)	Global Change Biology of Aquatic Ecosystems
BIOL 432	(3)	Limnology
BIOL 441	(3)	Biological Oceanography
BIOL 465	(3)	Conservation Biology
BIOL 540*	(3)	Ecology of Species Invasions
BIOL 553	(3)	Neotropical Environments
BREE 533	(3)	Water Quality Management
ENVB 210*	(3)	The Biophysical Environment
ENVB 410	(3)	Ecosystem Ecology
ENVB 500	(3)	Advanced Topics in Ecotoxicology
ENVR 540*	(3)	Ecology of Species Invasions
GEOG 305*	(3)	Soils and Environment
GEOG 470	(3)	Wetlands
MICR 331	(3)	Microbial Ecology
NRSC 333	(3)	Pollution and Bioremediation
PARA 410	(3)	Environment and Infection
SOIL 535	(3)	Soil Ecology
WILD 302	(3)	Fish Ecology
WILD 401	(4)	Fisheries and Wildlife Management

# List B (Surface and Atmospheric Processes)

6-9 credits chosen from:

st Note: you may take ATOC 219 or CHEM 219, but not both; you may take ENVB 529 or GEOG 201, but not both.

ATOC 219*	(3)	Introduction to Atmospheric Chemistry
ATOC 341	(3)	Caribbean Climate and Weather
BIOL 515	(3)	Advances in Aquatic Ecology
CHEM 219*	(3)	Introduction to Atmospheric Chemistry
CHEM 267	(3)	Introductory Chemical Analysis
ENVB 529*	(3)	GIS for Natural Resource Management
ENVB 530	(3)	Advanced GIS for Natural Resource Management
EPSC 220	(3)	Principles of Geochemistry
GEOG 201*	(3)	Introductory Geo-Information Science
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 372	(3)	Running Water Environments
GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science

GEOG 537 (3) Advanced Fluvial Geomorphology GEOG 550 (3) Historical Ecology Techniques

Bachelor of Science (Bac

3 credits - Meteorology

6 credits - Hydrology and Ecology

3 credits - Statistics

3 credits - Intermediate Calculus

3 credits - Field course

9 credits chosen from List

Applied Tropical Ecology

BIOL 553	(3)	Neotropical Environments
ENVB 410	(3)	Ecosystem Ecology
GEOG 470	(3)	Wetlands
GEOG 505	(3)	Global Biogeochemistry
GEOG 530	(3)	Global Land and Water Resources
WILD 302	(3)	Fish Ecology
WILD 421	(3)	Wildlife Conservation

# 7.7.5 Major in Environment – B.Sc.

In addition to the concentrations available to students in the Major program in either the Faculty of Science or the Faculty of Agricultural and Environmental Sciences, "Major in Environment - B.Sc." students in the F

ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Panama
FSCI 444	(6)	Barbados Research Project

### **Domain: Required Courses (15 credits)**

15 credits are selected from:

<sup>\*</sup> Note: You may take ATOC 219 or CHEM 219, but not both.

ATOC 214	(3)	Introduction: Physics of the Atmosphere
ATOC 215	(3)	Oceans, Weather and Climate
ATOC 219*	(3)	Introduction to Atmospheric Chemistry
ATOC 315	(3)	Thermodynamics and Convection
CHEM 219*	(3)	Introduction to Atmospheric Chemistry
GEOG 308	(3)	Remote Sensing for Earth Observation

### **Domain: Complementary Courses (24 credits)**

24 credits of complementary courses are selected as follows:

6 credits - Analytical Chemistry/Calculus courses

3 credits - Statistics

9 credits - Math or Physical Science

6 credits - Social Science

### **Analytical Chemistry/Calculus:**

One of (students will not receive credit for both):

AEMA 202	(3)	Intermediate Calculus
MATH 222	(3)	Calculus 3

Note: Students take either CHEM 267 or FDSC 213.

CHEM 267	(3)	Introductory Chemical Analysis
FDSC 213	(3)	Analytical Chemistry 1

### Statistics:

3 credits of Statistics courses or equivalent from:

AEMA 310	(3)	Statistical Methods 1
MATH 203	(3)	Principles of Statistics 1

### Math or Physical Science:

9 credits of Math or Physical Science (at least 6 credits of which are at the 300 level or above):

<sup>\*</sup> Note: You may take ATOC 519 or CHEM 519, but not both; you may take AEMA 305 or MATH 315, but not both.

AEMA 305*	(3)	Differential Equations
ATOC 309	(3)	Weather Radars and Satellites
ATOC 519*	(3)	Advances in Chemistry of Atmosphere
ATOC 540	(3)	Synoptic Meteorology 1
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods

CHEM 377	(3)	Instrumental Analysis 2
CHEM 519*	(3)	Advances in Chemistry of Atmosphere
CIVE 225	(4)	Environmental Engineering
CIVE 561	(3)	Greenhouse Gas Emissions
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
GEOG 505	(3)	Global Biogeochemistry
MATH 223	(3)	Linear Algebra
MATH 315*	(3)	Ordinary Differential Equations
NRSC 333	(3)	Pollution and Bioremediation
NRSC 510	(3)	Agricultural Micrometeorology

### Social Science:

6 credits from:

ANTH 206	(3)	Environment and Culture
ANTH 418	(3)	Environment and Development
	(3)	Economics of the Environment

### Core: Required Courses (18 credits)

Location Note: Core required courses are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

### Core: Complementary Course - Senior Research Project (3 credits)

Only 3 credits will be applied to the program; extra credits will count as electives.

ENVR 401	(3)	Environmental Research	es.es.
ENVR 451	(6)	Research in Panama	
FSCI 444	(6)	Barbados Research Project	

### **Domain: Required Courses (21 credits)**

ECON 230D1	(3)	Microeconomic Theory
ECON 230D2	(3)	Microeconomic Theory
ECON 405	(3)	Natural Resource Economics
EPSC 210	(3)	Introductory Mineralogy
EPSC 212	(3)	Introductory Petrology
EPSC 220	(3)	Principles of Geochemistry
EPSC 240	(3)	Geology in the Field

### **Domain: Complementary Courses (24 credits)**

24 credits of complementary courses are selected as follows:

3 credits - Statistics courses

12 credits - Economic Resources

9 credits - Natural Resources

#### Statistics:

One of the following Statistics courses or equivalent.

Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

AEMA 310	(3)	Statistical Methods 1
GEOG 202	(3)	Statistics and Spatial Analysis
MATH 203	(3)	Principles of Statistics 1

#### **Economic Resources**

12	credite	from

AGEC 333	(3)	Resource Economics
ECON 209	(3)	Macroeconomic Analysis and Applications

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ECON 305	(3)	Industrial Organization
ECON 313	(3)	Economic Development 1
ECON 314	(3)	Economic Development 2
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 408	(3)	Public Sector Economics 1
ECON 409	(3)	Public Sector Economics 2
ECON 416	(3)	Topics in Economic Development 2
ECON 511	(3)	Energy, Economy and Environment
ECON 525	(3)	Project Analysis
ENVB 437	(3)	Assessing Environmental Impact
ENVR 422	(3)	Montreal Urban Sustainability Analysis

### **Natural Resources**

9 credits from:

<sup>\*</sup> ANTH 451 or GEOG 451 can be taken, but not both; BIOL 451 or NRSC 451 can be taken, but not both; ENVB 529 or GEOG 201 can be taken, but not both.

AGRI 550	(3)	Sustained Tropical Agriculture
ANTH 451*	(3)	Research in Society and Development in Africa
	(3)	Biodiversity in the Caribean

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- 3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
- 4. Students are required to achieve a minimum overall CGPA of 3.0 at graduation, and a minimum Program GPA of 3.3 to obtain Honours.

Students in the B.Sc. Honours programs complete the core and domain courses (60 to 66 credits) according to their chosen domain as well as the 6 credits of Honours required courses.

At the completion of your Honours research, you are e

Students in the B.Sc.(Ag.Env.Sc.) Honours program complete the core and domain courses (60 to 63 credits) according to their chosen domain as well as the 6 credits of required Honours courses.

At the completion of your Honours research, you are expected to present your results at an Honours Symposium, and are required to submit a copy of your final report to the Bieler School Program Adviser.

#### Honours - Required Courses (6 credits)

ENVR 495D1	(3)	Honours Research
ENVR 495D2	(3)	Honours Research
ENVR 495N1	(3)	Honours Research
ENVR 495N2	(3)	Honours Research

Note: Students take either ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR 495N2 (6 credits over non-consecutive terms).

### 7.7.7 Joint Honours Component Environment

#### Adviser

Ms. Kathy Roulet, Program Adviser

Telephone: 514-398-4306 Email: kathy.roulet@mcgill.ca

This program is open only to students in the Faculty of Arts.

The Joint Honours Component Environment offers students the opportunity to undertake a year-long, interdisciplinary research project in their final year in close association with a professor. Honours research provides excellent preparation for graduate studies, but is not required for such studies. If, for some reason, students cannot complete the Joint Honours requirements, they may still graduate with a Minor Concentration Environment.

#### 7.7.7.1 Bachelor of Arts (B.A.) - Joint Honours Component Environment (36 credits)

Students wishing to study at the honours level in two disciplines can combine joint honours program components in any two Arts disciplines. For a list of available joint honours programs, see "Overview of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department for approval of their course selection and their interdisciplinary honours research project.

### 21 credits of Environment core courses as follows:

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought
ENVR 401	(3)	Environmental Research

### And 6 credits of honours resea(3) from the following:

Note: you take either ENVR 495D1 and ENVR 495D2 (6 credits over consecutive terms) or ENVR 495N1 and ENVR 495N2 (6 credits over non-consecutive terms).

ENVR 495D1	(3)	Honours Research
ENVR 495D2	(3)	Honours Research
ENVR 495N1	(3)	Honours Research
ENVR 495N2	(3)	Honours Research

### Complementary Courses ) 564.36 TN 0 0uE9N1

The core ENVR courses are offered on both campuses. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	Environmental Thought

#### **Complementary Courses (12 credits)**

12 credits of complementary courses are selected as follows:

3 credits - selected with the approval of the Program Adviser in an area outside of the student's previous degree (e.g., those with a B.A. or equivalent degree must take at least 3 credits in the natural sciences; those with a B.Sc. or equivalent degree must take at least 3 credits in the social sciences). A list of Suggested Courses is given below.

9 credits - in an area of focus chosen by the student with the approval of the Program Adviser. At least 6 credits must be taken at the 400 level or higher. A list of Suggested Courses is given below.

#### **Suggested Course List**

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.

Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.

This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.

Some courses on the Suggested Course List may be subject to other regulations (e.g., the Restricted Courses List for Faculty of Science students). If in doubt, ask the Program Adviser.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

#### Social Sciences and Policy

AGEC 231	(3)	Economic Systems of Agriculture
AGEC 333	(3)	Resource Economics
AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development
AGRI 411	(3)	Global Issues on Development, Food and Agriculture
ANTH 206	(3)	Environment and Culture
ANTH 212	(3)	Anthropology of Development
ANTH 339	(3)	Ecological Anthropology
ANTH 418	(3)	Environment and Development
ANTH 512	(3)	Political Ecology
ECON 205	(3)	An Introduction to Political Economy
ECON 225	(3)	Economics of the Environment
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
EDER 494	(3)	Human Rights and Ethics in Practice
ENVB 437	(3)	Assessing Environmental Impact
ENVR 201	(3)	Society, Environment and Sustainability

ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geography
GEOG 301	(3)	Geography of Nunavut
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geography
GEOG 310	(3)	Development and Livelihoods
GEOG 370	(3)	Protected Areas
GEOG 403	(3)	Global Health and Environmental Change
GEOG 408	(3)	Geography of Development
GEOG 423	(3)	Dilemmas of Development
GEOG 530	(3)	Global Land and Water Resources
HIST 249	(3)	Health and the Healer in Western History
HIST 292	(3)	History and the Environment
NRSC 221	(3)	Environment and Health
PHIL 221	(3)	Introduction to History and Philosophy of Science 2
PHIL 230	(3)	Introduction to Moral Philosophy 1
PHIL 237	(3)	Contemporary Moral Issues
PHIL 334	(3)	Ethical Theory
PHIL 341	(3)	Philosophy of Science 1
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
POLI 212	(3)	Government and Politics - Developed World
POLI 227	(3)	Developing Areas/Introduction
POLI 345	(3)	International Organizations
POLI 350	(3)	Global Environmental Politics
POLI 412	(3)	Canadian Voting/Public Opinion
POLI 445	(3)	International Political Economy: Monetary Relations
POLI 474	(3)	Inequality and Development
PSYC 215	(3)	Social Psychology
RELG 270	(3)	Religious Ethics and the Environment
RELG 370	(3)	Religion and Human Rights
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 235	(3)	Technology and Society
SOCI 254	(3)	Development and Underdevelopment
SOCI 307	(3)	Globalization
SOCI 365	(3)	Health and Development

SOCI 366	(3)	Neighborhoods and Inequality
SOCI 386	(3)	Contemporary Social Movements
URBP 201	(3)	Planning the 21st Century City
URBP 504	(3)	Planning for Active Transportation
URBP 506	(3)	Environmental Policy and Planning
URBP 530	(3)	Urban Infrastructure and Services in International Context
URBP 551	(3)	Urban Design and Planning
WCOM 314	(3)	Communicating Science

# **Natural Sciences and Technology**

\*\* Note: you may tak

ENVB 529**	(3)	GIS for Natural Resource Management
ENVR 200	(3)	The Global Environment
ENVR 202	(3)	The Evolving Earth
ENVR 422	(3)	Montreal Urban Sustainability Analysis
EPSC 201**	(3)	Understanding Planet Earth
EPSC 233**	(3)	Earth and Life History
EPSC 549	(3)	Hydrogeology
ESYS 301	(3)	Earth System Modelling
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 201**	(3)	Introductory Geo-Information Science
GEOG 205	(3)	Global Change: Past, Present and Future
GEOG 272	(3)	Earth's Changing Surface
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 321	(3)	Climatic Environments
GEOG 322**	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments

## 8 Faculty of Law

### 8.1 Legal Education at McGill

#### We do legal education like nobody else

Proudly bilingual, rigorously pluralistic, the McGill Law program breaks the mould for legal education in our fast-paced, globalized world. No other law program reaches further. The McGill program ensures that students gain a cosmopolitan understanding of the law that is not confined to specific jurisdictions or legal traditions.

Legal education at McGill explores concepts and ideas through a comparative, integrated lens that is unique around the world.

The McGill curriculum features multiple opportunities for problem-based learning, translation of knowledge into action, and the development of skills that are critical to engaged, effective, and enlightened jurists.

#### An integrated education

- 1. Designed to work across the traditional boundaries of first-year coursework.
- 2. Offered in French and English.
- 3. That builds on an expertise in the civil law and common law, broadened to include other legal traditions, including better understandings of Indigenous law, as well as cutting-edge scholarship in alternate dispute resolution.

#### A focus on problem-solving

1. Students work in small groups to tackle issues in leg

#### 8.1.2 Administrative Officers and Staff

**Faculty Administrative Officers** 

Robert Leckey **Dean** 

Tina Piper Associate Dean (Academic)

Darren Rosenblum Associate Dean (Graduate Studies)

Daniel Weinstock Associate Dean (Research)

Kimberly Lee-Louis Assistant Dean (Inclusion - Black and Indigenous Flourishing)

Brittany Williams Manager (Student Affairs)

Vanessa Batik Assistant Dean (Administration and Strategy)
Andra Syvänen (on leave) Assistant Dean (Admissions and Recruitment)

Shadaye Cousins Acting Assistant Dean (Admissions and Recruitment)

Debbie Carlone Manager, Faculty Administrator and Human Resources Advisor

Sandy Hervieux Head Librarian

Admissions (BCL/JD)

Lindsay Wills Admissions Officer

Kelly Hanley Senior Admissions Coordinator
Viky Boyer Admissions Coordinator

**Career Development Office** 

Staci Angelis (on leave) Director, Career Development Office

Sandra Palmieri Interim Director, Career Development Office

Ennaea Currie Advisor
Cait Bishop Associate

Communications

Aminata Mboup Web Communications Editor
Karell Michaud Communications Officer

**Conferences and Special Events** 

Silvana Solitero Special Events and Alumni Relations Administrator

Dean's Office

Lody Ehomba Senior Administrative Coordinator
Silvia Tuccia Academic Affairs Administrator

**Financial Administration** 

Pina Ricco Manager, Financial Administration

Sabrina Falco Accounts Administrator

Office of Research (Law)

Jennifer Scissons Research Administrator

Secretarial and Administrative Staff

Margaret Baratta

Administrative Officer and Building Director

Thomas Chalmers (on leave until 2025)

Deputy Building Director and Room Bookings

Lianna Barski Human Resources Administrator

## Secretarial and Administrative Staff

Tena Groot Human Resources Coordinator

Maria D'Amico Senior Administrative Coordinator (IASL)

Conference and Special Events Coordinator (CHLRP/CIP 70.52 694.12 Tm(Maria I

## Centre for Research in Air and Space Law

Brian Havel (on leave Director

#### 8.2.2 Outline of Academic Regulations

This publication and the Faculty Regulations in force govern students registered in the Faculty of Law during the 2023–2024 academic year. As well, students are subject to changes published in this publication from time to time within the Faculty before Fall registration.

These Regulations, and all others under which the curriculum is administered, are subject to change at any time.

#### 8.2.2.1 Academic Standing

Academic Standing is determined under a credit system as set out in the Faculty Academic Regulations contained in the Registration Materials published each academic year. This publication, which is posted on the Student Affairs Office website, mcgill.ca/law-studies/courses, prior to registration opening on Minerva in May, contains the detailed Regulations for the McGill Program. The Faculty is also 181 Tm(Af)TG5

## 8.3.2 Admission to the Legal Profession: The United States

The J.D. degree is an approved law degree in some U.S. jurisdictions (i.e., NY and MA), and is accepted as the equivalent of a degree in law from an accredited U.S. law school in those jurisdictions. This approval means that McGill graduates may proceed through the Bar admission process in those jurisdictions in the same way as their U.S. counterparts, subject to a "Foreign Legal Education Evaluation" process for the New York Bar.

You can obtain information on the Bar examinations of New York and Massachusetts by consulting the following websites:

The Massachusetts Board of Bar Examiners: http://www.mass.gov/or

#### 8.5 Nahum Gelber Law Library

The Law Library is a state-of-the-art facility with a collection of over 220,000 volumes and online resources covering Canadian, foreign, and international law. The collection supports the Faculty of Law undergraduate transsystemic program, graduate courses, and the Faculty of Law research centres with particular focuses on air and space law; comparative law; private and public international law; human rights law; intellectual property; and international trade law. The collection also covers mixed jurisdictions, and some aspects of Talmudic and Islamic Law. It also has legal materials from other common law and civil law jurisdictions such as Great Britain, France, and the United States.

The Peter Marshall Laing Special Collections Room houses the Wainwright Collection of French law from the *ancien régime*, and other rare books in Canadian and English Law. Other collections of note include an extensive collection of French legal theses and the John Humphrey United Nations Collection.

The Dobrin-Steinberg Computer Instruction Classroom, when not in use for legal research workshops, may be used by McGill students for personal research. In addition, wireless network access is available throughout the building, as well as colour printers and scanning facilities. Other facilities include six Moot Team Preparation Rooms for the exclusive use of competitive moot teams representing the Faculty of Law, cubicles, carrels, and three group study rooms for use by McGill Law students.

For complete information on the Nahum Gelber Law Library please visit our website: mcgill.ca/library/branches/law.

#### 8.6 Research Centres

Two research institutes are affiliated to the Faculty of Law: the Institute of Comparative Law (ICL); and the Institute of Air and Space Law (IASL).

The Faculty of Law also supports several semi-independent research centres:

- the Centre for Human Rights and Legal Pluralism;
- the Centre for Intellectual Property Policy;
- the Centre for Research in Air and Space Law;
- the Paul-André Crépeau Centre for Private and Comparative Law.

#### 8.6.1 Centre for Human Rights and Legal Pluralism

This Centre is a focal point for innovative legal and interdisciplinary research, dialogue, and outreach on human rights and legal pluralism. The Centre's mission is to provide students, professors, and the larger community with a locus of intellectual resources and experiential opportunities for engaging critically with the impact that law has on some of the most compelling social problems of our era.

Further information is available on the *Centre's website*.

#### 8.6.2 Centre for Intellectual Property Policy

This Centre was founded in 2003 under the auspices of the Faculty of Law. The goal of the Centre is to explore new perspectives on intellectual property.

in its field. The Centre has also published several other books and reports in recent years, and held seminars and conferences in Montreal, Bogota, Dubai, Macau, New Delhi, Brussels, Abu Dhabi, Cologne, Singapore, London, Amsterdam, and Dublin.

Further information is available on the *Centre's website*.

#### 8.6.4 Paul-André Crépeau Centre for Private and Comparative Law

The Paul-André Crépeau Centre for Private and Comparative Law was founded in 1975 and conducts research in the field of comparative private law, with a special focus on jurilinguistics, i.e., the relationship between law and language. The Centre produces historical and critical editions of the Civil Codes and an ongoing multi-volume Treatise of Quebec Civil Law. The Centre has also published a series of volumes making up the Private Law Dictionary / Dictionnaire de droit privé, along with associated bilingual lexicons; these are world-renowned authorities on the vocabulary of the civil law in English and French. The new dictionary project focuses on the law of successions as a continuation of the individual volumes which cover the law of obligations, property, and family. The Centre sponsors the Civil Law Workshops at the Faculty, which are designed to explore the foundations of the civil law tradition and further explore new theoretical understandings of private law, of which many have led to published collections of scholarly texts. It also serves as the focus for research relating to the implications for legal knowledge of the Faculty's ground-breaking program of transsystemism.

Further information is available on the Centre's website.

## 8.7 Overview of Undergraduate Degrees Offered

Our undergraduate Law program integrates the Civil Law and the Juris Doctor. Consequently, students in the undergraduate program obtain a double degree of Civil Law (B.C.L.) and Juris Doctor (J.D.). Students may enrich their program with one of our minor, major, or honours programs, or take one of our joint degree programs in Management or Social Work. Students can also go on exchange through our Student Exchange Program, take non-course credits and outside credits, or put their learning in practice through our various internship programs.

#### 8.7.1 McGill B.C.L./J.D. Program

The Faculty of Law's unique integrated program leads to graduation with both Civil Law and Juris Doctor degrees (B.C.L./J.D.).

McGill Law students are introduced to "transsystemic" teaching in the first year of the program; fundamental concepts of the civil law and Juris Doctor traditions are studied within a single course. This unique method of instruction fosters analytical ability, critical reflection, and openness to diverse approaches to legal problems. Students in the McGill program must complete 105 credits. Most students take three-and-a-half or four years to complete the program. It is possible, ho

Our admissions process is holistic, meaning that reviewers look at all aspects of an application to get a sense of the candidate as a whole. Committee reviewers assess the applicant's academic record, linguistic abilities, personal motivations for studying law, extracurricular, community, or professional activities, and letters of reference (see Supporting Documents).

In addition, applicants must demonstrate substantial reading ability in, and oral comprehension of, both English and French (see section 8.8.1.2: Language

The Admissions Committee is looking for applicants who have the ability to succeed academically in our rigorous academic program, as well as indicators of intellectual curiosity, community engagement, insight (cultural, economic, political, social, and otherwise), leadership skills, ability to work with others, openness to diversity, maturity, ethical sense, and judgement, and potential for development through opportunity or adversity, among other criteria. We do not use GPA or LSAT cut-offs, and we do not have quotas for categories of applicants.

We seek to create a diverse community of learners drawn from across Quebec, Canada, and beyond, in which there is a wide range of career aspirations, backgrounds, and life experiences. This approach contributes to the rich and dynamic learning environment for which McGill Law has become known.

The Faculty of Law is committed to equity and diversity. We welcome applications from Indigenous peoples, people with disabilities, racialized people, 2SLGBTQ+ people, women, people from an economically disadvantaged background, and others who may face systemic barriers that impact their access to education.

The B.C.L./J.D. is a limited enrolment program for which admission is competitive. Each year the Faculty admits approximately 180 new students. The number of applications is approximately eight times greater than the number of available places. Unfortunately, every year we must refuse many qualified candidates due to lack of space in the program.

Files are reviewed by the Admissions Office and the Faculty's Admissions Committee, which is composed of full-time faculty members appointed by the Dean; four senior law students selected by the Law Students' Association Executive; the Assistant Dean, Inclusion - Black and Indigenous Flourishing; and the Assistant Dean, Admissions and Recruitment.

#### **Educational Requirements** 8.8.1.1

Candidates must have a minimum of 60 credits of university studies, or a Diploma of College Studies (DCS) from a Quebec College of General and Professional Education (CEGEP), before starting their law studies. Students with a French Baccalaureate from Quebec (Collège international Marie de France or Collège Stanislas) are also eligible to apply.

Candidates from a French Baccalaureate program completed outside of Quebec, International Baccalaureate programs, or who are finishing high school are not eligible to apply.

Admission to the program is highly competitive. Almost all students admitted in the "University" category will have completed an undergraduate degree before starting our B.C.L./J.D. program.

In our holistic review process, there are no minimum thresholds for GPA, LSAT score, nor R-score. While the numerical aspects of the applicant's file are not, in themselves, decisive, students admitted to McGill Law, nonetheless, tend to have outstanding academic records, in addition to their other qualities. Applicants may consult the statistics on our website for a sense of how their academic indicators may impact the likelihood of admission.



Note: Candidates admitted directly from CEGEP or a Quebec French Baccalaureate who are interested in practising in the United States should be aware that bar admission requirements in a number of states include studies at the university level before studying law.



Note: Applicants are not eligible to apply directly from a French Baccalaureate program completed outside of Quebec or from high school. Applicants must meet the eligibility requirement mentioned above.

#### Language Requirements 8.8.1.2

McGill's BCL/JD program is offered in a bilingual (French and English) environment. Candidates must demonstrate that they are at least passively bilingual, which means that they have at a minimum an advanced proficiency in one language and an advanced intermediate level of reading and oral comprehension in another. The Faculty uses the standards set in the Common European Framework of Reference for Languages to evaluate language proficiency, and expects candidates to meet one of the following sets of minimal standards:

- C1 proficiency in English and a B2 level in reading and oral comprehension in French; or
- C1 proficiency in French and B2 level of reading and oral comprehension in English.

Passive bilingualism is a minimum requirement, not a competitive admissions asset.

The Faculty's policy of passive bilingualism permits students to submit written work, write exams, and ask questions in class in either English or French, regardless of the language of instruction. Students may fulfil their Moot Court requirements in English or French. First-year courses are offered in English and French, and a number of upper-year courses are offered in one language only. While examination questions are set in the language in which a course is given, any examination may contain extensive passages in either French or English. Due to space limitations, it is not always possible for students to be registered in courses given in their preferred language. Almost all first-year students will be registered in at least one class in a French section.

If no evidence of passive bilingualism in French or English appears in the application, the candidate will be refused admission.

To demonstrate that they meet bilingualism requirements, candidates must indicate in their application how they acquired both English and French. They must also submit transcripts from any post-secondary English and French language courses they have taken. The Admissions Committee reviews each candidate's CV and references to take into account work or volunteering experiences in each language.

In order to get a sense of the level of reading comprehension that is expected of McGill Law students, candidates are encouraged to visit the website of the Supreme Court of Canada and to read judgments in English and in French.

Candidates intending to proceed to the Bar of Quebec or the Board of Notaries of Quebec should carefully review *University Regulations and Resources* > *Undergraduate* > *Admission to Professional and Graduate Studies* > *section 1.10.1: Language Requirements for Professions.* The Charter of the French Language imposes certain mandatory language requirements on attorneys and notaries who practise in Quebec.

Please visit the Faculty of Law *Eligibility* page for more information on our language testing, conditional admissions, demonstration of bilingualism, and exemptions.

## 8.8.1.3 Indigenous Applicants

McGill Law is committed to recruiting and supporting Indigenous students and we welcome dialogue with prospective BCL/JD applicants. First Nations (Status, Non-Status), Inuit, Métis, or Indigenous persons with ties to Turtle Island are strongly encouraged to apply to the Faculty of Law and are invited to self-identify on their application form. For more information on this applicant category and rationale for this category, please visit the *Indigenous Applicants* page. Indigenous applicants retain the option of applying to the other *applicant categories* instead of applying to the Indigenous applicant category. If they elect to do so, they must follow the instructions and deadlines for applying to these categories.

Self-identification allows McGill to inform Indigenous students of specific services and funding opportunities and to assess our progress in the recruitment and retention of Indigenous students.

#### **Linguistic Support**

We acknowledge that our bilingualism admission requirement may represent an added challenge for some Indigenous applicants for whom English or French may be their third language, and potentially perceived as a colonizing influence. Applicants are encouraged not to exclude themselves from applying on linguistic grounds, and are encouraged to speak with us regarding any concerns on this point. Financial support is available to admitted Indigenous candidates who wish to improve their abilities in English or French before starting the program and to continue to address a relative weakness in English or French during legal studies here. This program is generously supported by the McCarthy Tétrault Fund for Language Training. Please contact us to find out more!

#### **Indigenous Student Financial Assistance**

McGill has established a *funding program for Indigenous students*, made possible in part by Indspire, an Indigenous-led registered charity that invests in the education of Indigenous peoples of Canada.

#### **Indigenous Research and Experiential Opportunities**

McGill offers Indigenous students the opportunity to study and complete research with a wide range of legal scholars in English and French. The Faculty is host to a vibrant Indigenous La

## 8.8.2.1 Online Application

Candidates must apply to the BCL/JD program online. The *online application* is available as of September 1. In order to avoid unnecessary processing delays, please read the application instructions carefully. Please *email* the Law Admissions Office at the Faculty of Law if you are unable to apply online (transfer applicants).

Once you have applied, an acknowledgment notice will be sent to the email address indicated on your application within 48 hours. If you have not received your acknowledgment notice within 48 hours following the submission of your application, you should contact the Admissions Office at the Faculty of Law admissions.law@mcgill.ca).

## 8.8.2.2 Verifying the Status of Your Application in the Applicant Portal

After submitting the application, you can log into the Applicant Portal, where you can monitor the status of your application. As your supporting documents are received and recorded, consult the *admissions checklist* to see which documents (if any) are missing, incomplete, or illegible. Consult your admissions checklist regularly as ne

## 8.8.2.6.1 University Applicants

A University applicant to McGill's Faculty of Law must be on track to complete their degree or have a minimum of 60 credits of undergraduate studies before starting their law studies. This category includes applicants who, at time of registration, will hav

## 8.8.2.6.6 Comité des équivalences

The Faculty accepts applications from candidates who hold a law degree from a Canadian or foreign university recognized by McGill and who are seeking to fulfil the requirements of the *Comité des équivalences* of the *Barreau du Québec* or of the *Chambre des notaires*, in order to practice in Quebec. Successful applicants must have the final decision of the *Comité des équivalences* of the *Barreau* or the *Chambre des notaires* in hand at the time of registration. Candidates must submit their equivalency application from the Barreau du Québec or the Chambre des notaires before our deadline for supporting documents.

Please note that:

• This is a non-degree program. Courses taken by Comité des équivalences students cannot be credited tow

- LAWG 210 Legal Ethics and Professionalism
- LAWG 220D1/D2 Property
- PRAC 200 Advocacy
- PROC 124 Judicial Institutions and Civil Procedure
- PUB2 101D1/D2 Constitutional Law
- PUB3 116 Foundations

In addition, the following undergraduate complementary courses are **not** open to Special Students:

- PROC 200 Advanced Civil Law Obligations
- PRV3 200 Advanced Common Law Obligations

## 8.8.2.7 Application Deadlines for Law Undergraduate Programs

The online application is available as of **September 1**. Deadlines vary by applicant category. Applicants must take the time to identify the category in which they must apply. Applicants are responsible for ensuring that the online application is completed by the deadlines indicated below and that all *supporting documents* 

1.	Transcripts for studies undertaken in Quebec universities may be submitted electronically via the BCI ( <i>Bureau de coopération interuniversitaire</i> , previously known as CREPUQ) system.

#### Practical tips

Read our Admissions Policy to get a sense of what we look for in our students.

Before writing, reflect critically on your motivations, your interests, and your convictions, and their connection to our program. Do some research on our law faculty and others. Law faculties all tend to have their own strengths and particularities. Doing some research may help you identify and articulate why you are interested in studying at McGill in particular.

The Personal Statement should not be used as a vehicle for narrating or repeating your CV. You have a limited amount of writing space; make it count. Do—adjbacknesses before traphdidacy that the Committee will see in other documents unless these aspects are directly linked to your interest in studying law at McGill. Be authentic. Be yourself. Don't be afraid to be original, but be careful not to sacrifice substance.

You may submit your Personal Statement in English, French, or both. It is important that you write the statement in whatever of the two language(s) you are most comfortable expressing yourself. It is not recommended to use the Personal Statement as a way to establish your bilingualism unless you are very comfortable expressing yourself in the other language.

Importantly, make sure that your Personal Statement follows our formatting guidelines (see below) and that it has grammatical integrity. Only one submission of the Personal Statement is accepted so it is important to submit the Personal Statement in its fi; mabmit theonalica97.52 587.62 he nectTm or our fo(w) fice substa Ir cgeno

## 8.8.2.8.6.1 Format

While you may format your CV in any way that best presents your information, the CV must conform to the two-page maximum. The Admissions Committee will not read beyond the two-page limit.

Please visit the Supporting Documents page of the Faculty of Law

encouraged to apply for admission to a number of faculties of law. Almost all faculties of law outside Quebec (with the exception of the Civil Law program at the University of Ottawa and the French Common Law programs at the University of Moncton and the University of Ottawa) require the LSAT.

The quality of McGill's applicant pool is exceptionally strong. Among admitted students, the average entering GPA is a 3.8 on a 4.0 scale (about an 85% average). Applicants with academic records below this average GPA or percentile are encouraged to consider writing the LSAT.

If you are considering writing the LSAT only to improve your application to McGill Law, it will be important to assess how the results could impact the strength of your application. It is also important to note that if you write the LSAT more than once, McGill Law takes your average score. Based on an average score.

The following SAO services and supports are available to all students at any point in their Law program.

#### 8.10.2.2 Student Advising & Support

Students are encouraged to seek academic advice and support from the SAO throughout their academic career. If you are experiencing acute stress, struggling to maintain productivity, or not sleeping or eating well, dealing with financial problems or any other personal problem, support is available. Come by your SAO on the fourth floor or send your a

- section 8.10.4.4: Innocence McGill
- section 8.10.4.5: L.E.X. Program
- section 8.10.4.6: McGill Journal of Law and Health
- section 8.10.4.7: McGill Journal of Sustainable Development Law
- section 8.10.4.8: McGill Law Journal
- section 8.10.4.9: McGill Journal of Dispute Resolution
- section 8.10.4.10: Pro Bono Students Canada
- section 8.10.4.11: Quid Novi
- section 8.10.4.12: Skit Nite

#### 8.10.4.1 Legal Information Clinic at McGill

The Legal Information Clinic at McGill (LICM) is a non-profit, student-run, bilingual, and free legal information service. Our mandate is to provide legal information, referral and document certification services to the McGill and Montreal communities, with a continuing commitment to meeting the needs of marginalized groups. Students who have completed their first year at the Faculty of Law are eligible to volunteer, but all McGill students are entitled to receive our services for free! For further information, contact:

Legal Information Clinic at McGill SSMU Building 3480 rue McTavish, Room 107 Montreal QC H3A 0E7 Telephone: 514-398-6792

Website: licm.ca

#### 8.10.4.2 Contours

Contours is a project based at the McGill Faculty of Law that aims to map and shape the contours of debates, experiences, concerns, and aspirations through written and artistic exploration of the intersection of women and law. Founded in 2012, the student-run magazine is a space for women's voices and an invitation for us all to start a conversation. Contours is published annually and welcomes contributions in English and French from students and faculty. Nous accueillions des réponses argumentatives et émotionnelles, théoriques et expérientielles, par écrit et de l'art, parce que nous croyons que toutes ces formes d'expression sont utiles pour développer notre compréhension des intersections entre les femmes et le droit à différents niveaux.

#### 8.10.4.3 Graduate Law Student Association

The Graduate Law Students' Association (GLSA) is an Association with an Executive Board composed anr.88 Tm( (GLSA) is an )Tosont utiles 3 471.12 Tm(W)Taaj/F

## 8.10.4.7 McGill Journal of Sustainable Development Law

The McGill Journal of Sustainable Development Law (MJSDL), formerly McGill International Journal of Sustainable Development Law and Policy (JSDLP), pro

## 3 credits from the following list of civil law courses:

BUS2 561	(3)	Insurance
LAWG 506	(3)	Advanced Civil Law Property
PROC 200	(3)	Advanced Civil Law Obligations
PROC 549	(3)	Lease, Enterprise, Suretyship
PRV2 270	(3)	Law of Persons
PRV4 548OC08om the f	follo (3)	Administration Property of Another and Trusts

3 credits from the following courses:

BUS1 532	(3)	Bankruptcy and Insolvency
BUS2 504	(3)	Securities Regulation
CMPL 543	(3)	Law and Practice of International Trade
CMPL 574	(3)	Government Control of Business
CMPL 575	(3)	Discrimination and the Law
CMPL 577	(3)	Communications Law
CMPL 580	(3)	Environment and the Law
LAWG 561	(3)	Privacy Law
LAWG 581	(3)	Law and Healthcare
LEEL 369	(3)	Labour Law
LEEL 570	(3)	Employment Law
LEEL 582	(3)	Law and Poverty
PRV4 545	(3)	Land Use Planning
PRV5 483	(3)	Consumer Law
PUB2 400	(3)	The Administrative Process
PUB2 401	(3)	Judicial Review of Administrative Action
PUB2 500	(3)	Law and Psychiatry
PUB2 551	(3)	Immigration and Refugee Law

## **Elective Courses**

46 credits.

Students must take 46 other elective courses offered within the Faculty or approved as credit equivalences in order to complete the 105-credit degree requirement.

## **Minimum Writing Requirement**

All students are required to submit at least one research paper. This requirement may be satisfied by:

LAWG 100D1	(3)	Contractual Obligations
LAWG 100D2	(3)	Contractual Obligations
LAWG 101D1	(3)	Extra-Contractual Obligations/Torts
LAWG 101D2	(3)	Extra-Contractual Obligations/Torts
LAWG 102D1	(3)	Criminal Justice
LAWG 102D2	(3)	Criminal Justice
LAWG 103	(3)	Indigenous Legal Traditions
LAWG 110D1	(1.5)	Integration Workshop
LAWG 110D2	(1.5)	Integration Workshop
PUB2 101D1	(3)	Constitutional Law
PUB2 101D2	(3)	Constitutional Law
PUB3 116	(3)	Foundations

#### **Second Year**

The following 13 credits of courses may be taken only in the second year:

LAWG 210	(3)	Legal Ethics and Professionalism
LAWG 220D1	(3)	Property
LAWG 220D2	(3)	Property
PROC 124	(4)	Judicial Institutions and Civil Procedure

#### **Any Year**

The following 1 credit course may be taken in any year after completing the first year:

PRAC 200 (1) Advocacy

## **Complementary Courses (12 credits)**

#### **Civil Law Immersion Courses**

3 credits from the following list of civil law courses:

BUS2 561	(3)	Insurance
LAWG 506	(3)	Advanced Civil Law Property
PROC 200	(3)	Advanced Civil Law Obligations
PROC 549	(3)	Lease, Enterprise, Suretyship
PRV2 270	(3)	Law of Persons
PRV4 548	(3)	Administration Property of Another and Trusts

## **Common Law Immersion Courses**

3 credits from the following list of common law courses:

PRV3 200	(3)	Advanced Common Law Obligations
PRV3 534	(3)	Remedies
PRV4 500	(3)	Restitution
PRV4 549	(3)	Equity and Trusts

## Social Diversity, Human Rights and Indigenous Law Courses

Students must take at least 3 credits from the following courses:

CMPL 500	(3)	Indigenous Peoples and the State
CMPL 504	(3)	Feminist Legal Theory
CMPL 511	(3)	Social Diversity and Law
CMPL 516	(3)	International Development Law
CMPL 565	(3)	International Humanitarian Law
CMPL 571	(3)	International Law of Human Rights
CMPL 573	(3)	Civil Liberties
CMPL 575	(3)	Discrimination and the Law
IDFC 500	(3)	Indigenous Field Studies
LAWG 503	(3)	Inter-American Human Rights
LAWG 505	(3)	Critical Engagements with Human Rights
LAWG 507	(3)	Critical Race Theory Advanced Seminar
LEEL 369	(3)	Labour Law
LEEL 582	(3)	Law and Poverty
PUB2 105	(3)	Public International Law
PUB2 500	(3)	Law and Psychiatry
PUB2 502	(3)	International Criminal Law
PUB2 551	(3)	Immigration and Refugee Law
PUB3 515	(3)	Canadian Charter of Rights and Freedoms

## Principles of Canadian Administrative Law

3 credits from the following courses:

BUS1 532	(3)	Bankruptcy and Insolvency
BUS2 504	(3)	Securities Regulation

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Students must take 46 other elective courses offered within the Faculty or approved as credit equivalences in order to complete the 120-credit degree requirement.

## **Minimum Writing Requirement**

All students are required to submit at least one research paper. This requirement may be satisfied by:

- a) writing and essay in a course in which the essay constitutes no less than 75% of the final grade;
- b) writing a term essay under independent supervision, for credit, within the Faculty of Law;
- c) writing an article, note, or comment of equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication.

Papers written jointly do not satisfy this requirement.

# 8.12.3 Bachelor of Law (B.C.L.) / Juris Doctor (J.D.) with Major Concentration Law with Major Concentration Commercial Negotiation and Dispute Resolution (123 credits)

The B.C.L. and J.D.. with a major concentration is open to all students enrolled in the Faculty of Law.

The Major Concentration in Commercial Negotiation and Dispute Resolution is articulated around a synthetic skill set driven by the transversal theme "Commercial Negotiation and Dispute Resolution" and is inspired by an interdisciplinary approach.

Law and non-law courses are combined with the practical experience acquired during an internship. The required writing of an independent essay allows students to integrate the various academic and clinical strands of the major program, and, more broadly, of legal learning.

The Major concentration is a 36-credit program. Students are permitted to include within their 105 credits for the B.C.L. and J.D. 18 credits toward their Major concentration. The remaining 18 credits needed for the Major concentration are added on top of the 105 credits for the Law degrees for a total of 123 credits.

#### **Required Courses (6 credits)**

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CMPL 521	(3)	Trade Regulation
CMPL 533	(3)	Resolution of International Disputes
CMPL 543	(3)	Law and Practice of International Trade
CMPL 568	(3)	Extrajudicial Dispute Resolution
CMPL 574	(3)	Government Control of Business
LAWG 200	(3)	Commercial Law
LAWG 400	(4)	Secured Transactions
LAWG 511	(1)	Specialized Topics in Law 1
LAWG 512	(1)	Specialized Topics in Law 2
LAWG 513	(2)	Specialized Topics in Law 3
LAWG 514	(2)	Specialized Topics in Law 4
LAWG 515	(3)	Specialized Topics in Law 5
LAWG 516	(3)	Specialized Topics in Law 6
LAWG 517	(3)	Specialized Topics in Law 7
LAWG 518	(3)	Specialized Topics in Law 8
LAWG 521	(3)	Student-Initiated Seminar 1
LAWG 522	(3)	Student-Initiated Seminar 2
LEEL 369	(3)	Labour Law
PROC 549	(3)	Lease, Enterprise, Suretyship
PRV4 500	(3)	Restitution
PRV5 483	(3)	Consumer Law
PUB2 517	(3)	Corporate Taxation

#### **Non-Law Courses**

Students may take 6-12 credits of non-law courses. Students who take 6 non-law credits as part of their Major concentration may count an additional 6 non-law credits toward their B.C.L. and J.D. program. Students who take 9 non-law credits as part of their Major concentration may count an additional 3 credits toward their B.C.L. and J.D. Students who take 12 non-law credits as part of their Major concentration may not count additional non-law credits toward their B.C.L. and J.D.

Other non-law courses related to Commercial Negotiation and Dispute Resolution not included in these lists may be taken with the approval of the Program Adviser.

#### **Non-Law Courses - Economics**

ECON 223	(3)	Political Economy of Trade Policy
ECON 305	(3)	Industrial Organization
ECON 310	(3)	Introduction to Behavioural Economics
ECON 546	(3)	Game Theory

## Non-Law Courses - Management

B (3) Managing in Europe

MGCR 293	(3)	Managerial Economics
MGCR 382	(3)	International Business
MGCR 423	(3)	Strategic Management
MGPO 383	(3)	International Business Policy
MGPO 440	(3)	Strategies for Sustainability
MGPO 445	(3)	Industry Analysis and Competitive Strategy
MGPO 450	(3)	Ethics in Management
		Managing Innovation

27 credits from the following lists of law and non-law courses of which at least 6 credits must be from non-law courses.

## **Law Courses**

15-21 credits of law courses selected from:

CMPL 516	(3)	International Development Law
CMPL 521	(3)	Trade Regulation
CMPL 533	(3)	Resolution of International Disputes
CMPL 543	(3)	Law and Practice of International Trade
CMPL 546	(3)	International Environmental Law and Politic
CMPL 565	(3)	International Humanitarian Law
CMPL 571	(3)	International Law of Human Rights
LAWG 503	(3)	Inter-American Human Rights
LAWG 505	(3)	Critical Engagements with Human Rights
LAWG 511	(1)	Specialized Topics in Law 1
LAWG 512	(1)	Specialized Topics in Law 2
LAWG 513	(2)	Specialized Topics in Law 3
LAWG 514	(2)	Specialized Topics in Law 4
LAWG 515	(3)	Specialized Topics in Law 5
LAWG 516	(3)	Specialized Topics in Law 6
LAWG 517	(3)	Specialized Topics in Law 7
LAWG 518	(3)	Specialized Topics in Law 8
LAWG 521	(3)	Student-Initiated Seminar 1
LAWG 522	(3)	Student-Initiated Seminar 2
PUB2 105	(3)	Public International Law
PUB2 502	(3)	International Criminal Law
PUB2 503	(3)	Comparative Federalism
PUB2 551	(3)	Immigration and Refugee Law

## Non-Law Cour

ECON 426	(3)	Labour Economics

## Non-Law Courses - Geography

GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 408	(3)	Geography of Development
GEOG 410	(3)	Geography of Underdevelopment: Current Problems

## Non-Law Courses - International Development

## Non-Law Courses - Management

MGPO 469	(3)	Managing Globalization
MGPO 475	(3)	Strategies for Developing Countries
ORGB 380	(3)	Cross Cultural Management

## Non-Law Courses - Political Science

POLI 227	(3)	Developing Areas/Introduction
POLI 243	(3)	International Politics of Economic Relations
POLI 324	(3)	Developing Areas/Africa
POLI 340	(3)	Developing Areas/Middle East
POLI 345	(3)	International Organizations
POLI 354	(3)	Approaches to International Political Economy
POLI 362	(3)	Political Theory and International Relations
POLI 474	(3)	Inequality and Development

221.91 283.72F0 8.3 Tf1 0 0 (367.52 446.1269)369731nxars Developing Areas

Contractual Oblig

Social Diversity, Human Rights and Indigenous Law Courses

Students must take at least 3 credits from the following courses:

CMPL 500	(3)	Indigenous Peoples and the State
CMPL 504	(3)	Feminist Legal Theory
CMPL 511	(3)	Social Diversity and Law
CMPL 516	(3)	International Development Law
CMPL 565	(3)	International Humanitarian Law
CMPL 571	(3)	International Law of Human Rights
CMPL 573	(3)	Civil Liberties
CMPL 575	(3)	Discrimination and the Law
IDFC 500	(3)	Indigenous Field Studies
LAWG 503	(3)	Inter-American Human Rights
LAWG 505	(3)	Critical Engagements with Human Rights
LAWG 507	(3)	Critical Race Theory Advanced Seminar
LEEL 369	(3)	Labour Law
LEEL 582	(3)	Law and Poverty
PUB2 105	(3)	Public International Law
PUB2 500	(3)	Law and Psychiatry
PUB2 502	(3)	International Criminal Law
PUB2 551	(3)	Immigration and Refugee Law
PUB3 515	(3)	Canadian Charter of Rights and Freedoms

## Principles of Canadian Administrative Law

3 credits from the following courses:

BUS1 532	(3)	Bankruptcy and Insolvency
BUS2 504	(3)	Securities Regulation
CMPL 543	(3)	Law and Practice of International Trade
CMPL 574	(3)	Government Control of Business
CMPL 575	(3)	Discrimination and the Law
CMPL 577	(3)	Communications Law
CMPL 580	(3)	Environment and the Law
LEEL 369	(3)	Labour Law
LEEL 570	(3)	Employment Law
LEEL 582	(3)	Law and Poverty
PRV4 545	(3)	Land Use Planning
PRV5 483	(3)	Consumer Law
PUB2 400	(3)	The Administrative Process
PUB2 401	(3)	Judicial Review of Administrative Action
PUB2 500	(3)	Law and Psychiatry
PUB2 551	(3)	Immigration and Refugee Law

## **Elective Courses**

15 credits of courses are chosen from 600-level courses offered by the Faculty. Course choice must be approved by a program adviser in the Faculty. Studen	te
will have to attend the M.B.A. Base Camp (Accounting and Business Math) prior to commencing the M.B.A.	.3

CMPL 504	(3)	Feminist Legal Theory	
CMPL 511	(3)	Social Diversity and Law	
CMPL 516	(3)	International Development Law	
CMPL 565	(3)	International Humanitarian Law	
CMPL 571	(3)	International Law of Human Rights	
CMPL 573	(3)	Civil Liberties	
		al La	

#### **Elective Courses (34 credits)**

Students must take 34 other elective courses, offered within the Faculty or approved as credit equivalencies in order to complete the 93-credit degree

#### **Minimum Writing Requirement**

All students are required to submit at least one research paper. This requirement may be satisfied by: a) writing an essay in a course in which the essay constitutes no less than 75% of the final grade; b) writing a term essay under independent supervision, for credit, within the Faculty of Law; c) writing an article, note, or comment or equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication. Papers written jointly do not satisfy this requirement.

# 8.12.7 Bachelor of Law (B.C.L.)/Juris Doctor (J.D.) & Master of Social Work (M.S.W.) (Joint B.C.L./J.D & M.S.W.) Law & Social Work (Non-Thesis) (132 credits)

A joint Master of Social Work (M.S.W.) with integrated Bachelor of Civil Law (B.C.L.) and Juris Doctor (J.D.) program is offered by the School of Social Work and the Faculty of Law.

Students complete 45 credits for the M.S.W. degree and 87 credits for the integrated B.C.L. and J.D. degrees for a total of 132 credits.

#### Required Courses - Social Work (30 credits)

SWRK 643	(3)	Research Methods 2
SWRK 650	(3)	Field Work Practicum 1
SWRK 651	(3)	Field Work Practicum 2
SWRK 653	(3)	Research Methods 1
SWRK 660	(6)	Field Work Practicum 3
SWRK 691	(12)	Social Work / Law Independent Study Project

#### Complementary Courses - Social Work (15 credits)

Students complete 15 credits of SWRK courses at the 500 or 600 level. Up to 6 graduate-level credits may be taken outside the School of Social Work with the approval of the Academic Adviser.

#### Required Courses - Law (46 credits)

First Year

The following 32 credits of courses may be taken only in the first year:

LAWG 100D1	(3)	Contractual Obligations
LAWG 100D2	(3)	Contractual Obligations
LAWG 101D1	(3)	Extra-Contractual Obligations/Torts
LAWG 101D2	(3)	Extra-Contractual Obligations/Torts
LAWG 102D1	(3)	Criminal Justice
LAWG 102D2	(3)	Criminal Justice
LAWG 110D1	(1.5)	Integration Workshop
LAWG 110D2	(1.5)	Integration Workshop
PUB2 101D1	(3)	Constitutional Law
PUB2 101D2	(3)	Constitutional Law
PUB3 116D1	()	
PUB3 116D2	()	

Second Year

The following 13 credits of courses may be taken only in the second year:

LAWG 210 (3) Legal Ethics and Professionalism

LAWG 220D1	(3)	Property
LAWG 220D2	(3)	Property
PROC 124	(4)	Judicial Institutions and Civil Procedure

The following 1 credit course may be taken in any year after completing the first year:

PRAC 200 (1) Advocacy

# **Complementary Courses (12 credits)**

Civil Law Immersion Courses

3 credits from the following list of civil law courses:

BUS2 561	(3)	Insurance
LAWG 506	(3)	Advanced Civil Law Property
PROC 200	(3)	Advanced Civil Law Obligations
PROC 549	(3)	Lease, Enterprise, Suretyship
PRV2 270	(3)	Law of Persons
PRV4 548	(3)	Administration Property of Another and Trusts

## Common Law Immersion Courses

3 credits from the following list of common law courses:

PRV3 200	(3)	Advanced Common Law Obligations
PRV3 534	(3)	Remedies
PRV4 500	(3)	Restitution
PRV4 549	(3)	Equity and Trusts

Social Diversity, Human Rights and Indigenous Law Courses

3 credits from the follo

PUB2 500	(3)	Law and Psychiatry
PUB2 502	(3)	International Criminal Law
PUB2 551	(3)	Immigration and Refugee Law
PUB3 515	(3)	Canadian Charter of Rights and Freedoms

Principles of Canadian Administrative Law

3 credits from the following courses:

BUS1 532	(3)	Bankruptcy and Insolvency
BUS2 504	(3)	Securities Regulation
CMPL 543	(3)	Law and Practice of International Trade
CMPL 574	(3)	Government Control of Business
CMPL 575	(3)	Discrimination and the Law
CMPL 577	(3)	Communications Law
CMPL 580	(3)	Environment and the Law
LEEL 369	(3)	Labour Law
LEEL 570	(3)	Employment Law
LEEL 582	(3)	Law and Poverty
PRV4 545	(3)	Land Use Planning
PRV5 483	(3)	Consumer Law
PUB2 400	(3)	The Administrative Process
PUB2 401	(3)	Judicial Review of Administrative Action
PUB2 500	(3)	Law and Psychiatry
PUB2 551	(3)	Immigration and Refugee Law

## **Elective Courses (29 credits)**

Students must take 29 other elective courses offered within the Faculty or approved as credit equivalencies in order to complete the 132-credit degree requirement.

## **Minimum Writing Requirement**

All students are required to submit at least one research paper. This requirement may be satisfied by:

- a) writing an essay in a course in which the essay constitutes no less than 75% of the final grade;
- b) writing a term essay under independent supervision, for credit, within the Faculty of Law;
- c) writing an article, note, or comment of equivalent substance that is published or accepted for publication in the McGill Law Journal and approved by the Faculty Adviser to that publication.

Papers written jointly do not satisfy this requirement.

## 8.13 Undergraduate Selection of Course Concentrations (Law Programs)

Several courses of instruction may be grouped because they treat a common subject matter or theme. The following unofficial groupings of courses regularly offered in the Faculty are intended to assist students desiring to specialize in selecting elective courses. They do not represent any academic policy decision by the Faculty as to the appropriate characterization of individual offerings. Moreover, some courses appear in more than one grouping. In all cases, reference should be made to the course descripwl7 E1 s1a.g7ks1a5uld 0.52 3o.3rRfiMripwl7 E1 s1a.g7ks1a5uld 0.oe4c341.001a97 ,R952 1187 Ea

#### 2. Advanced Private Law

#### Civil Law

Advanced Civil Law Obligations (PROC 200)

Advanced Civil Law Property (LAWG 506)

Insurance (BUS2 561)

Law of Persons (PRV2 270)

Lease, Enterprise, Suretyship (PROC 549)

#### Common Law

Advanced Common Law Obligations (PRV3 200)

Advanced Torts (PRV5 582)

Equity and Trusts (PRV4 549)

Real Estate Transactions (PRV4 451)

Remedies (PRV3 534)

Restitution (PRV4 500)

## Transsystemic Private Law

Business Associations (BUS2 365)

Commercial Law (LAWG 200)

Consumer Law (PRV5 483)

Death and Property (LAWG 504)

Employment Law (LEEL 570)

Evidence (Civil Matters) (LAWG 415)

Family Law (LAWG 273)

Family Property Law (LAWG 300)

Medical Liability (CMPL 522)

Private International Law (LAWG 316)

Property (LAWG 220D1 / LAWG 220D2)

Secured Transactions (LAWG 400)

### 3. Legal Theory, Legal Traditions, and Legal History

Aboriginal Peoples and the Law (CMPL 500)

Advanced Jurisprudence (CMPL 505)

Canadian Leg

# 4. Human Rights and Cultural Diversity

Civil Liberties (CMPL 573)

Discrimination and the Law (CMPL 575)

Inter-American Human Rights (LAWG 503)

International Humanitarian Law (CMPL 565)

International Law ofaw ofa

### 8. Corporate Law and Taxation

Corporate Taxation (PUB2 517)

Estate Planning (BUS1 414)

International Taxation (CMPL 539)

Securities Regulation (BUS2 504)

Taxation (PUB2 313)

Tax Policy (PUB2 515)

#### 9. International Business Law

European Union Law 1 (CMPL 536)

European Union Law 2 (CMPL 537)

International Carriage of Goods by Sea (CMPL 515)

International Development Law (CMPL 516)

International Maritime Conventions (CMPL 553)

Law and Practice of International Trade (CMPL 543)

Resolution of International Disputes (CMPL 533)

Trade Regulation (CMPL 521)

#### 10. Public International Law

International Criminal Law (PUB2 502)

International Environmental Law and Politics (CMPL 546)

International Humanitarian Law (CMPL 565)

International Law of Human Rights (CMPL 571)

The Law of International Organization (PUB2 506)

The McGill International Human Rights Internship (WRIT 020)

Public International Law (PUB2 105)

### 11. Criminal Law

Advanced Criminal Law (PUB2 501)

Criminal Law (PUB2 111)

Criminal Justice (LAWG 102D1 / LAWG 102D2)

Criminal Procedure (PUB2 422)

Evidence (Criminal Matters) (LAWG 426)

International Criminal Law (PUB2 502)

International Law of Human Rights (CMPL 571)

Sentencing in Canadian Law (PUB2 504)

## 12. Advocacy and the Legal Profession

Advocacy (PRAC 200)

Civil Litigation Workshop (PROC 459)

Criminal Procedure (PUB2 422)

Evidence (Civil Matters) (LAWG 415)

Evidence (Criminal Matters) (LAWG 426)

Extrajudicial Dispute Resolution (CMPL 568)

Judicial Institutions and Civil Procedure (PROC 124)

1001 Sherbrooke Street West, Room 305

Montreal QC H3A 1G5

Canada

Telephone: 514-398-4068

Faculty website: mcgill.ca/desautels

BCom degree website: mcgill.ca/desautels/programs/bcom

The BCom Student Affairs Office serves all students taking undergraduate Management courses.

#### 9.4.2 Administrative Officers

#### Dean

Yolande Chan

## Associate Dean, Undergraduate Programs

Benjamin Croitoru

## **Associate Director, BCom Program**

Giulia Campofredano

# Associate Director, BCom Student Affairs

Heather McCombie

## 9.4.3 Bachelor of Commerce Program

Internationally acclaimed for its high academic standards and excellence in teaching/research, and widely recognized as Canada's leading international business school, McGill University consistently attracts top students and f

If you want to pursue courses at another institution, credit will be granted for such courses only if they fit into your overall program, and if written permission to complete such courses for credit has been obtained in advance from the BCom Student Affairs Office. A course that overlaps with material already completed in your program, or a language course that does not substantially progress beyond corresponding language courses already taken, will not receive credit approval. For more information about transferring credits, see *section 9.4.7: Transfer Credit and Advanced Standing*.

### 9.4.6 International Student Exchange Program

The Desautels Faculty of Management prides itself on its international focus. To broaden this focus, we offer students the possibility of an exchange to over **60 top business schools** around the world. You will gain incredible life experience in and out of the classroom, as well as return with academic credits towards your degree. This experiential learning will make you face challenges and opportunities that will help you grow personally and professionally. You will build lifelong relationships and discover a new part of the world. Your future career will be enhanced as a result.

At least two-thirds of all departmental program requirements must be completed at McGill and there is a CGPA requirement of 3.0. Once accepted, you must obtain written faculty authorization for transfer credits before leaving to go on exchange. For more information about the International Student Exchange program, please visit mcgill.ca/desautels/programs/bcom/academics/exchange.

More information can also be obtained from the BCom Student Affairs Office at 514-398-4068, bcom.mgmt@mcgill.ca, or on the McGill Abroad website.

## 9.4.7 Transfer Credit and Advanced Standing

Students are admitted to a four-year program requiring the completion of 120 credits, but Advanced Standing of up to 30 credits may be granted if you have obtained satisfactory results in the Diploma of College Studies, International Baccalaureate, French Baccalaureate, European Baccalaureate, Bologna signatory countries, Advanced Level and Advanced Subsidiary Exams, and Advanced Placement Exams. Students who transfer course credit from another institution may transfer up to one-third of the credits required in their degree program, including the concentration, major, or honours requirements under the following conditions:

- For credit transfer from another institution, please visit section 1.5.6: Transfer Credits for the grading policy.
- · Grades of P or S are acceptable only if transferred from faculties within McGill.
- The letter grades applied by the former home institution or host institution (for exchanges and study away) take precedence over the numerical grades if provided.
- For exchange or study away purposes, it is required that course and credit approval is obtained **before** courses are taken at the host institution.
- The four-year program will require a minimum 80-credit residency at McGill.
- The three-year program will require a minimum 60-credit residency at McGill.
- A maximum of 6 credits of online non-management electives may transfer to the B.Com. degree if approved by the appropriate department at McGill.

#### 9.5 B.Com. Degree Admission Requirements

The Desautels Faculty of Management offers programs that are highly selective; fulfilment of minimum admission requirements does not guarantee acceptance. For information about admission requirements to the BCom program, please refer to the Undergraduate Admissions guide, found at mcgill.ca/undergraduate-admissions/apply. Students who have been asked to withdraw from a program in another faculty/university due to poor performance are not eligible for transfer into the BCom program. Information about interfaculty transfers can be obtained from the BCom Student Af

All students admitted with Advanced Standing must meet with a BCom Adviser. It is your responsibility to ensure that all appropriate official results are provided to McGill and that your McGill transcript accurately reflects the minimum credit requirement. This must be finalized by the end of your first term at McGill. Delays to submit all official documentation may result in the Advanced Standing not being granted.

It is your responsibility to make sure that your course of study conforms with the curriculum requirements as described in this publication. If you want to deviate from your program, you must obtain written permission from the Associate Director, BCom Program.

If you have transferred with Advanced Standing to the Desautels Faculty of Management from another university, you are required to complete a minimum of 60 credits while registered in the BCom program, including required courses that are deemed necessary, to become eligible for the degree of B.Com.

## 9.6.2 Cumulative Grade Point Average (CGPA)

You will be eligible for graduation upon satisfactory completion of the minimum credit requirement for the degree as indicated in your letter of acceptance, subject to the curriculum and CGPA of 2.00 (3.00 for Honours) requirements.

### 9.6.3 Course Requirements

All required and complementary courses used to fulfil program requirements, including the Freshman program, must be completed with a grade of C or better. If you fail to obtain a satisfactory grade in a required course (core, part of a concentration, minor, major, or honours program), you must repeat the course. Course substitution will be allowed only in special cases; you should consult your academic adviser. Normally, you are permitted to repeat a failed course only once (failure is considered to be a grade of less than C or the administrative failures of J and KF). If the failed course is a complementary course required by the program, you may choose to replace it with another complementary course. If you choose to substitute another complementary course for a complementary course in which a D was received, credit for the first course will still be given, but as an elective. If you repeat a required course in which a D was received, credit will be given only once. In either case, both grades of D count toward the CGPA.

In addition, if a course is passed with a grade of C or better, and is then repeated in the future, the subsequent course will not be allowed to count for credit, nor be calculated in the CGPA.

## 9.6.4 Academic Advising

If you are entering the Desautels Faculty of Management for the first time, you are required to attend an Orientation and Advising Session during the last week of August, at which the staff from the BCom Student Affairs Office provide information on all aspects of the BCom program. If you have had difficulty registering for your courses, and have not contacted the BCom Office to resolve your issues, you will have the opportunity to resolve your problems after this session. For a detailed description of advising and registration procedures, you should refer to section 9.6.5: Registration; the website for newly admitted undergraduate students at mcgill.ca/accepted; and the BCom website at mcgill.ca/desautels/programs/bcom.

It is not advisable to wait until August to resolve registration issues due to limited course enrolment.

Academic advising for all returning students takes place in February and March for the upcoming academic year. Appointments can be made using BCom Insight tool at mcgill.ca/desautels/programs/bcom/contact-us:

- from mid-August until the end of the add/drop period in the Fall term;
- from the beginning of January until the end of the add/drop period in the Winter term.

Appointments to discuss programs of study with student advisers may be made as soon as the add/drop period ends in September and then again in January. All new students ar

- All courses have limited enrolment. BCom students who are unable to register for required or complementary courses that they need in order to graduate
  on time should submit a copy of the Closed Course Request form to the BCom Student Affairs Office after registration in June. During the add/drop
  periods, Closed Course Request forms will not be accepted. Exact deadlines may be obtained from mcgill.ca/importantdates.
- BCom students are not permitted to take courses offered through the School of Continuing Studies for credit toward their degree.
- New students must select their area(s) of specialization online using *Minerva* before they are permitted to register for courses. The program options available are found in the Change your Curriculum module of the Student Menu. Please note that this can be changed at any time.
- Full-time students must register for courses online using *Minerva*. Additional information for new students is distributed at the time of admission and is also available on the Faculty website's *Newly admitted BCom students* section, and *mcgill.ca/student-records*. Information for returning students and part-time students is available in the BCom Office as of March.
- If you want to change the courses for which you are registered within the add/drop period, you must do so online using Minerva.
- If you want to withdraw from a course after the add/drop deadline, you must do so online using Minerva

<b>Note 1:</b> Quantitative Methods, Statistics, and Research courses offered by any department must be approved by the BCom Associate Director prior to registration in the course. F	r

- If you were previously in Probationary Standing, you will remain in Probationary Standing if your CGPA falls between 1.50 and 1.99 and your TGPA is 2.50 or higher (although the TGPA requirement will not apply to the Summer term).
- If you were previously in Interim Unsatisfactory Standing, you will be placed in Probationary Standing if your CGPA falls between 1.50 and 1.99 and your TGPA is 2.50 or higher.
- If you were previously in Unsatisfactory Standing and you were readmitted to the BCom program, you will be placed in Probationary Standing if your CGPA is lower than 2.00. To remain in the program, you must satisfy the relevant conditions specified in your letter of readmission.

### 9.6.9.3 Unsatisfactory Readmitted Standing

If you were previously in Unsatisfactory Standing and you were readmitted to the BCom program, you will have your Standing changed to Unsatisfactory Readmitted Standing. You course load is specified in your letter of readmission, as are the conditions you must meet to be allowed to continue in your program. You should see an Academic Adviser to discuss your course selection.

#### 9.6.9.4 Unsatisfactory/Interim Unsatisfactory Standing

If you are in Interim Unsatisfactory Standing, you may continue in your program, but should evaluate your course load and reduce it as appropriate. You must see a student adviser, before the withdrawal deadlines, about your course selection for the Winter term.

If you are in Unsatisfactory Standing, you have failed to meet the minimum standards set by the Faculty. You may not continue in your program, and your registration will be cancelled.

Appeals for readmission by students in Unsatisfactory Standing should be addressed to the Academic Director, BCom Program, no later than July 15 for readmission to the Fall term and November 15 for the Winter term. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (i.e., medical or other documentation) along with reassurances of future improvement. If you are in Unsatisfactory Standing for the second time, you must withdraw permanently.

- You will be placed in Unsatisfactory Standing (Winter or Summer term) or Interim Unsatisfactory Standing (Fall term) if your CGPA falls or remains below 1.50.
- If you were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing, you will be placed in Unsatisfactory Standing if your TGPA falls below 2.50 and your CGPA is below 2.00.
- If you were previously in Unsatisfactory Standing and you were readmitted to the BCom program by the Academic Director, and you have not at least satisfied the conditions to attain Probationary Standing that were specified in your letter of readmission, you will be placed in Unsatisfactory Standing.

#### 9.6.9.5 Incomplete Standings

- · Standing awaits deferred exam;
- Standing Incomplete.

If you have an Incomplete Standing in the Winter or Summer term, you may register for the Fall term, but your Standing must be resolved by the end of the add/drop period for that term. If your Incomplete Standing changes to Satisfactory, Probationary, or Interim Unsatisfactory Standing, you may continue in the program. If your Standing changes to Unsatisfactory Standing, you may not continue in your program, and your registration will be cancelled.

If your Standing changes to Unsatisfactory and you wish to ask for permission to continue in your program, you must meet with your academic adviser as soon as you are placed in Unsatisfactory Standing. Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (i.e., medical or other documentation) along with reassurances of future improvement.

#### 9.6.10 Time and Credit Limit for Completion of the BCom Degree

If you need 90 or fewer credits to complete your degree requirements, you are expected to complete your degree in no more than eight terms after your initial registration for the BCom degree. If you are a student completing over 90 and up to 120 credits, you become subject to these regulations one year after your initial registration.

If you wish to return to the BCom program after interrupting your studies for a period of one year or more, you must make a request for readmission through Minerva and also apply in writing to bcom.mgmt@mcgill.ca. When you are readmitted after a period of absence, you are normally subject to the program and de9.6.9Graand you wt Limi 0 0 1 43.52 271.489 678(9.6.99.7F1 8.1 Tf 1 0 0 1 67.52 575.1138Tw e 8.1Durhat wee @rthdreekeadmon fmpru beachn

must be no later than the last day of classes. Changes in the distributed grading scheme are permitted only with the unanimous consent of all students registered in the course. In practice, therefore, the grading scheme is almost never changed during the term;

- The instructor's office hours for students, office location, telephone number for office appointments, and secretarial contact information;
- Academic Integrity statement: McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of
  cheating, plagiarism, and other academic offences described in the Code of Student Conduct and Disciplinary Procedures and consult the Students Rights
  and Responsibilities page at mcgill.ca/students/srr/honest for more information. Note that all newly admitted undergraduate students are required to
  complete the Academic Integrity tutorial through Minerva.

## 9.7.1 Examinations

For information about final examinations and deferred examinations, also see *University Regulations and Resources > Undergraduate > section* 1.6: Examinations: General Information.

Final examinations are centrally administered by Enrolment Services. Around the beginning of November and March, a final examination schedule will be posted on the *McGill Exams website* by Enrolment Services. The seating arrangements are posted on the McGill website toward the end of the last week of classes.

BCom students and non-Management students taking BCom courses are contacted by Enrolment Services via McGill email regarding final exam conflicts. Arrangements to resolve final exam conflicts are made and communicated by Enrolment Services via McGill email as well. You should also refer to the BCom website for more information, or contact Enrolment Services Service Point. Students are warned not to make travel arrangements to leave Montreal prior to the posting of the official final examination schedule.

BCom courses cannot have examinations scheduled during the last two weeks of term worth more than 10% of the final grade. You must repeat any grades of D or F in core courses or courses as part of a concentration, minor, major, or honours program. However, D is a passing grade for elective courses.

### 9.7.1.1 Supplemental Examinations

Supplemental examinations are not offered in undergraduate courses administered by the Desautels Faculty of Management. If you are required to improve your standing in a course, you must repeat the course in a subsequent term, completing all course requirements to the satisfaction of the instructor. Faculty policy does not allow you to do additional work to improve your standing in a course.

#### 9.7.1.2 Deferred Examinations

For missed final examinations, whatever the reason may be, professors and students are not to make alternate arrangements. If you are unable to write your final exam due to illness or another serious reason, you may apply for a deferral of your exam through your *Minerva* account, and if your application is accepted, you will be permitted to write it during the next deferred examination period.

To qualify, you must obtain documentation (such as a doctor's note) explaining your inability to write the exam, which must be dated within 5 days of the

must be made within 10 w

- McGill Alumnae Society Prize
- Misawa Homes Prize in International Business
- Peter S. Wise Memorial Prize in Accounting
- Sir Edward Beatty Medal

In-Course Scholarships, Prizes, and Awards

In-course scholarships are granted to registered students with 27 graded credits in the  ${\bf f}$ 

### Women Associates of McGill Scholarship

To be awarded a scholarship students must be enrolled full-time in the subsequent fall and winter terms in the BCom program. If they are going on exchange in one of the following terms they must be full-time in the term they are at McGill. Students graduating in the summer or fall term are not eligible for in-course awards but may apply for graduating awards the following spring. Students who do not meet any of the eligibility requirements for a scholarship after it has been granted will have their scholarship revoked. Students who are on a leave of absence in a subsequent term or terms may not retain the award so long as they are not registered at McGill.

## 9.8 Overview of BCom Programs Offered by the Desautels Faculty of Management

The Desautels Faculty of Management offers several programs leading to a B.Com. degree, which fall within the following categories:

## **Overview of BCom Programs**

section 9.8.3: 120-Credit Program, Freshman Course Distribution

section 9.8.5: Concentrations (General Management Major)

section 9.8.8: Majors

section 9.8.9: Honours

section 9.8.6: Minors for Management Students

section 9.8.7: Minors for Non-Management Students

The following information outlines the credit structure for each BCom program type:

#### **BCom Program Credit Structures and Course Distributions**

section 9.8.3: 120-Credit Program, Freshman Course Distribution

section 9.8.4: Management Core

section 9.8.1: BCom Program Credit Structure: General Management Program (Concentrations)

section 9.8.2: BCom Program Credit Structure: Major or Honours Programs

#### 9.8.1 BCom Program Credit Structure: General Management Program (Concentrations)

2 Concentrations	90 credits	120 credits
Freshman Requirements	0	18
BUSA 250	3	3
Core	36	36
2 Concentrations	30	30
Electives	21	24
Total	90	120
1 Concentration and 1 Minor (18* or 24 credits)	90 credits	120 credits
Freshman Requirements	0	18
BUSA 250	3	3
BUSA 250 Core	3 36	3 36
Core	36	36
Core 1 Concentration	36 15	36 15
Core 1 Concentration 1 Minor (18* or 24 credits)	36 15 18* or 24	36 15 18* or 24

#### Concentrations

- Accounting
- Business Analytics

- Entrepreneurship
- Finance
- Information Technology Management
- International Business
- Labour-Management Relations and Human Resources
- Managing for Sustainability
- Marketing
- Operations Management
- Organizational Behaviour
- Retail Management
- Strategic Management Glo

Major in International Management	90 credits	120 credits
BUSA 250	3	3
Core	36	36
International Business Concentration Component	15	15
Area of Study Component: Minor Concentration	18	18
Language Component	9-12	9-12
Experiential Learning Component *	0-3	0-3
Electives	6-9	18-21
Total	90	120

<sup>\*</sup>: Going on exchange grants the credits for the approved courses taken abroad; it does not grant an additional 3 credits.

Major in Managing for Sustainability	90 credits	120 credits
Freshman Requirements	0	18
BUSA 250	3	3
Core	36	36
Major	39	39
Electives	12	24
Total	90	120
Honours in Economics	90 credits	120 credits
Math Freshman Requirements: MATH 140, MATH 141, and MATH	0	10

A grade of C or better is required for all core courses. If a D is obtained in a core course, the course must be repeated.

#### 9.8.4.1 Core Course Distribution

Required Courses (36 credits)		
ECON 295	Macroeconomic Policy	3 credits
MGCR 211	Introduction to Financial Accounting	3 credits
MGCR 222	Introduction to Organizational Behaviour	3 credits
MGCR 271	Business Statistics	3 credits
MGCR 293	Managerial Economics	3 credits
MGCR 331	Information Systems	3 credits
MGCR 341	Introduction to Finance	3 credits
MGCR 352	Principles of Marketing	3 credits
MGCR 360	Social Context of Business	3 credits
MGCR 382	International Business	3 credits
MGCR 423	Strategic Management	3 credits
MGCR 472	Operations Management	3 credits

#### **Program Footnotes:**

Students considering the following programs:

- Major in Mathematics or Major and Minor in Statistics:
  - replace MGCR 271 with MATH 324 (prerequisite: MATH 323)
- Honours or Joint Honours Program in Economics:
  - replace MGCR 271 with ECON 257D1/ECON 257D2
  - replace MGCR 293 with ECON 250D1/ECON 250D2
  - replace ECON 295 with ECON 352D1/ECON 352D2 (taken in the second year)
- Major Program in Economics:
  - replace MGCR 293 with ECON 230D1/ECON 230D2.
  - replace ECON 295 with ECON 330D1/ECON 330D2 (taken in the second year)

#### Also note that:

- A maximum of 6 credits will be permitted within the BCom program for MGCR 293 and ECON 230D1/ECON 230D2 or ECON 250D1/ECON 250D1.
- A maximum of 6 credits will be permitted within the BCom program for ECON 295 and ECON 330D1/ECON 330D2 or ECON 352D1/ECON 352D2.

## 9.8.5 Concentrations (General Management Major)

In order to complete a concentration, students must achieve a grade of C or better in the courses counting towards the concentration. If a student receives less than a C in a complementary course, they have the option of repeating this course or selecting another complementary course. They may also choose to pursue a different concentration altogether.

In general, students will begin taking courses from the chosen concentration(s) in the U2 year.

FINE 460	(3)	Financial Analytics
INSY 442	(3)	Data Analysis and Visualization
INSY 446	(3)	Data Mining for Business Analytics
INSY 448	(3)	Text and Social Media Analytics
INSY 463	(3)	Deep Learning for Business Analytics
MGSC 404	(3)	Foundations of Decision Analytics
	(3)	Data-Driven Models for Operations Analytics

# 9.8.5.4 Bachelor of Commerce (B.Com.) - Concentration in Finance (15 credits)

or financial arrangements; headquarters or subsidiaries of multinational companies; banks and other international financial institutions; and various governmental organizations.

# **Required Courses (3 credits)**

BUSA 356 (3) Management in Global Context

# **Complementary Courses (12 credits)**

Selected from the following:

BUSA 391	(3)	International Business Law
BUSA 394	(3)	Managing in Asia
BUSA 395	(3)	Managing in Europe
BUSA 401	(3)	Independent Studies in International Business
BUSA 430	(3)	Business Climate in Developing Countries
BUSA 433	(3)	Topics in International Business 1
BUSA 435	(3)	Topics in International Business 2

ORGB 325	(3)wing:	Negotiations and Conflict Resolution
ORGB 330	(3)	People Analytics
ORGB 401	(3)	Leadership Practicum in Social Sector
ORGB 409	(3)	Organizational Research Methods
ORGB 421	(3)	Managing Onganizational Change
ORGB 440	(3)	Career Theory and Development
ORGB 525	(3)	Compensation Management

## 9.8.5.8 Bachelor of Commerce (B.Com) - Concentration in Managing for Sustainability (15 credits)

The B.Com.; Major in General Management; Managing for Sustainability Concentration focuses on conceptual and analytical skills needed to formulate and implement organizational policies that contribute to ecologically sustainable and socially responsible economic development.

The main themes of courses in the Concentration include: organizational implications of the interlinked economic, social and ecological challenges of sustainability; the integration of sustainability into traditional business functions; and leadership, stakeholder management and managing change required to achieve sustainability.

## Required Course (6 credits)

MGPO 440	(3)	Strategies for Sustainability
MSUS 402	(3)	Systems Thinking and Sustainability

## **Complementary Courses (9 credits)**

3-9 credits from the following:

ACCT 401	(3)	Sustainability and Environmental Accounting
INSY 455	(3)	Technology and Innovation for Sustainability
MGPO 438	(3)	Social Entrepreneurship and Innovation
MGSC 488	(3)	Sustainability and Operations
MRKT 351	(3)	Marketing and Society

0-6 credits from the following:

 $j1\ 0\ 0\ 1\ 165.864\ \textbf{2000:action} \ \textbf{1000} \ \textbf{10000} \ \textbf{1000} \ \textbf{1000} \ \textbf{1000} \ \textbf{1000} \ \textbf{1000} \ \textbf{1000} \ \textbf{10$ 

# 9.8.5.9 Bachelor of Commerce (B.Com.) - Concentration in Marketing (15 credits)

The Marketing concentration prepares the student for a wide variety of career opportunities. Marketing graduates historically have found employment in the fields of product management, advertising, sales management, marketing management, pricing, marketing research, distribution, and retailing. The Marketing

(3)

# 9.8.7.1 Minor in Entrepreneurship

Detailed information on this Minor can be found under	Faculty of Education > Undergradu	ate > Browse Academic Units & Prog	rams > Kinesiology and

- 3-6 credits from any 300- or 400-level Management courses for which prerequisites have been met.
- 0-3 credits may be from a specifically designated course by the student's home faculty.
- \* Prerequisite: MGCR 271, Business Statistics, or another equivalent Statistics course approved by the Program Adviser.
- \*\* 3 credits of statistics: Students who have taken an equivalent Statistics course in another faculty may not count those credits towards the Minor; an additional 3-credit complementary course must be chosen from the course list above.
- \*\*\* Students who have taken an equivalent Economics course in another faculty may not count those credits toward the Minor; an additional 3-credit complementary course must be chosen from the course list abo

# Required Courses (6 credits)

MGCR 472	(3)	Operations Management
MGSC 373	(3)	Operations Research 1

# **Complementary Courses (12 credits)**

_			
	cred	1	t

MGCR 271*	(3)	Business Statistics
MOCK 2/1	(3)	Dusiness Statistics

# 9 credits selected from:

9 credits selected from:		
MGSC 372	(3)	Advanced Business Statistics
MGSC 402	(3)	Operations Strategy
MGSC 403	(3)	Introduction to Logistics Management
MGSC 405	(3)	Quality Management
MGSC 415	(3)	Supplier Management
MGSC 431	(3)	Operations and Supply Chain Analysis
MGSC 479	(3)	Applied Optimization
MGSC 575	(3)	Applied Time Series Analysis Managerial Forecasting
MGSC 578	(3)	Simulation of Management Systems

or other appropriate 300- or 400-level MGSC courses with the approval of the Program Adviser.

<sup>\* 3</sup> credits of Statistics: Students who have taken an equiv

MGCR 211	(3)	Introduction to Financial Accounting
MGCR 222	(3)	Introduction to Organizational Behaviour
MGCR 271	(3)	Business Statistics
MGCR 293	(3)	Managerial Economics
MGCR 331	(3)	Information Technology Management
MGCR 341	(3)	Introduction to Finance
MGCR 352	(3)	Principles of Marketing
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business
MGCR 423	(3)	Strategic Management
MGCR 472	(3)	Operations Management
		ĺ
Major (18 credits)		, ,
ACCT 351	(3)	Intermediate Financial Accounting 1
ACCT 352	(3)	Intermediate Financial Accounting 2
ACCT 361	(3)	Management Accounting
ACCT 362	(3)	Cost Accounting
ACCT 385	(3)	Principles of Taxation
ACCT 455	(3)	Development of Accounting Thought
Complementary Courses	c (12 orodita)	/
12 credits selected from the fo	` ,	/
ACCT 354	(3)	Financial Statement Analysis
ACCT 401	(3)	Sustainability and Environmental Accounting
ACCT 434	(3)	Topics in Accounting 1
ACCT 451	(3)	Data Analytics in Capital Market
ACCT 452	(3)	Financial Reporting Valuation
ACCT 453	(3)	Advanced Financial Accounting
ACCT 463	(3)	Management Control
ACCT 475	(3)	Principles of Auditing
ACCT 486	(3)	Business Taxation 2

## 9.8.8.2 Bachelor of Commerce (B.Com.) - Major Business Analytics (69 credits)

The Major in Business Analytics offers an interdisciplinary approach to study the evolving field of management analytics with a strong emphasis on experiential learning. The major is designed to address the growing needs of organizations for business analytics, data science, and artificial intelligence. The emphasis of the program will be on managerial issues and use of state-of-the-art data analytics tools to optimize organizational decisions in a variety of managerial settings.

## **Required Courses (54 credits)**

BUSA 250 (3) Expressive Analysis for Management

# **Management Core**

ECON 295	(3)	Macroeconomic Policy
MGCR 211	(3)	Introduction to Financial Accounting
MGCR 222	(3)	Introduction to Organizational Behaviour
MGCR 271	(3)	Business Statistics
MGCR 293	(3)	Managerial Economics
MGCR 331	(3)	Information Technology Management
MGCR 341	(3)	Introduction to Finance
MGCR 352	(3)	Principles of Marketing
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business
MGCR 423	(3)	Strategic Management
MGCR 472	(3)	Operations Management
Major		
INSY 336	(3)	Data Handling and Coding for Analytics
INSY 446	(3)	Data Mining for Business Analytics
MGSC 401	(3)	Statistical Foundations of Data Analytics

3 credits of experiential learning from the following:

(3)

MGSC 483	(3)	Analytics-Based Community Project
RETL 407	(3)	Retail Management Project

## **Complementary Courses**

MGSC 404

6-9 credits of technical component from the following:

INSY 437	(3)	Managing Data and Databases
INSY 442	(3)	Data Analysis and Visualization
INSY 463	(3)	Deep Learning for Business Analytics

6-9 credits of topics component from the following:

ACCT 451	(3)	Data Analytics in Capital Market
BUSA 471	(3)	Artificial Intelligence Ethics for Business
FINE 460	(3)	Financial Analytics
INSY 448	(3)	Text and Social Media Analytics
MGSC 416	(3)	Data-Driven Models for Operations Analytics
MRKT 440	(3)	Marketing Analytics
MRKT 442	(3)	Customer Analytics
ORGB 330	(3)	People Analytics

Or any related undergraduate topics course (with approvals from the Business Analytics area and the B.Com. Office).

## 9.8.8.3 Bachelor of Commerce (B.Com.) - Major Economics for Management Students (63 credits)

Mentors: Professors M. El-Attar Vilalta, P. Dickinson, J. Kurien, J. Li, R.T. Naylor, and C. Ragan; Department of Economics, tatistics

Foundations of Decision Analytics

All B.Com. students take a Core curriculum in addition to the Major.

## Required Courses (45 credits)

## Management Core (27 credits)

MGCR 211	(3)	Introduction to Financial Accounting
MGCR 222	(3)	Introduction to Organizational Behaviour
MGCR 331	(3)	Information Technology Management
MGCR 341	(3)	Introduction to Finance
MGCR 352	(3)	Principles of Marketing
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business
MGCR 423	(3)	Strategic Management
MGCR 472	(3)	Operations Management

## Major (18 credits)

ECON 230D1	(3)	Microeconomic Theory
ECON 230D2	(3)	Microeconomic Theory
ECON 330D1	(3)	Macroeconomic Theory
ECON 330D2	(3)	Macroeconomic Theory
MGCR 271	(3)	<b>Business Statistics</b>
MGSC 372	(3)	Advanced Business Statistic

#### **Complementary Courses (18 credits)**

Selected from other 200-, 300-, and 400-level courses in Economics (ECON), excluding courses with numbers below 210. At least 6 of these 18 credits should be taken from courses with 400-level numbers. No more than 6 of the 18 credits may be taken at the 200 level.

## 9.8.8.4 Bachelor of Commerce (B.Com.) - Major Finance (66 credits)

The 30-credit Finance Major has been designed to meet the increasing demand for expertise in this rapidly growing functional area of business. This major is designed to provide in-depth knowledge of finance theory, financial institutions, investment analysis, risk management, and applied techniques. Employment for graduates is most often obtained in investment and commercial banking, manufacturing and service firms, non-profit organizations and governments, and non-financial firms.

All BCom students take a Core curriculum in addition to this Major.

## **Required Courses (54 credits)**

## Management Core (36 credits)

ECON 295	(3)	Macroeconomic Policy
MGCR 211	(3)	Introduction to Financial Accounting
MGCR 222	(3)	Introduction to Organizational Behaviour
MGCR 271	(3)	Business Statistics
MGCR 293	(3)	Managerial Economics
MGCR 331	(3)	Information Technology Management
MGCR 341	(3)	Introduction to Finance
MGCR 352	(3)	Principles of Marketing
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business

Managing and Org

MGCR 360 (3) Social Context of Business

MGCR 382 (3) International Business

Strate

B.A. Minor Concentration in Quebec Studies & Community-Engaged Learning/

La concentration Mineure en Études sur le Québec et apprentissage par engagement communautaire (18 credits)

- B.A. Minor Concentration in Russian Culture (18 credits)
- B.A. Minor Concentration in South Asian Studies (18 credits)
- B.A. Minor Concentration in World Islamic & Middle East Studies (18 credits)
- \* Students should choose Economics (ECON) courses with a regional focus. Course numbers above ECON 209 (excluding ECON 295) are required, with at least 6 credits at the 300, 400, or 500 levels. Credits for the introductory sequence MGCR 293 and ECON 295 that are prerequisites for 300-level courses in economics do not count as part of this Minor concentration. ECON 227 will not count if it is taken to meet other B.Com. requirements.

# Theme 2: Global Politics and Economy

This theme focuses on aspects of public policy from the perspective of global transactions and finance. Students may select a minor concentration in the area of international relations and investigate policy on a global scale and its operations in the context of policy, war and peace, the economy, security, trade, human rights, and international organizations. Graduates with this option would be poised to apply their educational background to careers with world gov

SOCI 265	(3)	War, States and Social Change
SOCI 307	(3)	Globalization
SOCI 386	(3)	Contemporary Social Movements

### Theme 3: Global Well-Being and Development

Broad-based, interdisciplinary topics will allow students to study current issues of social importance ranging from: poverty and inequality, health promotion and the environment, sustainability, and natural resource management. Students will be prepared to apply business practices to the protection of the vulnerable and the planet. Students will be poised to work for multinationals, governments, or non-governmental organizations.

- B.A. Minor Concentration in Anthropology (18 credits)
- B.A. Minor Concentration in Economics\* (18 credits)
- B.A. Minor Concentration in Geography (18 credits)
- B.A. Minor Concentration in International Development Studies (18 credits)
- B.A. Minor Concentration in Psychology (18 credits)
- B.A. Minor Concentration in Social Studies of Medicine (18 credits)
- B.A. Minor Concentration in Sociology (18 credits)
- B.A. Minor Concentration in Environment (18 credits) [Bieler School of Environment]
- B.Sc. Minor in Environment (18 credits) [Bieler School of Environment]
- B.Sc. Field Study Minor (18 credits)

#### **Language Component**

9-12 credits chosen from the following:

9 credits of language in First- or Second-Level EAST (Asian Languages and Literature)\*

or

<sup>\*</sup> Students should choose Economics (ECON) courses related to the environment, development, and health. Course numbers above ECON 209 (excluding ECON 295) are required, with at least 6 credits at the 300, 400, or 500 levels. Credits for the introductory sequence MGCR 293 and ECON 295 that are prerequisites for 300-level courses in economics do not count as part of this Minor Concentration. ECON 227 will not count if it is taken to meet other B.Com. requirements.

# **Experiential Learning Component**

0-3 credits of experiential learning chosen from the following:

# **International Exchange Component**

Students complete at least one term of exchange or an international educational experience approved by the BCom SAO. Credits received for courses successfully completed while abroad will count towards other components of the Major in International Management as determined by the program/exchange adviser.

OR

# Internship

Students may complete a 3-credit internship as part of their experiential credits.

INDR 294	(3)	Introduction to Labour-Management Relations
INDR 494	(3)	Labour Law
INDR 496	(3)	Collective Bargaining
ORGB 423	(3)	Human Resources Management

# **Complementary Courses (18 credits)**

Complementary (		,
Selected from:		
ECON 306	(3)	Labour Markets and Wages
INDR 449	(3)	Occupational Health and Safety
INDR 459	(3)	Comparative Employment Relations
INDR 492	(3)	Globalization and Labour Policy
ORGB 321	(3)	Leadership
ORGB 325	(3)	Negotiations and Conflict Resolution
ORGB 330	(3)	People Analytics
ORGB 380	(3)	Cross Cultural Management
ORGB 401	(3)	Leadership Practicum in Social Sector
ORGB 409	(3)	Organizational Research Methods
ORGB 420	(3)	Managing Organizational Teams
ORGB 421	(3)	Managing Organizational Change
ORGB 434	(3)	Topics in Organizational Behaviour 1
ORGB 440	(3)	Career Theory and Development
ORGB 525	(3)	Compensation Management
SOCI 312	(3)	Sociology of Work and Industry
SOCI 321	(3)	Gender and Work
SOCI 354	(3)	Dynamics of Industrial Societies

### 9.8.8.8 Bachelor of Commerce (B.Com) - Major Managing for Sustainability (66 credits)

The B.Com.; Major in Managing for Sustainability focuses on combining management and business knowledge with a solid understanding of the interlinked economic, social and ecological challenges of achieving sustainability. It integrates management studies with fundamentals of environmental science and sustainability.

The Major includes the integration of multiple management disciplines with sustainability; fundamental concepts of environmental science, social sciences and human impacts on natural systems; and an experiential learning component in the form of a consulting engagement, internship or research project offering "real world" experience.

# Required Courses (42 credits)

### **Management Core**

ECON 295	(3)	Macroeconomic Policy
MGCR 211	(3)	Introduction to Financial Accounting
MGCR 222	(3)	Introduction to Organizational Behavious
MGCR 271	(3)	Business Statistics
MGCR 293	(3)	Managerial Economics
MGCR 331	(3)	Information Technology Management
MGCR 341	(3)	Introduction to Finance

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ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought

Note: ENVR courses have limited enrolment.

3 credits of environmentally-related courses. A list of Suggested Courses is provided below.

#### **Suggested Course List**

The Suggested Course List is divided into two thematic categories: Social Sciences and Policy; and Natural Sciences and Technology.

Most courses listed at the 300 level and higher have prerequisites. You are urged to prepare your program of study with this in mind.

Some courses may be subject to other regulations.

This list is not exhaustive. You are encouraged to examine the course lists of the various domains in the Environment program for other courses that might interest you. Courses not on the Suggested Course List may be included with the permission of the Program Adviser.

### **Location Note:**

When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

#### **Social Sciences and Policy**

AGEC 231	(3)	Economic Systems of Agriculture
AGEC 333	(3)	Resource Economics
AGEC 430	(3)	Agriculture, Food and Resource Policy
AGEC 442	(3)	Economics of International Agricultural Development
AGRI 411	(3)	Global Issues on Development, Food and Agriculture
ANTH 206	(3)	Environment and Culture
ANTH 212	(3)	Anthropology of Development
ANTH 339	(3)	Ecological Anthropology
ANTH 512	(3)	Political Ecology
ECON 205	(3)	An Introduction to Political Economy
ECON 225	(3)	Economics of the Environment
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
ENVB 437	(3)	Assessing Environmental Impact
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and Environment
ENVR 400	(3)	Environmental Thought
GEOG 200	(3)	Geographical Perspectives: World Environmental Problems
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geography of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geography
GEOG 301	(3)	Geography of Nunavut
GEOG 302	(3)	Environmental Management 1

Health Geography

BIOL 436

- (3) Evolution and Society
- (3) Conservation Biology

(3Ur4ms Geosystems

# 9.8.8.10 Bachelor of Commerce (B.Com.) - Major Concentration Mathematics for Management Students (72 credits)

Students should consult the appropriate adviser in the Department of Mathematics and Statistics. See:

https://www.mcgill.ca/mathstat/undergraduate/advising

All BCom students take a Core curriculum in addition to this Major.

Students entering the Major Concentration in Mathematics are normally expected to have completed MATH 133, MATH 140, and MATH 141 or their equivalents. Otherwise, the

ORGB 380	(3)	Cross Cultural Management
ORGB 401	(3)	Leadership Practicum in Social Sector
ORGB 409	(3)	Organizational Research Methods
ORGB 421	(3)	Managing Organizational Change
ORGB 434	(3)	Topics in Organizational Behaviour 1
ORGB 440	(3)	Career Theory and Development
ORGB 525	(3)	Compensation Management

<sup>12</sup> credits from one of the following Specialty Areas\*.

# 1) Psychology

PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology
PSYC 331	(3)	Inter-Group Relations
PSYC 332	(3)	Introduction to Personality
PSYC 333	(3)	Personality and Social Psychology
PSYC 351	(3)	Research Methods in Social Psychology
PSYC 352	(3)	Cognitive Psychology Laboratory
PSYC 406	(3)	Psychological Tests
PSYC 471	(3)	Human Motivation
PSYC 473	(3)	Social Cognition and the Self
PSYC 474	(3)	Interpersonal Relationships

# 2) Sociology

SO1zCognit67Ue the three specialtc1 0 0 1 70 Saction graft Recisper 200B 42echn 0 1 2221.949 e61 Tm(Introduction to T.m(w2GB 429.ha)Tj1 0 0 1 320.162T.m(w2GB

<sup>\*</sup>Students select one of the three specialty areas and take 12 credits from that area. At least two courses must be above the 200 level. Individualized or customized programs are possible upon consultation with an area advisor.

ANTH 222	(3)	Legal Anthropology
ANTH 303	(3)	Ethnographies of Post-socialism
ANTH 318	(3)	Globalization and Religion
ANTH 352	(3)	History of Anthropological Theory
ANTH 355	(3)	Theories of Culture and Society
ANTH 358	(3)	The Process of Anthropological Research
ANTH 423	(3)	Mind, Brain and Psychopathology
ANTH 440	(3)	Cognitive Anthropology

### 9.8.8.12 Bachelor of Commerce (B.Com.) - Major Retail Management (69 credits)

The retail industry is experiencing a period of unparalleled changes where emerging technologies such as artificial intelligence (AI) and automation are transforming every stage of the retail journey. The Retail Management major will arm the students with valuable analytical, reasoning, management and communication skills and place them at the forefront of a fast evolving and innovated retail industry while promoting for sustainability, and long-term social and environmental benefits. Admission requirements: as per other B.Com. programs offered by the Desautels Faculty of Management.

# Required Courses (57 credits)

BUSA 250 (3)	Expressive Analysis for Management
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### **Management Core**

ECON 295	(3)	Macroeconomic Policy
MGCR 211	(3)	Introduction to Financial Accounting
MGCR 222	(3)	Introduction to Organizational Behaviour
MGCR 271	(3)	Business Statistics
MGCR 293	(3)	Managerial Economics
MGCR 331	(3)	Information Technology Management
MGCR 341	(3)	Introduction to Finance
MGCR 352	(3)	Principles of Marketing
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business
MGCR 423	(3)	Strategic Management
MGCR 472	(3)	Operations Management

# Major

MRKT 459	(3)	Retail Management
RETL 402	(3)	Innovations in Retailing
RETL 407	(3)	Retail Management Project
RETL 408	(3)	Omni-Channel Retailing
RETL 409	(3)	Digitization of Retailing
RETL 410	(3)	Business Models in Retail

#### **Complementary Courses (12 credits)**

12 credits from the following:	12 credits	from	the fe	ollowing	:
--------------------------------	------------	------	--------	----------	---

BUSA 465	(3)	Technological Entrepreneurship
FINE 447	(3)	Venture Capital and Entrepreneurial Finance

MGPO 460	(3)	Managing Innovation
MGPO 469	(3)	Managing Globalization
MGPO 470	(3)	Strategy and Organization

# at least 9 credits from the following group:

MGPO 365	(3)	<b>Business-Government Relations</b>
MGPO 438	(3)	Social Entrepreneurship and Innovation
MGPO 440	(3)	Strategies for Sustainability
MGPO 450	(3)	Ethics in Management
MGPO 475	(3)	Strategies for Developing Countries

# the remaining credits, if any, to be chosen from:

AGRI 411	(3)	Global Issues on Development, Food and Agriculture
ANTH 212	(3)	Anthropology of Development
BUSA 391	(3)	International Business Law
ECON 305	(3)	Industrial Organization
ECON 313	(3)	Economic Development 1
ECON 314	(3)	Economic Development 2
INTD 200	(3)	Introduction to International Development
MGPO 362	(3)	Fundamentals of Entrepreneurship
MGPO 402	(3)	Dynamic Cities
MGPO 430	(3)	Practicum in Not for Profit Consulting
MGPO 433	(3)	Topics in Social Business and Enterprise
MGPO 434	(3)	Topics in Policy 1
MGPO 435	(3)	The Origins of Capitalism
MGSC 402	(3)	Operations Strategy
ORGB 380	(3)	Cross Cultural Management

# 9.8.9 Honours

# **Honours** programs:

- section 9.8.9.1: Bachelor of Commerce (B.Com.) Honours Economics (69 credits)
- section 9.8.9.2: Bachelor of Commerce (B.Com.) Honours Investment Management (81 credits)

# Joint Honours programs:

• section 9.8.9.3: Bachelor of Commerce (B.Com.) - Joint Honours Economics and fce (B.Com.) - J

Honours students who satisfy the 6-credit Statistics requirement by taking M	AGCR 271 and MGSC 372 (or ECON 227D1/D2) must complete ECON 468

ECON 450	(3)	Advanced Economic Theory 1 - Honours
ECON 452	(3)	Advanced Economic Theory 2 - Honours
ECON 468	(3)	Econometrics 1 - Honours

# **Complementary Courses (15 credits)**

3 credits from the following:

ECON 460	(3)	History of Thought 1 - Honours
ECON 461	(3)	History of Thought 2 - Honours
ECON 469	(3)	Econometrics 2 - Honours

and 12 credits of Economics courses at the 300, 400, or 500 levels, approved by an Honours adviser

FINE 443	(3)	Applied Corporate Finance
FINE 448	(3)	Financial Derivatives
FINE 449	(3)	Risk Management in Finance
FINE 450	(3)	Honours Investment Management Research Project 2
FINE 451	(3)	Fixed Income Analysis
FINE 452	(3)	Applied Quantitative Finance
		Alternativ

MGCR 352	(3)	Principles of Marketing
MGCR 360	(3)	Social Context of Business
MGCR 382	(3)	International Business
MGCR 423	(3)	Strategic Management

# 9.8.9.4 Bachelor of Commerce (B.Com.) - Joint Honours Economics and Finance (81 credits)

The B.Com. Joint Honours in Economics and Finance program is offered jointly between Economics and the Desautels Faculty of Management. This program requires the completion of 30 specified credits of Honours courses listed in the Economics part of the program and 24 specified credits for Finance. In addition, all B.Com. students tak

ECON 450	(3)	Advanced Economic Theory 1 - Honours
ECON 452	(3)	Advanced Economic Theory 2 - Honours
ECON 468	(3)	Econometrics 1 - Honours
FINE 342	(3)	Corporate Finance
FINE 441	(3)	Investment Management
FINE 443	(3)	Applied Corporate Finance
FINE 547	(3)	Advanced Finance Seminar

# **Complementary Courses (15 credits)**

3 credits from the following:

ECON 460	(3)	History of Thought 1 - Honours
ECON 461	(3)	History of Thought 2 - Honours
ECON 469	(3)	Econometrics 2 - Honours

# 6 credits from the following:

FINE 442	(3)	Capital Markets and Institutions
FINE 448	(3)	Financial Derivatives
FINE 449	(3)	Risk Management in Finance
FINE 451	(3)	Fixed Income Analysis
		Applied Quantitativ

# **Assistant Professors**

K. An; P. Beaumont; D. Dakhlallah; D. Demetry; B. Doré; S. Gopalakrishnan; E. Han; R. Hariss; M. Hollister; P. Joshi; D. Lee; G. Ma; S. Miao; S. Oh; T.J. Rivera; Y. Roh; G. Roussellet; H. So; K. Tinn; G. Weitzner; B. Wenzel; B. Ya

### 10.3 Academic Staff

# 10.3.1 Department of Music Research

#### Chair

Scavone, Gary

# 10.3.1.1 Composition Area

#### Composition

Bouliane, Denys; Cherney, Brian; Ferguson, Sean; Harman, Chris Paul; Hui, Melissa; Leroux, Philippe; Lesage, Jean

#### 10.3.1.2 Music Education Area

#### **Music Education**

Cossette, Isabelle; Creech, Andrea; Lorenzino, Lisa; Araújo, Liliana S

### 10.3.1.3 Music Theory Area

#### **Music Theory**

Biamonte, Nicole; Hasegawa, Robert; Klorman, Edward; Neidhöfer, Christoph; Schubert, Peter; Wild, Jonathan; Bakulina, Olga Ellen

### 10.3.1.4 Music Technology Area

### Music Technology

 $Depalle, Philippe; Fujinaga, Ichiro; McAdams, Stephen; Scavone, Gary \; ; Wanderley, Marcelo\\$ 

### 10.3.1.5 Musicianship Area

#### Musicianship

Asly, Monica; Mariner, Justin; Schubert, Peter

### 10.3.1.6 Musicology Area

#### Musicology

Barg, Lisa; Brackett, David; Cumming, Julie; Huebner, Steven; Kok, Roe-Min; Whitesell, Lloyd; Bandy, Dorian

#### 10.3.1.7 Sound Recording Area

#### **Sound Recording**

de Francisco, Martha; Epstein, Steven; King, Richard; Massenburg, George; Woszczyk, Wieslaw

# 10.3.1.8 Associate Members

10.3.2	Department of Performance	

# Jazz Trumpet

Couturar

# **Vocal Repetiteurs and Coaches**

Gonthier, Esther; Hargreaves, Stephen; McMahon, Michael; Nadler, Rona; Nigrim, Dana; Pelletier, Louise; Scarfone, Marie-Eve; Hansen, Patrick

#### 10.3.2.10 Woodwind Area

# Flute

Brouwer, Albert; Bluteau, Denis; G'Froerer, Joanna; Howes, Heather; Hutchins, Timothy.

#### Ohoe

Baskin, Theodore; Leclair, Jacqueline.

# Clarinet

Aldrich, Simon; Cope, Todd; Desgagné, Alain; Dumouchel, Michael; Normand, Jean-François.

### Bassoon

Lévesque, Stégrea

Website: mcgill.ca/music

#### 10.4.2 School Administrative Officers

#### 10.4.2.1 Dean's Office

#### Dean's Office

Sean Ferguson Dean

Tracy Roach

Safia Nour

Human Resources Adviser

Lea St-Arnaud-Boffa

Human Resources Coordinator

Hugh Topham Associate Director Development, University Advancement

Daniel Zuluaga **Development Officer**Jordan Gasparik **Advancement Officer** 

Irene Baczynsky Administrative Coordinator

Henry Tin Manager, Finance

Elise Quinn Faculty Research Finance Administrator

Elizabeth Burnell Senior Accounts Administrator

#### 10.4.2.2 Associate Deans' Office

#### **Associate Deans' Office**

Andrea Creech

Associate Dean (Academic and Student Affairs)

Jon Wild

Associate Dean (Research and Administration)

Diana (Dino) Dutz

Administrative Coordinator to the Associate Dean (Academic and Student

Affairs)

Alain Terriault LAN Manager

# 10.4.2.3 Graduate Studies

#### **Graduate Studies**

Lisa Barg Associate Dean, Graduate Studies

Hélène Drouin Senior Administrative and Student Affairs Coordinator

Michel Cayer Student Affairs Coordinator

#### 10.4.2.4 Academic Affairs

#### **Academic Affairs**

Gary Scavone Chair, Department of Music Research
Stéphane Lemelin Chair, Department of Performance

Isabel ZamoraAdministrative OfficerFrank MutyaAdministrative Assistant

Ania Loboda Student Affairs Coordinator, Performance and Music Research

Jennifer Stephenson Timetable and Scheduling Coordinator

 Christa Emerson
 Ensemble Resource Supervisor

 David Menzies
 Booking Office Administrator

 Kerry Wagner
 Piano Maintenance Supervisor

#### **Academic Affairs**

Christopher Smythe

**Shop Coordinator** 

#### 10.4.2.5 Admissions

#### Admissions

Patrick O'Neill
Admissions and Recruitment Officer
Amanda Kitik
Admissions Service Representative
Pia D'Amico
Admissions Service Representative
Melanie Collins
Student Recruitment Supervisor

#### 10.4.2.6 Student Services

# **Student Services**

Nancy Czemmel Manager Student Services
Adelina Lameiras Student Affairs Officer

Anna Maria Drblik

Administrative Student Affairs Coordinator

Diana (Dino) Dutz

Administrative Student Affairs Coordinator

### 10.4.2.7 Building Management

# **Building Management**

Peter Wightman Building Supervisor

José Vásquez García Customer Service Coordinator

Danuta Pietrzak Secretary

#### 10.4.2.8 Communications and Production

Box Office (weekdays: 12:00 to 18:00): 514-398-4547 Concert Information: 514-398-4547 or 514-398-5145

Bookings: 514-398-8993

# **Communications and Production**

Sophie Laurent Associate Director

Marketing and Web Administrator

# 10.4.2.9 Marvin Duchow Music Library

Telephone: 514-398-4695

### **Marvin Duchow Music Library**

Houman Behzadi Head Music Librarian

Cathy Martin Liaison Librarian and Coordinator, Music Library Access Services

Katie Lai Liaison Librarian

Kimberly White Senior Reference Assistant and Cataloguing Editor

Gabrielle Kern Senior Documentation Technician (audiovisual and computing

technology)

Melissa Pipe Senior Documentation Technician (audiovisual archives)

Melanie Preuss Head Library Clerk

Anne Storey Senior Documentation Technician

Geneviève Beaudry Senior Reference Assistant and Cataloguing Editor (Gertrude Whitley

Performance Library)

Daniel Lavigne Senior Documentation Technician

Sofie Tsatas Senior Reference Assistant and Cataloguing Editor

# 10.4.2.10 Opera McGill

Telephone: 514-398-4535, e

# 10.4.2.14 Computational Acoustic Modeling Laboratory (CAML)

Telephone: 514-398-4535, ext. 094836

### **Computational Acoustic Modeling Laboratory**

Gary P. Scavone Director

# 10.4.2.15 Distributed Digital Music Archives and Libraries Laboratory (DDMAL)

Telephone: 514-398-4535, ext. 0300

# Distributed Digital Music Archives and Libraries Laboratory

Ichiro Fujinaga Director

# 10.4.2.16 Sound Processing and Control Laboratory (SPCL)

Telephone: 514-398-4535, ext. 00271

### **Sound Processing and Control Laboratory**

Philippe Depalle Co-Director

Marcelo M. Wanderley Co-Director

# 10.4.2.17 Input Devices and Music Interaction Laboratory (IDMIL)

Telephone: 514-398-4535, ext. 094916

# **Input Devices and Music Interaction Laboratory**

Marcelo M. Wanderley **Director** 

# 10.4.2.18 Music Perception and Cognition Laboratory (MPCL)

Telephone: 514-398-4535, ext. 094812

## Music Per

# 10.5 Overview of Programs

The Schulich School of Music offers degree programs leading to a Bachelor of Music (B.Mus.), and diploma programs leading to a Licentiate in Music (L.Mus.).

- The Department of Music Research offers Minors in Music Composition, Music Education, Music Entrepreneurship, Music History, Music Theory, Musical Applications of Technology, and Music Science and Technology.
- The Department of Performance offers Minors in Conducting, Early Music Performance, Jazz Arranging and Composition, and Jazz Performance.

The Schulich School of Music of McGill University also offers the opportunity to pursue courses that reflect your multiple interests through collaboration with McGill's other faculties and departments. You may wish to consider partnering your music major studies with subjects from a different music department, or from other faculties that would lead to graduating with a double major, double degrees, or minor. B.Mus. students who are interested in pursuing double majors or double degrees should consult this website: <code>mcgill.ca/music/programs/double</code>.

Please refer to section 10.8: Browse Academic Units & Programs for a full list of program offerings.

**Degrees and Diplomas Offered** 

- section 10.8.1.10: Bachelor of Music (B.Mus.) Minor Music History (18 credits)
- section 10.8.1.11: Bachelor of Music (B.Mus.) Minor Music Theory (18 credits)
- section 10.8.1.12: Bachelor of Music (B.Mus.) Minor Musical Applications of Technology (18 credits)
- section 10.8.1.13: Bachelor of Music (B.Mus.) Minor Musical Science and Technology (18 credits)

Minors offered through the Desautels Faculty of Management for non-management students are available to B.Mus. students that have completed the necessary prerequisites. Further information on the minors listed below can be found at Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.7: Minors for Non-Management Students.

- section 9.8.7.3: Bachelor of Commerce (B.Com.) Minor Finance (For Non-Management Students) (18 credits)
- section 9.8.7.4: Bachelor of Commerce (B.Com.) Minor Management (For Non-Management Students) (18 credits)
- section 9.8.7.5: Bachelor of Commerce (B.Com.) Minor Marketing (For Non-Management Students) (18 credits)
- section 9.8.7.6: Bachelor of Commerce (B.Com.) Minor Operations Management (For Non-Management Students) (18 credits)

Minor programs in Music are also available to students in the Faculty of Arts and the Faculty of Science. Further information on these minors can be found at Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.29: Music and at Faculty of Science > Undergraduate > Browse Academic Units & Programs > section 11.13.24: Music for Science Students.

#### 10.5.1.5 Master of Music (M.Mus.)

The Master of Music degree (M.Mus.) is available in Composition, Performance, and Sound Recording. Specializations offered within the Performance option are:

- piano
- guitar
- orchestral instruments (including orchestral training)
- organ
- conducting
- · collaborative piano
- opera and voice
- early music
- jazz

## 10.5.1.6 M.Mus. Performance (Prerequisite Courses)

Students wishing to prepare for the Master of Music in Performance should include, in their Bachelor of Music program, the courses listed under section 10.8.2.14: Special Prerequisite Courses for M.Mus. in Performance.

## 10.5.1.7 M.Mus. Sound Recording (Prerequisite Courses)

Students wishing to prepare for the Master of Music in Sound Recording should include, in their Bachelor of Music program, the courses listed under section 10.8.1.6: Special Prerequisite Courses for M.Mus. in Sound Recording.

### 10.5.1.8 Master of Arts (M.A.)

The Master of Arts degree is available as a thesis option in Music Education, Music Technology, Musicology (with an option in Gender and Women's Studies), and Theory (with an option in Gender and Women's Studies). The thesis option may take one of two forms in Music Education and Theory: the standard thesis and the research paper-based thesis that includes a more substantial course load. Students in Music Technology and Musicology only have a standard thesis available as an option.

# 10.5.1.9 Licentiate in Music (L.Mus.)

The Licentiate in Music is offered in Performance and is designed for advanced instrumentalists and singers who wish to concentrate on their practical subject while limiting their theoretical studies to basic areas in Music History, Music Theory, and Musicianship. This program normally requires three years of study. For more information, please see:

- section 10.8.2.11: Licentiate in Music (L.Mus.) Major Performance Piano (93 credits)
- section 10.8.2.12: Licentiate in Music (L.Mus.) Major Performance (All Instruments except Piano, Voice and Jazz) (93 credits)
- section 10.8.2.13: Licentiate in Music (L.Mus.) Major Performance Voice (105 credits)

### 10.5.1.10 Graduate Certificate in Performance Choral Conducting

The Graduate Certificate in Performance - Choral Conducting is designed for choral conductors wishing to perfect their technical, pedagogical, and musical skills. This flexible program allows conductors to develop their craft while maintaining their professional activities. The program includes group tutorial instruction in conducting, ensemble participation, and complementary courses offering the opportunity to focus on conducting technique, rehearsal pedagogy, or performance practice. Enrolment is limited.

#### 10.5.1.10.1 Graduate Diploma in Performance

The Graduate Diploma in Performance is a one-year graduate diploma that allows excellent musicians to refine their technique and master repertoire through intensive coaching, practice, and performance projects.

Designed as a polishing diploma, the program prepares musicians for professional careers as soloists, opera singers, collaborative pianists, chamber, jazz and orchestral musicians, or for further graduate studies in performance. Fle

# 10.5.4 Music Credit Options for Students in Other Faculties

The Schulich School of Music offers three groups of courses that may be taken for credit by students in other faculties.

The first group consists of Music Literature and Theory courses especially designed for students from faculties other than Music who may not have taken formal studies in music but who wish to take elective courses in the cultural, historical, and theoretical aspects of music. These courses are generally offered with a MU

### Approximate Equivalents to Entrance Requirements in Practical Subjects (McGill Conservatory Collegial I - Instrument/Voice)

Western Board Grade 9
Mount Allison Grade 9
Associated Board of the Royal Schools of Music Grade 7

The above listing is intended only as a general guide. Admissibility to any program is determined by audition and academic record. Students wishing to major in Performance should be approximately two years more advanced, and be able to demonstrate potential as performers at their audition.

All applicants in **classical voice (all voice types)** and in all **jazz instruments**, who select the on-campus audition option on their application form, will be required to submit screening video material for preselection by January 15. Following a review of these recordings, selected applicants will be invited to attend a live audition. No live audition will be scheduled in classical voice (all voice types) or in any jazz instrument until recordings have been received and reviewed. All applicants must perform an audition of approximately 15 minutes in duration. The student should choose material that will represent different musical periods and reveal musicianship and technical proficiency to best advantage.

Consult the Music Admissions' website at mcgill.ca/music/admissions/undergraduate/auditions for specific information on entrance audition requirements and dates.

Recorded auditions (video) are acceptable when distance or other events prevent an applicant from attending an audition in person. All applicants auditioning live or through a recorded audition have equal opportunities for admission

Applicants for Composition are asked to submit two or three samples of their written work.

Music Education applicants are asked to outline reasons for wishing to enter the Music Education field in their statement of intent, and have a letter of reference sent from someone attesting to their suitability for teaching.

All screening, audition recordings and composition samples should be submitted electronically to the Schulich School of Music. Please consult the Music Admissions' website at mcgill.ca/music/admissions/undergraduate/materials for instructions on how to submit this material.

### 10.6.3 Academic Entrance Requirements

**Bachelor of Music** 

evaluation of the student's transcript (a higher grade may often be required). Transfer students must complete a minimum of 60 credits at McGill in order to obtain a degree.

## 10.6.3.7 Mature Students

Applicants who are at least 21 years of age and are Canadian citizens or Permanent Residents at or before registration, who have not met the high school or CEGEP academic requirements, and who are able to demonstrate exceptional talent in their discipline may be considered for admission. Such applicants may reside anywhere in Canada. All available academic/educational documents must be submitted. An interview may be required.

### 10.6.3.8 Special Students

Special Students do not need to fulfil any of the academic requirements outlined previously, but are required to have the necessary music prerequisites for the courses concerned. The minimum requirement is a bachelor's degree in music or equivalent. Registration is subject to the availability of space in the course(s) concerned. Special Students are normally not entitled to lessons in an instrument or in voice. Registration is permitted for one year only, after which time the student must apply for admission to either a degree or diploma program.

## 10.6.3.9 Visiting Students

Individuals wishing to take courses at McGill for credit at another univ

### 10.6.6 Readmission

Students in Satisfactory Standing, who have not been registered in the Schulich School of Music for one or two terms, may return to the program in which they were previously registered upon permission of the School. Those who have been out for longer than two consecutive terms may be readmitted upon permission of the School, subject to the student's previous record and current School's limitations on enrolment.

Students seeking program readmission must submit a program readmission request on Minerva. The application instruction and deadlines are posted on the Schulich School of Music website at megill.ca/music/resources/undergraduate/academic-actions/program-transfer-and-readmission.

# Reauditioning

Voice Coaching (MUIN 300, MUIN 301) is available at the per-credit rate for a maximum of two terms for full-time B.Mus. and L.Mus. Voice Performance students only.

Students in the Minor in Early Music and the Minor in Jazz Performance will be charged a private lesson fee of \$645.09 for 3 credits or \$322.55 for 1.5 credits in addition to the per-credit fee for Early Music Minor Repertoire Coaching and/or Practical Lessons.

courses) in subsequent terms. Students failing to meet these requirements will be asked to transfer to another program. Students may also consult with a Program Adviser to determine their eligibility to transfer to another B.Mus. program offered by the Department of Music Research.

#### **B.Mus. Jazz Performance**

All B.Mus. Jazz Performance students must attain a minimum grade of B- in all jazz (MUJZ)courses, as well as in all practical instruction/exams (MUIN courses) and ensembles (MUEN courses) to continue in the program.

The faculty will issue students an academic warning if they fail to meet these requirements. Students having received a warning are permitted to continue in the admitted program as long as they abide by the probationary conditions. Students failing to meet the probationary condition will be asked to transfer to the B.Mus. Faculty Jazz concentration program. They may also consult with a program adviser to determine their eligibility to transfer to another B.Mus. program offered by the Department of Music Research.

### L.Mus. Programs

Students in all L.Mus. Performance programs must attain a minimum grade of A- in all practical instruction/exams (MUIN courses) and ensembles (MUEN courses) to continue in the program.

The faculty will issue students an academic warning if they fail to meet this requirement. Students having received a warning are permitted to continue in their admitted program providing they do not get another grade lower than A- in a practical instruction/exam and/or ensemble in subsequent terms. Students failing to meet these requirements will be asked to withdraw from the licentiate program.

### 10.7.3 Academic Standing

In addition to meeting the program-specific academic conditions stipulated above, students are expected to maintain Satisfactory Academic Standing to allow for program continuation.

Academic Standing is based primarily on students' cumulative grade point average (CGPA), but may also be affected by their term grade point average (TGPA). Academic Standing, assessed after the end of each term, determines if students will be allowed to continue their studies in the next term and if any conditions will be attached to their registration.

Decisions about Academic Standing in the F

Readmission will be considered only when proof of extenuating circumstances that affected academic performance can be provided (e.g., medical or other documentation). Students in Unsatisfactory Standing for the second time must withdraw permanently.

Normally, supplemental examinations are not permitted; however, students in Unsatisfactory Standing may appeal to the Associate Dean (Academic and Student Affairs) for permission to write a supplemental examination, clearly stating the reasons for special consideration and providing proof, as appropriate.

- Students will be placed in Unsatisfactory Standing (Winter or Summer term) or Interim Unsatisfactory Standing (Fall term) if their CGPA falls or remains below 1.50.
- For the Fall and Winter terms, students who were previously in Probationary, Unsatisfactory Readmitted, or Interim Unsatisfactory Standing will be placed in Unsatisfactory Standing if their TGP

- trombone;
- tuba;
- percussion;
- harp;
- violin;
- viola;
- cello; and
- double bass.

Voice majors may choose from a group of vocal and choral ensembles appropriate to the level of their development.

In all programs which specify small ensembles, the following are considered small ensembles:

# **Small Ensembles**

MUEN 540 Chamber Music Project 1

MUEN 541 Chamber Music Project 2

MUEN 553 Vocal Chamber Ensemble

Introduction to Collaborative Piano 1

Assignments for large and small ensembles are posted on the *Ensemble Resource Office website*. Reassignments may be made from time to time during a term and will be communicated to students. Students registered in an instrumental program who are not assigned a large ensemble following the ensemble placement auditions should take a choral ensemble as their large ensemble.

## 10.7.4.5 Commitment

Ensembles are courses. Each student who has registered for an ensemble, or who has been assigned to an ensemble, has made a commitment to the ensemble and is required to be available to attend all rehearsals, concerts, performances, field trips, recordings, and other activities, which constitute the course requirements of that ensemble. If rehearsals outside of class meeting times occur, advance notice will be given. These additional rehearsals will be avoided when possible.

### 10.7.4.6 Failing Grade

A failing grade in any of the ensembles (large, small, complementary, or elective) obliges the student to make up the credit during a later semester. A subsequent failure in the same course may result in the student being required to withdraw from the program.

### 10.7.4.7 Request to be Excused from a Rehearsal

Students who cannot attend a rehearsal for a large ensemble are required to fill out an *Absence Request Form* as soon as they learn of their conflict. The students may be required to find a replacement for the rehearsal, in collaboration with the director.



Note: For Opera McGill policies, please contact patrick.j.hansen@mcgill.ca.

#### How to submit a request to be absent from a rehearsal

Important: No permission is given to be excused from a rehearsal in the week (7 days) before a concert, including the dress rehearsal and the concert itself.

Absences or tardiness without an approved Absence Request Form (available at sites.music.mcgill.ca/ensembles/absencerequest) will result in a final grade deduction as follo

# 10.7.4.14 Performance Library

Students are responsible for the music that has been loaned to them for their use, and for its return in good condition to the Gertrude Whitley Performance Library. Students will be required to pay for the replacement of any music that has been lost, stolen, or damaged, and a hold on a student's Minerva account can be placed by the Performance librarian should music or fines not be handed in to the library.

# 10.7.5 Accompanist Program

Music students registered for practical instruction (including electiv

- The course is given by a government-accredited, degree-granting institution acceptable to McGill.
- The course must be assessed by the department which oversees the subject and be approved on McGill's Course Equivalency Database (see <a href="mailto:mcgill.ca/students/transfercredit/course-equivalency">mcgill.ca/students/transfercredit/course-equivalency</a>).
- The course counts for credit toward degrees granted at the institution giving the course.
- Prior approval for the course is obtained from the Music Student Affairs office.

# 10.7.10 Course Changes & Withdrawal

Students are permitted to change courses and/or sections of a course during the add/drop period in each term. This is referred to as the official Course Change period. Course and section changes are made by the student, using Minerva to access their record directly. Contact Music Student Affairs Office if you are unable to change a course or section. For more information, see

Students who are unable to write a deferred exam due to extenuating circumstance must contact the Music Student Affairs Office immediately to discuss the next steps. Deferred examinations cannot be written at a later date. Students who have failed to complete a deferred exam will have a final grade of J (absent), which will negatively impact TGPA/CGPA.

# 10.7.12.2 Supplementals

#### 10.8.1 Department of Music Research: Composition; Music Education; Music History; Theory; Faculty Program

At both the undergraduate and graduate levels, the Department embraces the disciplines of Composition, Music Education, Music History, and Theory; and at the graduate level, Music Technology and Sound Recording. The philosophy of the Department is to encourage integration of the disciplines as much as possible within the learning process in each program of study: the development of basic musicianship, the absorption of the grammar and syntax of musical discourse, and the study of the world of ideas are understood as interconnected.

Major programs offer the student some focus with the flexibility to pursue other areas of interest. The Faculty program is intended to offer an option for individual and creative plans of study. All of the Department's programs give a solid grounding in analytic, synthetic, and writing skills that are useful preparation not only for the music profession but also for professions as diverse as law, journalism, management, and librarianship.

The Music Education program combines an orientation towards a professional career in primary and secondary schools with sensitivity to broader intellectual frameworks against which teachers should understand their roles. This program is offered concurrently with the B.Ed., Music (see *section 10.8.3: B.Mus./B.Ed. Bachelor of Music and Bachelor of Education Concurrent Program*).

The Department also offers a Minor in Music Composition, a Minor in Music Education, a Minor in Music Entrepreneurship, a Minor in Music History, and a Minor in Music Theory to students who seek to place their work in a larger context, as well as a Minor in Musical Applications of Technology and a Minor in Musical Science and Technology to Music students and to students from other faculties.

For each program, all courses listed are required courses unless otherwise indicated.

#### 10.8.1.1 Bachelor of Music (B.Mus.) - Major Composition (124 credits)

The Bachelor of Music (B.Mus.); Major in Composition program offers students a solid grounding in the basics of classical music composition for instruments and voices, with or without electronics. This is achieved through lecture courses and tutorials (private composition lessons in the third and fourth years of the program). The study of topics related to music theory helps to hone students' compositional technique, while the study of topics related to music history helps to develops students' critical thinking skills. Free elective courses allow students either to focus on an area of secondary interest as a minor degree, or to pursue a broader range of course offerings, either within or outside the Schulich School of Music. To ensure consistent performance throughout their program, students are required to achieve a minimum grade of B- in courses given by the Composition Area.

#### Program Prerequisites - Freshman Program (29 credits)

29 credits selected as described below, in consultation with the Program Adviser:

19 credits of Prerequisite Courses

4 credits of Large Ensemble

6 credits of Non-Music Electives

### **Prerequisite Courses**

19 credits, all of the courses below:

Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.

MUHL 186	(3)	Western Musical Traditions
MUIN 180	(3)	BMus Practical Lessons 1
MUIN 181	(3)	BMus Practical Lessons 2
MUPD 135	(1)	Music as a Profession 1
MUSP 140	(2)	Musicianship Training 1
MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 150	(3)	Theory and Analysis 1

# Required Courses (61 credits)

### Composition

MUCO 241	(3)	Tonal Composition 1A
MUCO 242	(3)	Tonal Composition 1B
MUCO 245	(2)	Composition 1A

MUCO 246	(3)	Composition 1B
MUCO 261	(3)	Orchestration 1
MUCO 340D1	(2)	Composition 2
MUCO 340D2	(2)	Composition 2
MUCO 341	(3)	Digital Studio Composition 1
MUCO 342	(3)	Digital Studio Composition 2
MUCO 360	(3)	Orchestration 2
MUCO 440D1	(2)	Composition 3
MUCO 440D2	(2)	Composition 3
MUCO 460	(2)	Orchestration 3
MUCO 541	(3)	Advanced Digital Studio Composition 1
MUCO 575	(3)	Topics in Composition
Theory		
MUTH 251	(3)	Theory and Analysis 4
MUTH 350	(3)	Theory and Analysis 5
Musicianship		
MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4
MUSP 346	(2)	Post-Tonal Musicianship
		-
Music History		
MUHL 286	(3)	Critical Thinking About Music
	(3)	Citation Timining Floods Masie

# Performance/practical lessons

MUHL 385	(3)	Early Twentieth-Century Music
MUHL 391	(3)	Canadian Music
MUHL 392	(3)	Music since 1945

# Performance/ensemble

4 credits from the following:

MUEN 563 (2) Jazz Vocal Workshop MUEN 572 (2) Cappella Antica 6 credits of Non-Music Electives

## **Prerequisite Courses**

22 credits, all of the courses below:

Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.

MUHL 186	(3)	Western Musical Traditions
MUIN 180	(3)	BMus Practical Lessons 1
MUIN 181	(3)	BMus Practical Lessons 2
MOIN 181	(3)	
		j1 0 0 1 393.044 676.4t81j1 0 0 1 393.044 15 171Tjs(1181)Tj1 0 0 1 221.94j1 0 0 1 393.0586.12 0 0 1(21812181KionsK

Group I		
MUHL 377	(3)	Baroque Opera
MUHL 380	(3)	Medieval Music
MUHL 381	(3)	Renaissance Music
MUHL 382	(3)	Baroque Music
MUHL 383	(3)	Classical Music
MUHL 395	(3)	Keyboard Literature before 1750
MUHL 591D1	(1.5)	Paleography
MUHL 591D2	(1.5)	Paleography
MUPP 381	(3)	Topics in Performance Practice
MUTH 426	(3)	Topics in Early Music Analysis
Group II		
MUHL 384	(3)	Romantic Music
MUHL 385	(3)	Early Twentieth-Century Music
MUHL 387	(3)	Opera from Mozart to Puccini
MUHL 388	(3)	Opera After 1900
MUHL 389	(3)	Orchestral Literature
MUHL 390	(3)	The German Lied
MUHL 391	(3)	Canadian Music
MUHL 392	(3)	Music since 1945
MUHL 396	(3)	Era of the Modern Piano
Group III		
MUHL 314	(3)	Women in Music: A Cross-Cultural Perspective
MUHL 330	(3)	Music and Film
MUHL 362	(3)	Popular Music
MUHL 375	(3)	Introduction to Ethnomusicology
MUHL 393	(3)	History of Jazz
MUHL 529	(3)	Proseminar in Musicology
MUHL 592	(3)	Popular Music Studies

# Theory

3 credits from courses with a prefix of MUTH at the 200 or 300 level.

# Musicianship

2 credits from	:
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MUSP 324	(2)	Musicianship for Strings
MUSP 330	(2)	Musicianship for Woodwinds
MUSP 335	(2)	Musicianship for Brass
MUSP 346	(2)	Post-Tonal Musicianship
MUSP 350	(2)	Musicianship for Pianists

(1)	Musicianship (Keyboard) 1
(1)	Musicianship (Keyboard) 2
(3)	Theory and Analysis 1
(3)	Theory and Analysis 2
	(1) (3)

# Required Courses (25 credits)

Т	hec	r۱

MUTH 250	(3)	Theory and Analysis 3
MUTH 251	(3)	Theory and Analysis 4
MUTH 350	(3)	Theory and Analysis 5

# Musicianship

MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4
MUSP 346	(2)	Post-Tonal Musicianship

# **Music History**

MUHL 286	(3)	Critical Thinking About Music
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## **Performance**

MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4
MUIN 283	(1)	BMus Concentration Final Examination

# **Professional Development**

MUPD 235 (1) Music as a Profession 2

# **Complementary Courses (40 credits)**

# Theory

6 credits selected from:

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22 credits, all of the courses below:

Note: Students who can demonstrate through auditions, placement tests or equivalencies that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.

MUHL 186	(3)	Western Musical Traditions
MUIN 180	(3)	BMus Practical Lessons 1
MUIN 181	(3)	BMus Practical Lessons 2
MUPD 135	(1)	Music as a Profession 1
MUSP 140	(2)	Musicianship Training 1
MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 150	(3)	Theory and Analysis 1
MUTH 151	(3)	Theory and Analysis 2

# Required Courses (23 credits)

# Theory

MUTH 250	(3)	Theory and Analysis 3
MUTH 251	(3)	Theory and Analysis 4
MUTH 350	(3)	Theory and Analysis 5

# Musicianship

MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4

# **Music History**

MUHL 286	(3)	Critical Thinking About Music
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### **Performance**

MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4
MUIN 283	(1)	BMus Concentration Final Examination

## **Professional Development**

MUPD 235 (1) Music as a Profession 2

# **Complementary Courses (12 credits)**

# **Music History**

 $6\ credits$  from courses with a prefix of MUHL or MUPP at the  $300\ level$  or higher.

## Musicianship

2 credits from:

MUSP 324 (2) Musicianship for Strings

MUSP 330	(2)	Musicianship for Woodwinds
MUSP 335	(2)	Musicianship for Brass
MUSP 346	(2)	Post-Tonal Musicianship
MUSP 350	(2)	Musicianship for Pianists
MUSP 353	(2)	Musicianship for Voice
MUSP 354	(2)	Introduction to Improvisation and Ornamentation
MUSP 355	(2)	Musicianship for Percussion
MUSP 361	(2)	Topics in Musicianship
MUSP 381	(2)	Singing Renaissance Notation

# Performance

4 credits from:

MUEN 563 (2) Jazz Vocal Workshop

MUEN 572 (2) Cappella Antica

MUJZ 160	(3)	Jazz Materials 1	
MUJZ 161	(3)	Jazz Materials 2	
MUJZ 170	(1)	Jazz Keyboard Proficiency 1	
MUJZ 171	(1)	Jazz Keyboard Proficiency 2	
MUJZ 187	(3)	Jazz History Survey	

## Special Prerequisite Courses for M.Mus. Sound Recording

MUPD 204 Production for Digital Media 1

**TOTAL: 27 Credits** 

For the most up-to-date information about special prerequisite courses for the M.Mus. in Sound Recording, consult the Sound Recording Program website.

**Note:** Students admitted as a Special Student in the prerequisite package for Sound Recording must meet with the Sound Recording Adviser prior to registration. In order to be considered for admission to the Master of Music in Sound Recording, students must attain a minimum grade of B in all of the above courses and must hav

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MUCT 235	(3)	Vocal Techniques
MUCT 315	(3)	Choral Conducting 1
MUGT 205	(3)	Psychology of Music
MUGT 354	(3)	Music for Children
MUGT 355	(3)	Music in Early Childhood
MUIT 250	(3)	Guitar Techniques

9 credits selected from courses with a prefix of MUCT, MUGT, MUIT.

# Stream III: Secondary Music

6 credits selected from:

MUCT 235	(3)	Vocal Techniques
MUCT 315	(3)	Choral Conducting 1
MUGT 358	(3)	General Music for Adults and Teenagers
MUIT 201	(3)	String Techniques
MUIT 202	(3)	Woodwind Techniques
MUIT 203	(3)	Brass Techniques
MUIT 204	(3)	Percussion Techniques
MUIT 250	(3)	Guitar Techniques
MUIT 302	(3)	Advanced Wind Techniques
MUIT 315	(3)	Instrumental Conducting
MUIT 356	(3)	Jazz Instruction: Philosophy and Techniques

9 credits selected from courses with a prefix of MUCT, MUGT, MUIT.

# 10.8.1.9 Bachelor of Music (B.Mus.) - Minor Music Entrepreneurship (18 credits)

This Minor is a collaboration between the Schulich School of Music and Desautels Faculty of Management. It is designed to provide music students with an understanding of how to conceptualize, develop, and manage successful new ventures; manage their careers as performers, music teachers and arts administrators; and develop skills in marketing, fundraising, publicizing, and financing. The program covers the essentials of management and is multidisciplinary and integrative.

This Minor is restricted to B.Mus. students who have completed one year of studies and have a minimum CGPA of 3.0. The minor has limited enrolment; interested students should contact the Music Research Department to apply for admission. Students in this Minor are not permitted to take the Desautels Minors in Management, Marketing, Finance or Operations Management (for Non-Management Students).

## Required Courses (12 credits)

INTG 201	(3)	Integrated Management Essentials 1
INTG 202	(3)	Integrated Management Essentials 2
MGPO 362	(3)	Fundamentals of Entrepreneurship
MUPD 350	(3)	Applied Projects for Musicians

### Complementary Courses (6 credits)

3-6 credits chosen from the following:

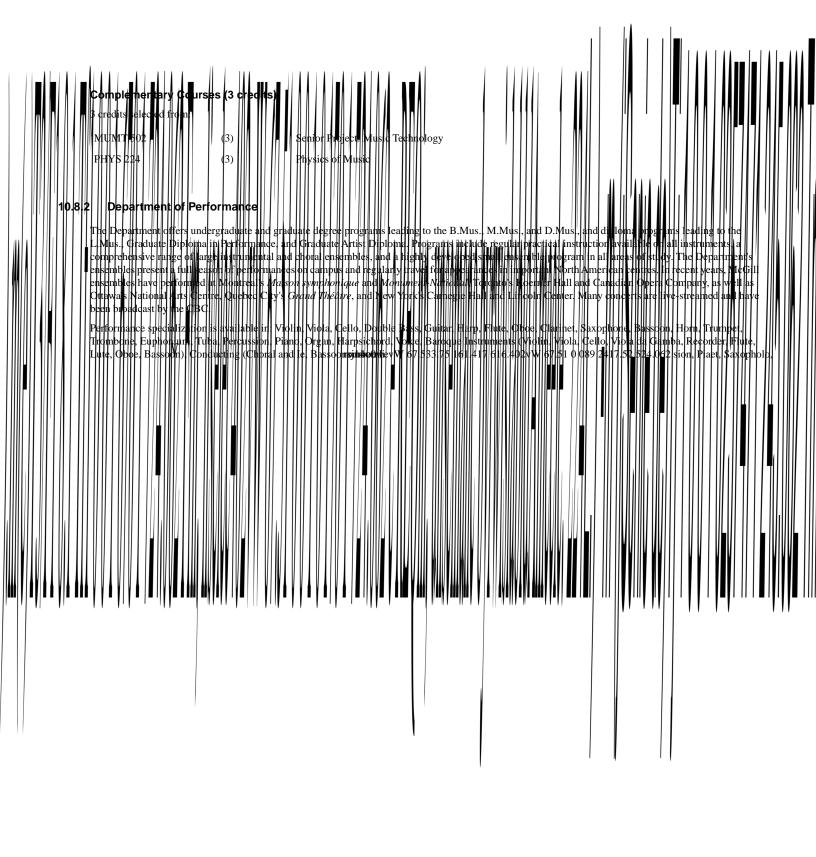
MUMT 301 (3) Music and the Internet

Introduction to 2Ieental Conducting

# 10.8.1.12 Bachelor of Music (B.Mus.) - Minor Musical Applications of Technology (18 credits)

The goal of this Minor is to provide instruction in practical and creative applications of technology for musical purposes. This program will help prepare students for production-oriented jobs in the creative arts.

This program is open to students from any discipline and has no prerequisites other than familiarity with computers. Applications will only be considered for fall admission. Late applications will not be accepted and no students will be admitted to the Minor in January. Registration will be limited to available lab space. To apply, submit an online application through the Music website: www.mcgill.ca/music/programs/minor/mat.



MITTEN 560	(2)		T X7 1XX7 1 1
MUEN 563			Jazz Vocal Workshop
MUEN 572	(2)	1	Cappella Antica
MUEN 587	(2)	)	Cappella McGill
MUEN 590	(2)	)	McGill Wind Orchestra
MUEN 592	(2)	)	Chamber Jazz Ensemble
MUEN 593	(2)	)	Choral Ensembles
MUEN 594	(2)	)	Contemporary Music Ensemble
MUEN 595	(2)	)	Jazz Ensembles
MUEN 597	(2)	)	McGill Symphony Orchestra
4 credits* fro	om:		
MUEN 540	(.5	)	Chamber Music Project 1
MUEN 541	(.5	)	Chamber Music Project 2
MUEN 556	(1)	)	Introduction to Collaborative Piano 1
MUEN 557	(1)	)	Introduction to Collaborative Piano 2
MUEN 560	(1)	)	Chamber Music Ensemble
MUEN 569	(1)	)	Tabla Ensemble
MUEN 578	(1)	)	Song Interpretation 1
MUEN 579	(1)	)	Song Interpretation 2
MUEN 581	(1)	)	Introduction to Ensemble Playing for Pianists
MUEN 582	(1)	)	Piano Ensembles
MUEN 584	(1)	)	Studio Accompanying
MUEN 585	(1)	)	Sonata Masterclass

<sup>\*</sup> All ensembles courses under MUEN may be taken in multiple terms.

# Musicianship

2 credits from:

MUSP 346	(2)	Post-Tonal Musicianship
MUSP 355	(2)	Musicianship for Percussion
MUSP 361	(2)	Topics in Musicianship

Music History/Literature/Performance Practice (6 credits)

Selected from courses with a prefix of MUHL or MUPP at the 300-level or above.

3 credits from courses with a MUHL or MUPP prefix

## **Elective Courses (26 credits)**

3 credits of Non-Music Electives

23 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

# 10.8.2.2 Bachelor of Music (B.Mus.) - Major Performance Voice (123 credits)

The Bachelor of Music; Major Performance (Voice) program focuses on vocal pedagogy, repertoire coaching, linguist, theory, and musicology to strengthen artistry in professional singing. In addition to recitals and masterclasses, students are encouraged to take advantage of diverse solo performance opportunities

in Opera, Early Music Ensembles, Song Interpretation, a comprehensive Choral Program, the annual McGill Concerto and Wirth Vocal Competitions, and outside venues in Montreal.

The Bachelor of Music (B.Mus.) - Major Performance (Voice) program requires 91 credits (plus 32 credits for the Freshman requirement for out-of-province students).

Special Requirements:

Continuation in the program requires a minimum grade of B- in practical instruction/exams, ensembles, and voice coaching.

Program Prerequisites - Freshman Program (32 credits)

32 credits selected as described below, in consultation with the Program Adviser:

22 credits of Prerequisite Courses

4 credits of Large Ensemble

Prior to, or concurrent with registration in the corresponding Diction courses, the Voice Major must furnish evidence of having completed English Second Language courses, ITAL 205D1/ITAL 205D2, GERM 202, and FRSL 207, or their equivalent. This language requirement may be fulfilled by appropriate high school or CEGEP courses, or as part of the non-music and/or free elective requirements or by extra university courses.

Theory		
MUTH 250	(3)	Theory and Analysis 3
MUTH 251	(3)	Theory and Analysis 4
MUTH 350	(3)	Theory and Analysis 5
Musicianship		
MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4
Music History/Literature		
MUHL 286	(3)	Critical Thinking About Music
Professional Development		
MUPD 235	(1)	Music as a Profession 2

## **Complementary Courses (27 credits)**

### Performance

 $10\ credits^*$  of complementary performance selected from:

MUEN 454	(2)	Introductory Opera Repertoire Experience
MUEN 496	(2)	Opera Studio
MUEN 563	(2)	Jazz Vocal Workshop
MUEN 569	(1)	Tabla Ensemble
MUEN 572	(2)	Cappella Antica
MUEN 578	(1)	Song Interpretation 1
MUEN 579	(1)	Song Interpretation 2
MUEN 580	(1)	Early Music Ensemble
MUEN 587	(2)	Cappella McGill
MUEN 593	(2)	Choral Ensembles
MUEN 594	(2)	Contemporary Music Ensemble

<sup>\*</sup> All ensemble courses under MUEN may be taken in multiple terms.

9 credits of complementary performance selected from:

MUIN 300	(2)	Voice Coaching 1
MUIN 301	(2)	Voice Coaching 2
MUPG 296	(1)	Acting for Voice
MUPG 297	(1)	Movement for Voice
MUPG 300	(2)	Music Performance Strategies
MUPG 309	(1)	Advanced Diction

MUPG 353	(2)	Song Repertoire Class
MUPG 380	(2)	Oratorio Class
MUPG 453	(2)	Contemporary Repertoire for Voice

MUEN courses at the 400 or 500 level (maximum 4 credits)

#### Musicianship

2 credits from

MUSP 346	(2)	Post-Tonal Musicianship
MUSP 353	(2)	Musicianship for Voice
MUSP 354	(2)	Introduction to Improvisation and Ornamentation
MUSP 361	(2)	Topics in Musicianship
MUSP 381	(2)	Singing Renaissance Notation

Music History/Literature/Performance Practice

### 6 credits from:

MUHL 377	(3)	Baroque Opera
MUHL 387	(3)	Opera from Mozart to Puccini
MUHL 388	(3)	Opera After 1900
MUHL 390	(3)	The German Lied

### **Elective Courses (20 credits)**

3 credits of non-Music Electives

17 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

#### 10.8.2.3 Bachelor of Music (B.Mus.) - Major Performance (Orchestral Instruments) (125 credits)

The Bachelor of Music; Major Performance (Orchestral Instruments) program provides comprehensive training in the practical and theoretical elements of music. Throughout the program, students receive individual instruction, participate in chamber music and other small ensembles, and perform in large ensembles such as the McGill Symphony Orchestra, Contemporary Music Ensemble, and Wind Orchestra.

The Bachelor of Music (B.Mus.) - Major Performance (Orchestral Instruments) program requires 91 credits (plus 34 credits for the Freshman requirement for out-of-province students).

Special Requirements:

- 1. Continuation in the program requires a minimum grade of B- in practical instruction/exams and ensembles.
- 2. Students majoring in violin, viola, or cello must commence basic ensemble training with two terms of MUEN 565 String Quartet Seminar.

Program Prerequisites - Freshman Program (34 credits)

34 credits selected as described below, in consultation with the Program Adviser:

22 credits of Prerequisite Courses

2 credits of Assigned Small Ensemble

4 credits of Large Ensemble

6 credits of Non-Music Electives

Prerequisite Courses

22 credits, all of the courses below:

Note: Applicants who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.

MUHL 186 (3) Western Musical Traditions

MUIN 180	(3)	BMus Practical Lessons 1
MUIN 181	(3)	BMus Practical Lessons 2
MUPD 135	(1)	Music as a Profession 1
MUSP 140	(2)	Musicianship Training 1
MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 150	(3)	Theory and Analysis 1
MUTH 151	(3)	Theory and Analysis 2

# Required Courses (35 credits)

Performance		
MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4
MUIN 282	(1)	BMus Performance Examination 1
MUIN 380	(2.5)	BMus Practical Lessons 5
MUIN 381	(2.5)	BMus Practical Lessons 6
MUIN 382	(1)	BMus Performance Examination 2
MUIN 480	(2)	BMus Practical Lessons 7
MUIN 481	(2)	BMus Practical Lessons 8
MUIN 482	(2)	BMus Performance Examination 3
Theory		
MUTH 250	(3)	Theory and Analysis 3

Theory and Analysis 4

Theory and Analysis 5

# Musicianship

MUTH 251

**MUTH 350** 

MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4

(3)

(3)

# Music History

MUHL 286	(3)	Critical Thinking About Music
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# Professional Development

MUPD 235 (1) Music as a Profession 2



per term; as assigned by audition) from Large ensembles:

VIIIII VIIII VIIII 2024, Undergraduate Programs, Courses and Univ

MUEN 563	(2)	Jazz Vocal Workshop
MUEN 565	(2)	String Quartet Seminar
MUEN 573	(2)	Baroque Orchestra
MUEN 587	(2)	Cappella McGill
MUEN 590	(2)	McGill Wind Orchestra
MUEN 592	(2)	Chamber Jazz Ensemble
MUEN 593	(2)	Choral Ensembles
MUEN 594	(2)	Contemporary Music Ensemble
MUEN 595	(2)	Jazz Ensembles
MUEN 597	(2)	McGill Symphony Orchestra

4 credits  $*(1 \text{ credit per term}; \text{ as assigned by audition}) from small ensembles:}$ 

MUEN 540	(.5)	Chamber Music Project 1
MUEN 541	(.5)	Chamber Music Project 2
MUEN 560	(1)	Chamber Music Ensemble
	560	Tabla Ensemble

MUPG 473	(1)	Special Project in Performance
MUPG 474	(2)	Special Project in Performance
MUPG 571	(1)	Free Improvisation 1
MUPG 572D1	(.5)	Free Improvisation 2
MUPG 572D2	(.5)	Free Improvisation 2

(Percussionists must include MUEN 569, MUPG 328, MUPG 329)

#### Musicianship

2 credits from:

MUSP 324	(2)	Musicianship for Strings
MUSP 330	(2)	Musicianship for Woodwinds
MUSP 335	(2)	Musicianship for Brass
MUSP 346	(2)	Post-Tonal Musicianship
MUSP 355	(2)	Musicianship for Percussion
MUSP 361	(2)	Topics in Musicianship

Music History/Literature/Performance Practice

6 credits of courses with a MUHL or MUPP prefix

Percussionists must include:

MUHL 392 (3) Music since 1945

#### **Elective Courses (23 credits)**

3 credits of non-Music Electives

20 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

# 10.8.2.4 Bachelor of Music (B.Mus.) - Major Early Music Performance (Baroque Violin, Viola, Cello, Viola da Gamba, Flute, Recorder, Oboe, Organ, Harpsichord and Early Brass Instruments) (125 credits)

The Bachelor of Music; Major Early Music Performance program provides comprehensive training in historical performance practice and in performance on a period instrument. The program combines individual lessons and ensembles with the study of historical approaches to performance in its various activities - workshops, master classes, guest lectures, and research projects.

The Bachelor of Music (B.Mus.); Major Early Music Performance program requires 91 credits (plus 34 credits for the Freshman requirement for out-of-province students).

Special Requirements:

Continuation in the program requires a minimum grade of B- in practical instruction/exams and ensembles.

Program Prerequisites - Freshman Program (34 credits)

34 credits selected as described below, in consultation with the Program Adviser:

22 credits of Prerequisite Courses

2 credits of Assigned Small Ensemble

4 credits of Large Ensemble

6 credits of Non-Music Electives

Prerequisite Courses

22 credits, all of the courses below:

Note: Applicants who can demonstrate through auditions and placement tests that they have mastered the material in any of the courses below will be exempt from them and may proceed to more advanced courses.

# Performance

12 credits\*(2 credits per term; as assigned by audition) from large ensembles:

MUEN 563 (2) Jazz Vocal Workshop

MUEN 572 (2) Cappella Antica

#### 2 credits from:

MUSP 346	(2)	Post-Tonal Musicianship
MUSP 354	(2)	Introduction to Improvisation and Ornamentation
MUSP 361	(2)	Topics in Musicianship
MUSP 381	(2)	Singing Renaissance Notation

#### History/Literature/Performance Practice

#### 3 credits from:

MUHL 377	(3)	Baroque Opera
MUHL 380	(3)	Medieval Music
MUHL 381	(3)	Renaissance Music
MUHL 382	(3)	Baroque Music
MUHL 383	(3)	Classical Music
MUHL 395	(3)	Keyboard Literature before 1750
MUHL 591D1	(1.5)	Paleography
MUHL 591D2	(1.5)	Paleography

# **Elective Courses (23 credits)**

3 credits of non-Music Electives

20 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

# 10.8.2.5 Bachelor of Music (B.Mus.) - Major Early Music Performance (Voice) (126 credits)

The Bachelor of Music; Major Early Music Performance (Voice) program provides comprehensive training in historical performance practice and in singing period repertoire. The program combines individual lessons and ensembles with the study of historical approaches to performance in its various activities - wThe Bachelor of Music; MB.Mus.) - ajor Early Music Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTugorical Performance (Vorksut-of-3 cAdatier: 1 0 0 1 67.52 3632551 Tm(ork2 1 298.657 39bwC43.Mus.) - Major EarlyTu

MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 150	(3)	Theory and Analysis 1
MUTH 151	(3)	Theory and Analysis 2

# Required Courses (54 credits)

	o (o : o: o a.i.o,	
Performance		
MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4
MUIN 282	(1)	BMus Performance Examination 1
MUIN 300	(2)	Voice Coaching 1
MUIN 301	(2)	Voice Coaching 2
MUIN 380	(2.5)	BMus Practical Lessons 5
MUIN 381	(2.5)	BMus Practical Lessons 6
MUIN 382	(1)	BMus Performance Examination 2
MUIN 480	(2)	BMus Practical Lessons 7
MUIN 481	(2)	BMus Practical Lessons 8
MUIN 482	(2)	BMus Performance Examination 3
Diction		
MUPG 209	(1)	Introduction to Lyric Diction
MUPG 210	(2)	Italian Diction
MUPG 211	(2)	French Diction
MUPG 212	(2)	English Diction
MUPG 213	(2)	German Diction

Prior to, or concurrent with registration in the corresponding Diction courses, the Bachelor of Music; Major Early Music Performance (Voice) must furnish evidence of having completed English Second Language courses, ITAL 205D1/ITAL 205D2, GERM 202, and FRSL 207, or their equivalent. This language requirement may be fulfilled by appropriate high school or CEGEP courses, or as part of the non-music and/or free elective requirements above, or by extra university courses.

## Theory

MUTH 250	(3)	Theory and Analysis 3
MUTH 251	(3)	Theory and Analysis 4
MUTH 350	(3)	Theory and Analysis 5
MUTH 426	(3)	Topics in Early Music Analysis

# Musicianship

MUSP 240o821 1 221.949 10**22** 7U71 8j1 0 0 M22icians666iEraining 3

#### **Elective Courses (23 credits)**

3 credits of non-Music Electives

20 credits of Free Electives (may include 2 credits of courses with a MUEN prefix)

#### 10.8.2.6 Bachelor of Music (B.Mus.) - Major Performance Jazz (126 credits)

The Bachelor of Music; Major in Performance Jazz provides comprehensive training for jazz musicians. The curriculum includes jazz theory and harmony, keyboard, history, performance practice, improvisation, composition, and arranging. Throughout the program, students receive individual instruction and participate in jazz orchestras, ensembles, and combos.

#### Special Requirements:

- 1. Students majoring in Jazz Performance must achieve a minimum grade of B- in all Jazz courses and Practical Instruction/Exams, including Jazz Combo and Ensembles.
- 2. Students are permitted to study with the same teacher for the assigned practical instruction for a maximum of two consecutive years.

#### Program Prerequisites - Freshman Program (34 credits)

34 credits selected as described below, in consultation with the Program Adviser:

- 22 credits of Prerequisite Courses
- 2 credits of MUEN 570 Jazz Combo
- 4 credits of Large Ensemble
- 6 credits of Non-Music Electives

### **Prerequisite Courses**

22 credits, all of the courses below:

Note: Students who can demonstrate through auditions, placement tests, or equivalencies that they have mastered the material in any of the courses listed below, will be exempt from them and may proceed to more advanced courses.

Incoming jazz guitarists and pianists are automatically exempt from MUJZ 170 and MUJZ 171.

MUIN 180	(3)	BMus Practical Lessons 1
MUIN 181	(3)	BMus Practical Lessons 2
MUJZ 160	(3)	Jazz Materials 1
MUJZ 161	(3)	Jazz Materials 2
MUJZ 170	(1)	Jazz Keyboard Proficiency 1
MUJZ 171	(1)	Jazz Keyboard Proficiency 2
MUJZ 187	(3)	Jazz History Survey
MUPD 135	(1)	Music as a Profession 1
MUSP 123	(2)	Jazz Ear Training 1
MUSP 124	(2)	Jazz Ear Training 2

# Required Courses (53 credits)

Performance		
MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4
MUIN 282	(1)	BMus Performance Examination 1
MUIN 380	(2.5)	BMus Practical Lessons 5
MUIN 381	(2.5)	BMus Practical Lessons 6
MUIN 382	(1)	BMus Performance Examination 2
MUIN 480	(2)	BMus Practical Lessons 7
MUIN 481	(2)	BMus Practical Lessons 8

MUIN 482	(2)	BMus Performance Examination 3	
Small Ensemble			
MUEN 570*	(1)	Jazz Combo	
*This course is taken in four	semesters for 4 c	redits.	
Jazz Improvisation			
Instrumental majors:			
MUJZ 223	(3)	Jazz Improvisation/Musicianship 1	
MUJZ 224	(3)	Jazz Improvisation/Musicianship 2	
MUJZ 423	(3)	Jazz Improvisation/Musicianship 3	
MUJZ 424	(3)	Jazz Improvisation/Musicianship 4	
OR			
Vocal majors:			
MUJZ 225	(3)	Jazz Vocal Improvisation 1	
MUJZ 226	(3)	Jazz Vocal Improvisation 2	
MUJZ 325	(3)	Jazz Vocal Improvisation 3	
MUJZ 326	(3)	Jazz Vocal Improvisation 4	
Jazz Theory			
MUJZ 260	(3)	Jazz Arranging 1	
MUJZ 261	(3)	Jazz Arranging 2	
MUJZ 340	(3)	Jazz Composition 1	
MUJZ 341	(3)	Jazz Composition 2	
NewZ	(3)	vazz Composition 2	
History/Literature/Performa	nce Practice		
MUHL 286	(3)	Critical Thinking About Music	
MUJZ 493	(3)	Jazz Performance Practice	
Professional Development			
MUPD 235	(1)	Music as a Profession 2	
WICI D 233	(1)	Music us a Froression 2	
Complementary Course	es (14-18 credit	s)	
Performance			
Small Ensemble			
MUEN 570*	(1)	Jazz Combo	
*Taken in two semesters for 2 credits.			

OR

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MUEN 574* (1) Afro-Cuban/Brazilian Jazz Cor
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### Large Ensemble

Note: students playing Rhythm Section instruments (piano, guitar, bass, drums, vibraphone) can substitute 4 credits of large ensemble with free electives).

# 8-12 credits from\*:

\* All ensemble courses under MUEN may be taken in multiple terms.

MUEN 563	(2)	Jazz Vocal Workshop
MUEN 572	(2)	Cappella Antica
MUEN 573	(2)	Baroque Orchestra
MUEN 587	(2)	Cappella McGill
MUEN 590	(2)	McGill Wind Orchestra
MUEN 592	(2)	Chamber Jazz Ensemble
MUEN 593	(2)	Choral Ensembles
MUEN 594	(2)	Contemporary Music Ensemble
MUEN 595	(2)	Jazz Ensembles
MUEN 597	(2)	McGill Symphony Orchestra

#### Advanced Jazz

Instrumental majors:

4 credits from either MUJZ 440 and MUJZ 441, or MUJZ 461D1/D2:

	osition 1
MUJZ 441 (2) Advanced Jazz Compo	osition 2
MUJZ 461D1 (2) Advanced Jazz Arrang	ing
MUJZ 461D2 (2) Advanced Jazz Arrang	ing

OR

# Vocal majors:

MUJZ 425	(2)	Jazz Vocal Repertoire 1
MUJZ 426	(2)	Jazz Vocal Repertoire 2

### Elective Courses (21-25 credits)

3 credits of non-Music Electives.

18-22 credits of Free Electives (may not include courses with a MUEN prefix); students playing Rhythm Section instruments may take up to 22 Free Electives.

## 10.8.2.7 Bachelor of Music (B.Mus.) - Minor Conducting (18 credits)

The B.Mus. Minor in Conducting contains two streams—orchestral conducting and choral conducting—which offer students an opportunity to deven in multtreams—or

<sup>\*</sup>Taken in two semesters for 2 credits.

ing:
1

MUCO 261	(3)	Orchestration 1
MUCT 235	(3)	Vocal Techniques
MUHL 377	(3)	Baroque Opera
MUHL 380	(3)	Medieval Music
MUHL 381	(3)	Renaissance Music
MUHL 382	(3)	Baroque Music
MUHL 383	(3)	Classical Music
MUHL 384	(3)	Romantic Music
MUHL 385	(3)	Early Twentieth-Century Music
MUHL 387	(3)	Opera from Mozart to Puccini
MUHL 388	(3)	Opera After 1900
MUHL 390	(3)	The German Lied
MUHL 391	(3)	Canadian Music
MUHL 392	(3)	Music since 1945
MUHL 591D1	(1.5)	Paleography
MUHL 591D2	(1.5)	Paleography
MUPG 209	(1)	Introduction to Lyric Diction
MUPG 210	(2)	Italian Diction
MUPG 211	(2)	French Diction
MUPG 212	(2)	English Diction
MUPG 213	(2)	German Diction
MUTH 202	(3)	Modal Counterpoint 1
MUTH 204	(3)	Tonal Counterpoint 1
MUTH 302	(3)	Modal Counterpoint 2
MUTH 304	(3)	Tonal Counterpoint 2

### 10.8.2.8 Bachelor of Music (B.Mus.) - Minor Early Music Performance (18 credits)

The Minor in Early Music Performance offers an opportunity for B.Mus. students to learn the elements of early music performance practice, and to play an early music instrument or to sing early music.

# **Required Courses (3 credits)**

MUIN 272	(0)	Performance Minor Examination 1
MUPP 381	(3)	Topics in Performance Practice

# **Complementary Courses (15 credits)**

6 credits from the following:

MUEN 572	(2)	Cappella Antica
MUEN 573	(2)	Baroque Orchestra
MUEN 580	(1)	Early Music Ensemble
MUPD 560	(1)	Introduction to Research Methods in Music
MUPG 272D1*	(2)	Continuo

<sup>\*</sup> must be taken by Harpsichord students

### 3 credits from the following:

MUHL 377	(3)	Baroque Opera
MUHL 380	(3)	Medieval Music
MUHL 381	(3)	Renaissance Music
MUHL 382	(3)	Baroque Music
MUHL 383	(3)	Classical Music
MUHL 395	(3)	Keyboard Literature before 1750
MUHL 591D1	(1.5)	Paleography
MUHL 591D2	(1.5)	Paleography
MUTH 202	(3)	Modal Counterpoint 1
MUTH 204	(3)	Tonal Counterpoint 1
MUTH 302	(3)	Modal Counterpoint 2
MUTH 304	(3)	Tonal Counterpoint 2
MUTH 426	(3)	Topics in Early Music Analysis

### 6 credits from the following (for Voice students only):

MUIN 302	(1.5)	Early Music Minor Repertoire Coaching 1
MUIN 303	(1.5)	Early Music Minor Repertoire Coaching 2
MUIN 304	(1.5)	Early Music Minor Repertoire Coaching 3
MUIN 305	(1.5)	Early Music Minor Repertoire Coaching 4

OR

# 6 credits from the following (for Instrumental students only):

MUIN 270	(3)	Practical Lessons Performance Minor 1
MUIN 271	(3)	Practical Lessons Performance Minor 2
MUIN 273	(1.5)	Practical Lessons Performance Minor 3
MUIN 274	(1.5)	Practical Lessons Performance Minor 4
MUIN 275	(1.5)	Practical Lessons Performance Minor 5
MUIN 276	(1.5)	Practical Lessons Performance Minor 6
MUIN 302	(1.5)	Early Music Minor Repertoire Coaching 1
MUIN 303	(1.5)	Early Music Minor Repertoire Coaching 2
MUIN 304	(1.5)	Early Music Minor Repertoire Coaching 3
MUIN 305	(1.5)	Early Music Minor Repertoire Coaching 4

### 10.8.2.9 Bachelor of Music (B.Mus.) - Minor Jazz Arranging and Composition (18 credits)

The Minor in Jazz Arranging and Composition allows B.Mus. students who are not Jazz majors to explore the jazz idiom with an emphasis on arranging composition and jazz theory. In theory courses, students are trained in fundamental jazz materials, compose jazz tunes, and develop analytical skills; in arranging courses, they gain practical experience by writing for various small and large jazz ensembles; and in the jazz history course, they explore the repertoire and history of the jazz tradition. The program is aimed primarily at classical students who love jazz and who have already acquired facility with rudimentary classical materials.

# **Required Courses (18 credits)**

MUJZ 160	(3)	Jazz Materials 1
MUJZ 161	(3)	Jazz Materials 2
MUJZ 187	(3)	Jazz History Survey
MUJZ 260	(3)	Jazz Arranging 1
MUJZ 261	(3)	Jazz Arranging 2
MUJZ 262	(3)	Applied Jazz Theory

### 10.8.2.10 Bachelor of Music (B.Mus.) - Minor Jazz Performance (18 credits)

The Minor in Jazz Performance offers students the opportunity to develop abilities in instrumental and vocal jazz through a combination of theoretical and practical courses.

# Required Courses (18 credits)

MUEN 570*	(1)	Jazz Combo
MUIN 273	(1.5)	Practical Lessons Performance Minor 3
MUIN 274	(1.5)	Practical Lessons Performance Minor 4
MUJZ 160	(3)	Jazz Materials 1
MUJZ 161	(3)	Jazz Materials 2
MUJZ 213	(2)	Fundamentals of Jazz Improvisation 1
MUJZ 214	(2)	Fundamentals of Jazz Improvisation 2
MUJZ 262	(3)	Applied Jazz Theory

<sup>\* 2</sup> credits in MUEN 570.

# 10.8.2.11 Licentiate in Music (L.Mus.) - Major Performance Piano (93 credits)

The Licentiate in Music (L.Mus.) Major Performance Piano is a 93-credit program.

Special Requirements:

- 1. Continuation in the program requires a minimum grade of A- in practical instruction/exams and ensembles.
- 2. Candidates must take the L.Mus. Performance 1 Examination at the end of their first year of study and the L.Mus. Performance 2 and 3 Examinations in each of the next two years if they hope to complete the program in the normal length of time.

# Required Performance (52 credits)

MUIN 250	(6)	L.Mus. Practical Instruction 1
MUIN 251	(6)	L.Mus. Practical Instruction 2
MUIN 252	(4)	L.Mus. Performance 1 Examination
MUIN 333	(0)	Piano Techniques 2
MUIN 350	(6)	L.Mus. Practical Instruction 3
MUIN 351	(6)	L.Mus. Practical Instruction 4
MUIN 352	(4)	L.Mus. Performance 2 Examination
MUIN 369	(0)	Concerto
MUIN 433	(0)	Piano Techniques 3
MUIN 450	(4)	L.Mus. Practical Instruction 5
MUIN 451	(4)	L.Mus. Practical Instruction 6
MUIN 452	(8)	L.Mus. Performance 3 Examination
MUPG 541	(2)	Senior Piano Seminar 1

MUPG 542 (2) Senior Piano Seminar 2

# **Complementary Performance (14 credits)**

Large Ensemble – during the first four terms (2 credits x 4 semesters).

14 credits selected as follows:

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X	cred	lits.	from:	

MUEN 563	(2)	Jazz Vocal Workshop
MUEN 572	(2)	Cappella Antica
MUEN 587	(2)	Cappella McGill
MUEN 590	(2)	McGill Wind Orchestra
MUEN 592	(2)	Chamber Jazz Ensemble
MUEN 593	(2)	Choral Ensembles
MUEN 594	(2)	Contemporary Music Ensemble
MUEN 595	(2)	Jazz Ensembles
MUEN 597	(2)	McGill Symphony Orchestra

### 6 credits from:

MUEN 540	(.5)	Chamber Music Project 1
MUEN 541	(.5)	Chamber Music Project 2
MUEN 556	(1)	Introduction to Collaborative Piano 1
MUEN 557	(1)	Introduction to Collaborative Piano 2
MUEN 560	(1)	Chamber Music Ensemble
MUEN 578	(1)	Song Interpretation 1
MUEN 579	(1)	Song Interpretation 2
MUEN 581	(1)	Introduction to Ensemble Playing for Pianists
MUEN 582	(1)	Piano Ensembles
MUEN 584	(1)	Studio Accompanying
MUEN 585	(1)	Sonata Masterclass

# **Complementary Musicianship (2 credits)**

MUSP 346	(2)	Post-Tonal Musicianship
MUSP 350	(2)	Musicianship for Pianists
MUSP 361	(2)	Topics in Musicianship

# Required Courses (25 credits)

25 credits of required courses selected as follows:

9 credits of Theory

10 credits of Musicianship

6 credits of History

# Theory

# 9 credits from:

MUEN courses at the 400 or 500 level (maximum 4 credits).

MUIN 300	(2)	Voice Coaching 1
MUIN 301	(2)	Voice Coaching 2
MUPG 296	(1)	Acting for Voice
MUPG 297	(1)	Movement for Voice
MUPG 309	(1)	Advanced Diction
MUPG 353	(2)	Song Repertoire Class
MUPG 380	(2)	Oratorio Class
MUPG 453	(2)	Contemporary Repertoire for Voice

# Complementary Musicianship (2 credits)

# 2 credits from:

MUSP 346	(2)	Post-Tonal Musicianship
MUSP 353	(2)	Musicianship for Voice
MUSP 354	(2)	Introduction to Improvisation and Ornamentation
MUSP 361	(2)	Topics in Musicianship
		Singing Renalementar

# History (6 credits)

MUHL 186	(3)	Western Musical Traditions
MUHL 286	(3)	Critical Thinking About Music

# 10.8.2.14 Special Prerequisite Courses for M.Mus. in Performance

•		
Master of Music (M.Mus.) Perfo	rmance: E	Carly Music (Thesis)
MUPD 560	(1)	Introduction to Research Methods in Music
3 credits from the following:		
MUHL 377	(3)	Baroque Opera
MUHL 380	(3)	Medieval Music
MUHL 381	(3)	Renaissance Music
MUHL 382	(3)	Baroque Music
MUHL 383	(3)	Classical Music
MUHL 395	(3)	Keyboard Literature before 1750
MUPP 381	(3)	Topics in Performance Practice
MUTH 426	(3)	Topics in Early Music Analysis
Harpsichord students:		
MUPG 272D1/D2	(4)	Continuo
MUPG 372D1/D2	(2)	Continuo
Organ/Lute students:		
MUPG 272D1/D2	(4)	Continuo
Voice students:		
MUPG 210	(2)	Italian Diction (or equivalent)
MUPG 211	(2)	French Diction (or equivalent)
MUPG 212	(2)	English Diction (or equivalent)
MUPG 213	(2)	German Diction (or equivalent)
Master of Music (M.Mus.) Perfo	rmance: O	Orchestral Instruments and Guitar (Thesis)
MUPD 560	(1)	Introduction to Research Methods in Music
Master of Music (M.Mus.) Perfo	rmance: C	Collaborative Piano (Thesis)
MUPD 560	(1)	Introduction to Research Methods in Music
4 credits from the following:		
MUPG 210	(2)	Italian Diction
MUPG 211	(2)	French Diction
MUPG 212	(2)	English Diction
MUPG 213	(2)	German Diction
6 credits from the following:		
MUHL 372	(3)	Solo Song Outside Germany and Austria
MUHL 377	(3)	Baroque Opera
MUHL 387	(3)	Opera from Mozart to Puccini
MUHL 388	(3)	Opera After 1900

### Master of Music (M.Mus.) Performance: Collaborative Piano (Thesis)

MUHL 390 (3) The German Lied

### Master of Music (M.Mus.) Performance: Piano (Thesis)

MUPD 560 (1) Introduction to Research Methods in Music

# Master of Music (M.Mus.) Performance: Opera and Voice (Thesis)

MUPD 560 (1) Introduction to Research Methods in Music

MUPG 210 (2) Italian Diction
MUPG 211 (2) French Diction
MUPG 212 (2) English Diction

MUPG 213 (2) German Diction

 $\boldsymbol{3}$  credits from the following:

MUHL 372 (3) Solo Song Outside Germany and Austria

Which Her Britain Lied The 390 (3) Baroque Opera

Opera from Mozart to 00 1 7051i1 0 0 1 200.228 526.9 Tm(Oper)

#### 10.8.3 B.Mus./B.Ed. Bachelor of Music and Bachelor of Education Concurrent Program

The Bachelor of Education in Music (B.Ed. Music) mcgill.ca/dise/teachercert/music is an integrated 152-credit program of initial teacher training that leads to certification as a teacher in the Province of Quebec. This program is only open to students who have completed a Bachelor of Music (B.Mus.) or its equivalent, and normally students receive significant advanced standing in the program such that the B.Ed. Music program can be completed in two and a half years. Applicants to B.Ed. Music should choose Faculty of Education (Music) as the faculty which offers the program when submitting an application for an undergraduate program. Students who do not have an equivalent B.Mus. should complete the concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary mcgill.ca/music/programs/bmus/bmus-bed. The concurrent program is comprised of 170 credits, and combines academic studies in music, professional studies and field experience. Students normally take five years to complete the concurrent program. The two degrees are awarded during the same convocation period. Applicants to the B.Mus./B.Ed. concurrent program should select Schulich School of Music as the faculty when applying for this program.

Students in the concurrent B.Mus./B.Ed. or B.Ed. Music who receive an F or J in any Field Experience course are placed in Unsatisfactory Standing. Although they may complete their term, they are required to withdraw from the program.

# 10.8.3.1 Concurrent Bachelor of Music (B.Mus.) - Major Music Education and Bachelor of Education (B.Ed.) - Music Elementary and Secondary (170 credits)

The Concurrent B.Mus./B.Ed. combines the Bachelor of Music (Major Music Education) with the Bachelor of Education (Music Elementary and Secondary).

Requirements are normally completed in five years and lead to certification as a school teacher in the Province of Quebec. Out-of-province students (or those without Quebec CEGEP, French Baccalaureate, International Baccalaureate, or at least one year of university studies prior to commencing the Concurrent program) are required to complete 170 credits, normally in six years.

Applicants who already hold a Bachelor of Music degree from a North American university should apply directly to the Bachelor of Education in Music Elementary and Secondary (B.Ed. Music) program offered by the Faculty of Education https://www.mcgill.ca/dise/progs/music.

#### Notes:

- 1. Students majoring in Music Education in the jazz stream may take Jazz Arranging 1 (MUJZ 260) with the permission of the instructor, per available space in the course, and if they have the prerequisite, MUJZ 161. Alternatively, they may be asked to register for a different jazz stream course upon the recommendation of the Jazz Area Chair and/or the Music Education Area Chair.
- 2. In addition to meeting prerequisites/co-requisites for MUCO 230 or MUCO 261, students must obtain the relevant instructor's permission, per available space in the course, prior to registration. MUCO 260 is waived as a prerequisite for MUCO 230.

The B.Mus. Major Music Education program in the Schulich School of Music focuses on the development of prospective music educators as musicians. This is achieved both through core music history, theory, musicianship, and performance courses, as well as through different instrumental, vocal, and conducting techniques courses. Laboratory experiences provide an opportunity to develop facility with basic music rehearsing/teaching techniques, with emphasis on the ability to diagnose and correct technical and musical problems. The B.Ed. Music Elementary and Secondary program in the Faculty of Education focuses on the development of the musicians as educators. This is achieved through courses in educational foundations, music pedagogy, pedagogical support, and a practicum component comprised of four field experiences and supporting professional seminars.

The components of the 137-credit Concurrent Bachelor of Music - Major Music Education and Bachelor of Education - Music Elementary and Secondary (c (Major Musipare required8 47.812 378.021 Tm/t94F3oMa8t in.112 459.061 Tm(Notes:)Tj-0.rymcgill.ca/diGa47.812 378.0.1e required8 4onal foundations, ta3.341 Tm/t94F3oMa8t in.112 459.061 Tm(Notes:)Tj-0.rymcgill.ca/diGa47.812 378.0.1e required8 4onal foundations, ta3.341 Tm/t94F3oMa8t in.112 459.061 Tm(Notes:)Tj-0.rymcgill.ca/diGa47.812 378.0.1e required8 4onal foundations, ta3.341 Tm/t94F3oMa8t in.112 459.061 Tm(Notes:)Tj-0.rymcgill.ca/diGa47.812 378.0.1e required8 4onal foundations, ta3.341 Tm/t94F3oMa8t in.112 459.061 Tm(Notes:)Tj-0.rymcgill.ca/diGa47.812 378.0.1e required8 4onal foundations, ta3.341 Tm/t94F3oMa8t in.112 459.061 Tm/t94F3oMa8t in

MUPD 235	(1)	Music as a Profession 2
MUSP 140	(2)	Musicianship Training 1
MUSP 141	(2)	Musicianship Training 2
MUSP 170	(1)	Musicianship (Keyboard) 1
MUSP 171	(1)	Musicianship (Keyboard) 2
MUTH 150	(3)	Theory and Analysis 1
MUTH 151	(3)	Theory and Analysis 2

# Required Courses - Music Components (48 credits)

(3)

Music	Education
wusic	Education

MUCT 235

		_
MUGT 215	(1)	Basic Conducting Techniques
MUGT 354	(3)	Music for Children
MUGT 358	(3)	General Music for Adults and Teenagers
MUGT 401	(3)	Issues in Music Education
MUIT 202	(3)	Woodwind Techniques
MUIT 203	(3)	Brass Techniques
MUIT 204	(3)	Percussion Techniques
MUIT 356	(3)	Jazz Instruction: Philosophy and Techniques

Vocal Techniques

# Theory

MUTH 250	(3)	Theory and Analysis 3
MUTH 251	(3)	Theory and Analysis 4
MUTH 350	(3)	Theory and Analysis 5

# Musicianship

MUSP 240	(2)	Musicianship Training 3
MUSP 241	(2)	Musicianship Training 4

# **Music History**

MUHL 286	(3)	Critical Thinking About Music
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### Performance

MUIN 280	(2.5)	BMus Practical Lessons 3
MUIN 281	(2.5)	BMus Practical Lessons 4
MUIN 283	(1)	BMus Concentration Final Examination

# **Professional Development**

MUPD 235 (1) Music as a Profession 2

# **Complementary Courses - Music Components (24 credits)**

# Composition/Arranging

3 credits from:

MUCO 230	(3)	The Art of Composition
MUCO 261	(3)	Orchestration 1
MUJZ 260	(3)	Jazz Arranging 1

# **Music Education**

3 credits from:

MUIT 201	(3)	String Techniques
MUIT 250	(3)	Guitar Techniques

3 credits from:

MUCT 315	(3)	Choral Conducting 1
MUIT 315	(3)	Instrumental Conducting

3 credits from courses with a prefix of MUIT or MUGT.

# Musicianship

2 credits from:

MUSP 324	(2)	Musicianship for Strings
MUSP 330	(2)	Musicianship for Woodwinds
MUSP 335	(2)	Musicianship for Brass
MUSP 346	(2)	Post-Tonal Musicianship
MUSP 350	(2)	Musicianship for Pianists
MUSP 353	(2)	Musicianship for Voice
MUSP 354	(2)	Introduction to Improvisation and Ornamentation
MUSP 355	(2)	Musicianship for Percussion
MUSP 361	(2)	Topics in Musicianship
MUSP 381	(2)	Singing Renaissance Notation

# **Music History**

6 credits from courses with a prefix of MUHL or MUPP.

### Perf

MUEN 594	(2)	Contemporary Music Ensemble
MUEN 595	(2)	Jazz Ensembles
MUEN 597	(2)	McGill Symphony Orchestra

# **Electives Cour**

Detailed information on the minors listed below can be found on the Desautels Faculty of Management website and at Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.7: Minors for Non-Management Students.

- section 9.8.7.3: Bachelor of Commerce (B.Com.) Minor Finance (For Non-Management Students) (18 credits)
- section 9.8.7.4: Bachelor of Commerce (B.Com.) Minor Management (For Non-Management Students) (18 credits)
- section 9.8.7.5: Bachelor of Commerce (B.Com.) Minor Marketing (For Non-Management Students) (18 credits)
- section 9.8.7.6: Bachelor of Commerce (B.Com.) Minor Operations Management (For Non-Management Students) (18 credits)

Students must submit an online application to apply for these minors for non-management students. Contact the Desautels Faculty of Management for more information.

### 10.9 Practical Instruction (MUIN courses)

All new and returning students must submit a *Practical Instruction Request Form* by the assigned deadline in the spring if they wish to register for practical instruction and/or voice coaching lessons in the following academic year. Practical Instruction courses have the MUIN prefix, and are also known as private lessons All private lessons are subject to a Music Private Lesson fee in addition to the per-credit tuition rate assigned for each course.

Students are entitled to a maximum number of terms of lessons, which varies by program. Additional terms of practical instruction beyond the term quota can be requested but will be subject to supplementary lesson fees, as are lessons on a secondary instrument. See *section 10.6.7: Tuition Fees, Practical Instruction Fees, and Lesson Quotas* for more information.

Students are not permitted to only register for practical instruction in any given semester. Students are expected to register for other required academic course(s) for the program in the same semester for which they are taking practical instruction.



**Note:** With the exception of B.Mus. and L.Mus. students in the graduating year, part-time students will be charged a Music Supplementary Practical Instruction fee in addition to the per-credit fee and the Music Practical Instruction fee. See *section 10.6.7: Tuition Fees, Practical Instruction Fees, and Lesson Quotas* for more information.

#### 10.9.1 Practical Assignment and Lessons

### 10.9.1.1 Registration/Withdrawal

Registration for practical instruction (MUIN lesson course numbers) is **not available** on Minerva. Students are reminded to submit an *Online Practical Instruction Request Form* by the specified deadlines. Practical Instruction will then be added onto students' records.

Students cannot withdra

- · Licentiate Study
- · Postgraduate Study
- · Elective Study

#### 10.9.2.1 Concentration Study

Students in the:

- B.Mus. Faculty Program;
- Faculty Program Jazz concentration; or
- Major in Music Composition, Music Education, Music History, or Music Theory

are obliged to present one examination in order to fulfil the practical requirement of these programs: the Concentration Final Examination (MUIN 283). Grades of C or higher in all practical requirements are mandatory for continuation in the program.

The sequence would normally be:

#### **Concentration Study Sequence**

MUIN 180	BMus Practical Lessons 1
MUIN 181	BMus Practical Lessons 2
MUIN 280	BMus Practical Lessons 3
MUIN 281	BMus Practical Lessons 4

MUIN 283 BMus Concentration Final Examination

Examination:

### **BMus Concentration Final Examination (MUIN 283)**

*Purpose*: To determine that the student is sufficiently accomplished to qualify for the degree of Bachelor of Music. In the event that the student is inadequately prepared, the panel may recommend to the department in which the student is registered that: a) the student be asked to withdraw from the program; or b) the student be permitted to redo the examination.

*Panel*: A minimum of two staff members (not including the teacher), one of whom must be from the area. The panel is appointed by the Chair of the Department of Performance. At the discretion of the Departmental Chair, the teacher may be included on panels of three or more examiners.

Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

## 10.9.2.2 Major Study

A student majoring in Performance must show talent for this field before being admitted to the program. The practical requirement for these programs comprises examinations and recitals as specified in the programs.

B.Mus. Major in PB.M;jJ3Plo4 1 129.561 277g in Pe must shoB3r in P

<b>Major Study Sequence</b>	
MUIN 481	BMus Practical Lessons 8
MUIN 482	BMus Performance Examination 3
MUIN 369	Concerto (mandatory test for pianists)

#### **Examinations:**

#### **BMus Performance Examination 1 (MUIN 282)**

*Purpose*: To assess the student's progress in the practical area and determine whether or not the student may continue in the program. The panel may recommend to the Department that the student be: a) asked to withdraw from the program; b) permitted to continue to the BMus Performance Examination 2.

*Panel*: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance. *Distribution of Marks*: The final mark for the examination is the average of the marks submitted by the examination panel.

### **BMus Performance Examination 2 (MUIN 382)**

Purpose: To assess the student's ability to perform a program of sufficient length and suitable repertoire as specified in the requirements for each instrument.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.

Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

#### **BMus Performance Examination 3 (MUIN 482)**

Purpose: All recitals are to be performed in public before a jury and are intended to demonstrate technical mastery of their instrument/voice as well as an understanding of different musical styles appropriate to their level of study.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.

Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

### 10.9.2.3 Licentiate Study

Students must show talent for this field before being admitted to the program. Grades of A- or higher in all practical requirements are mandatory for continuation in the program.

#### 10.9.2.3.1 L.Mus. Performance

The sequence would normally be:

<b>Licentiate Study Sequence</b>	
MUIN 250	L.Mus. Practical Instruction 1
MUIN 251	L.Mus. Practical Instruction 2
MUIN 252	L.Mus. Performance 1 Examination
MUIN 350	L.Mus. Practical Instruction 3
MUIN 333	Piano Techniques 2 (pianists only)
MUIN 351	L.Mus. Practical Instruction 4
MUIN 352	L.Mus. Performance 2 Examination
MUIN 450	L.Mus. Practical Instruction 5
MUIN 433	Piano Techniques 3 (pianists only)
MUIN 451	L.Mus. Practical Instruction 6
MUIN 452	L.Mus. Performance 3 Examination
MUIN 369	Concerto (mandatory test for pianists)

#### **Examinations:**

#### L.Mus. Performance 1 Examination (MUIN 252)

Purpose: To assess the student's progress in the practical area and determine whether or not the student may continue in the program. The panel may recommend to the Department that the student be: a) asked to withdraw from the program; or b) permitted to continue to the L.Mus. Performance 2 Exam.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.

Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

#### L.Mus. Performance 2 Examination (MUIN 352)

Purpose: The recital is a public presentation, before a jury, intended to demonstrate competence in public solo performance. Non-keyboard performers and singers must use appropriate accompaniment.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.

Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

#### L.Mus. Performance 3 Examination (MUIN 452)

Purpose: All recitals are to be performed in public before a jury and are intended to demonstrate technical mastery of their instrument/voice as well as an understanding of different musical styles appropriate to their level of study.

Panel: A minimum of three staff members, one of whom may be the student's teacher. The panel is appointed by the Chair of the Department of Performance.

Distribution of Marks: The final mark for the examination is the average of the marks submitted by the examination panel.

#### 10.9.2.4 Postgraduate Study

Master of Music (M.Mus.), Graduate Artist Diploma (Gr.Art.Dip.), Graduate Diploma in Performance (Gr.Dip.), and Doctor of Music (D.Mus.) candidates should consult Schulich School of Music > Graduate > Browse Academic Units & Programs > : Schulich School of Music for program requirements.

#### 10.9.2.5 Elective Practical Instruction

Elective practical instruction is also known as elective lessons. Elective practical instruction courses have an MUIN prefix.

Students may elect to pursue further practical instruction in an instrument/voice beyond a program's curricular requirements.

Additional student fees ( section 10.6.7: Tuition Fees, Practical Instruction Fees, and Lesson Quotas) may apply when students apply for elective practical instruction.

For more information about elective practical instruction, visit the Elective Lessons website mcgill.ca/music/resources/undergraduate/practical-instruction-muin-courses/elective-lessons.

## 10.10 Practical Examinations

Practical exams are concentration or performance exams with an MUIN prefix. Students cannot add MUIN courses on Minerva. They must submit an application form to apply for a practical exam.

Details of specific examination requirements and practical exam application form for each area:

- Brass
- Early Music
- Guitar
- Harpg
- Jazz
- Organ
- Percussion
- Piano
- Strings
- Voice
- Woodwinds

are available on the area's program webpage at mcgill.ca/music/programs or may be obtained from the Department of Performance office.

Moreover, the Faculty is transforming the way science is taught, with an increased emphasis on student/professor interaction and outreach. This approach emphasizes hands-on research at the undergraduate level and a more personal, one-on-one style between professors and students that traditionally did not begin until the graduate level.

The Faculty counts undergraduate students as one of its key strengths. The calibre of McGill's undergraduates is very high—they boast the highest average entrance grades in Canada—and the Faculty understands that these brilliant young minds are the key to its future.

### 11.2 History of the Faculty of Science

The study of science at McGill goes back almost two centuries, when the lower campus was a rough and muddy cow pasture and the University struggled to establish itself. In 1855, the job of principal was given to a Nova Scotia—born geologist, John William Dawson. When he arrived at McGill, Dawson laid out plans for walks and roads, and at his own expense arranged the planting of trees on the entrance avenue. More importantly, Dawson worked diligently to transform McGill from a poorly equipped provincial college into one of the best scientific institutions in the world. In 1882, he successfully lobbied for the creation of the Royal Society of Canada and brought international renown to McGill.

In the century and a half since Dawson steered the Faculty of Science onto the path of excellence, the Faculty has received numerous honours for its groundbreaking research, including Nobel prizes to ten Science alumni or Faculty members, as well as over 100 fellowships in the Royal Society of Canada. More importantly, McGill's scientists have made the world a better place in which to live and have provided answers to the deepest mysteries facing humanity. Examples of McGill's breakthroughs include the world's first effective anti-retroviral HIV drug, the theory explaining photosynthesis, and the discovery of the fastest-spinning pulsar in the known universe.

McGill's Faculty of Science has a long tradition of discovery and innovation that no other Canadian university, and only a handful of U.S. schools can match. Our long tradition of scientific leadership, and the illustrious roster of McGill researchers who changed the weei

SOUSA advisers provide assistance with degree planning and are a valuable referral source. They are a good place to start for students who are not certain where to address their questions. They also offer help managing academic situations during periods of personal, financial, or medical problems, by working with students to identify various possibilities and strategies for making informed decisions.

Special requests can be made, in writing, to the Associate Dean, Student Affairs.

The Committee on Student Standing (CSS) will consider appeals of the Associate Dean's decisions. For information about CSS, see the Associate Dean, Student Affairs' assistant.

# 11.5 Faculty Admission Requirements

For information about admission requirements for the B.Sc., please refer to the Undergraduate Admissions Guide, found at *mcgill.ca/undergraduate-admissions/apply*.

For information about interfaculty transfers, refer to *University Regulations and Resources > Undergraduate > Registration > section 1.3.6: Interfaculty Transfer* as well as the relevant information posted on the SOUSA Student Handbook under Degree Transfers at *mcgill.ca/science/undergraduate/handbook*.

# 11.6.1.3 Readmission after Interruption of Studies for a Period of Five Consecutive Years or More

Students who are readmitted after interrupting their studies for a period of five consecutive years or more may be required to complete a minimum of 60 credits and satisfy the requirements of a program. In this case, a new CGPA will be calculated. The Associate Dean, Student Aff

### 11.6.4.1.3 Honours Programs

Honours programs typically involve an even higher degree of specialization, often include supervised research, and require students to maintain a high academic standard. Although honours programs are specially designed to prepare you for graduate studies, graduates of the other degree programs may also be admissible to many graduate schools. If you intend to pursue graduate studies in your discipline, you should consult a departmental adviser regarding the appropriate selection of courses in your field.

#### 11.6.4.2 Minor and Minor Concentration Programs

In addition to the liberal, major, and honours degree programs, students in the Faculty of Science may select a minor or approved minor concentration program. These are coherent sequences of courses in a given discipline or interdisciplinary area that may be taken in addition to the courses required for the degree program.

Science minor concentrations consist of up to 24 credits.

Arts minor concentrations consist of 18 credits.

A minimum of 18 new credits must be completed in the minor or minor concentration.

For a list of minor programs, see *section 11.10.2: Minor Programs*; for minor concentrations that are approved for Science students, see *section 11.10.5: Arts Major and Minor Concentrations Open to Science Students*.

#### 11.6.4.3 Other Second Programs

In addition to a major or honours program, students may pursue a second major or honours program, or an Arts major concentration program. Each major or honours program must contain a minimum of 36 credits that are distinct from the courses used to satisfy the other program.

#### 11.6.4.4 Special Designations

The Faculty of Science recognizes Bachelor of Science (B.Sc.) students who have gone beyond a typical B.Sc. experience by awarding certain special designations to their student record and degree at graduation.

#### 11.6.4.4.1 B.Sc. Global Designation

 $For details on the B.Sc.\ Global\ Designation, students\ should\ refer\ to\ \textit{mcgill.ca/science/undergraduate/programs/bsc-global}.$ 

#### 11.6.4.4.2 Internship Program Designation

All B.Sc. programs can include an internship component. For more details, students should refer to section 11.12: Science Internships and F

Sometimes, the same course is offered by two different departments. Such courses are called "double-prefix" courses. When such courses are offered simultaneously, you should take the course offered by the department in which you are obtaining your degree. For example, in the case of double-prefix courses CHEM XYZ and PHYS XYZ, Chemistry students take CHEM XYZ and the Physics students take PHYS XYZ. If a double-prefix course is offered by different departments in alternate years, you may take whichever course best fits your schedule.



Note for Arts students: Credit for computer courses offered by the School of Computer Science is governed by rules specified in each individual course description.



Note for Science, and Bachelor of Arts and Science students: Credit for statistics courses offered by faculties other than Arts and Science requires the permission of the Associate Dean (Student Affairs), Science, except for students in the B.Sc. Major in Environment, who may take required statistics courses in the Faculty of Agricultural and Environmental Sciences necessary to satisfy their program requirements. Credit for computer courses offered by faculties other than Science requires the permission of the Associate Dean (Student Affairs) Science, and will be granted only under exceptional circumstances.

Credit for statistics courses for Arts, Science, and Bachelor of Arts and Science students will be given with the following stipulations:

- Credit will be given for only one of the following introductory statistics courses: AEMA 310, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, GEOG 202, MATH 203, MGCR 271, MGCR 273, POTH 204, PSYC 204, SOCI 350.
- Credit will be given for only **one** of the following intermediate statistics courses: AEMA 411, ECON 227D1/D2, ECON 257D1/D2, GEOG 351, MATH 204, PSYC 305, SOCI 461, with the exception that you may receive credit for both PSYC 305 and ECON 227D1/D2 or ECON 257D1/D2.
- Students who have already received credit for MATH 324 or MATH 357 will not receive credit for any of the following: AEMA 310, AEMA 411, BIOL 373, ECON 227D1/D2, ECON 257D1/D2, GEOG 202, GEOG 351, MATH 203, MATH 204, MGCR 271, MGCR 273, PSYC 204, PSYC 305, SOCI 350.
- For 500-level statistics courses not listed above, students must consult a program/department adviser to ensure that no significant overlap exists. Where such overlap exists with a course for which the student has already received credit, credit for the 500-level course will not be allowed.
- PSYC 204 may not be taken if a grade of 75% was received in an equivalent course completed at CEGEP.

**Courses Outside the Faculties of Arv** 

# 11.6.5.3 Correspondence, Distance Education, or Web-Based Courses

Science students may obtain transfer credit for correspondence, distance education, or web-based courses if they receive prior approval from the appropriate McGill department for the course content **and** prior approval from the Science Office of Undergraduate Student

## 11.8 Freshman Interest Groups

Freshman Interest Groups (FIGs) are groups of approximately 25 U0 students and U1 students in their first semester, in the B.Sc. or B.A. & Sc., led by a Faculty of Science academic adviser and an upper-year undergraduate student. They meet once every two weeks in the Fall or Winter semester (or weekly for half the semester) to discuss a wide range of topics, such as science in the news, program choices, undergraduate research opportunities, or various aspects of life in Montreal. The purpose of a FIG is to ease the transition to McGill and Montreal and to provide an opportunity to interact with an adviser and with other U0 students in a small group. FIGs carry no credit and there is no charge. For more information and on how to register: Bachelor of Science students, refer to the New Student website B.Sc. Freshman course selection section on FIGs; Bachelor or Arts & Science students, refer to the New Student website B.A. & Sc. Freshman course selection section on FIGs.

### 11.9 Examinations

Students should refer to *University Regulations and Resources > Undergraduate > section 1.6: Examinations: General Information* for information about final examinations and deferred examinations. Note that for the Faculty of Science, *University Regulations and Resources > Undergraduate > Examinations: General Information > Final Examinations > section 1.6.3.1: Final Examinations: University Regulations Concerning Final Examinations applies to courses up to and including the 500 level.* 

The exam schedules are posted on the McGill website at *mcgill.ca/exams*, normally one month after the start of classes for the Tentative Exam schedule, and two months after the start of classes for the Final Exam schedule.

Students are warned not to make travel arrangements to leav

- Microbiology and Immunology: section 11.13.23.4: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Microbiology and Immunology (50 credits)
- Physiology: section 11.13.31.4: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Physiology (50 credits)

- Computer Science: section 11.13.9.8: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Computer Science (45 credits)
- Earth and Planetary Sciences: section 11.13.10.7: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Earth and Planetary Sciences (45 credits)
- Geography: section 11.13.17.7: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Geography (49 credits)
- Mathematics: section 11.13.22.9: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Mathematics (45 credits)
- Physics: section 11.13.30.8: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Physics (45 credits)
- Software Effgint@filig:0.00 atibit 94.292959y \$50 km lor of Science (B.Sc.) Liberal Program Core Science Component Software Engineering (49 credits)
- Statistics: section 11.13.22.10: Bachelor of Science (B.Sc.) Liberal Program Core Science Component Statistics (48 credits)

### 11.10.1.4.2 Major Programs

- Atmospheric Science: section 11.13.3.6: Bachelor of Science (B.Sc.) Major Atmospheric Science (62 credits)
- Chemistry: section 11.13.7.8: Bachelor of Science (B.Sc.) Major Chemistry (59 credits)
- Chemistry Bio-or

#### 11.10.1.4.4 Honours Programs

- Applied Mathematics: section 11.13.22.15: Bachelor of Science (B.Sc.) Honours Applied Mathematics (63 credits)
- Atmospheric Science: section 11.13.3.8: Bachelor of Science (B.Sc.) Honours Atmospheric Science (74 credits)
- Chemistry: section 11.13.7.11: Bachelor of Science (B.Sc.) Honours Chemistry (71 credits)
- Chemistry Bio-organic option: section 11.13.7.12: Bachelor of Science (B.Sc.) Honours Chemistry Bio-organic (75 credits)
- Computer Science: section 11.13.9.14: Bachelor of Science (B.Sc.) Honours Computer Science (75 credits)
- Earth System Science: section 11.13.11.5: Bachelor of Science (B.Sc.) Honours Earth System Science (66 credits)
- Environment: section 7.7.6.2: Bachelor of Science (B.Sc.) Honours Environment (72 credits)
- Geography: section 11.13.17.9: Bachelor of Science (B.Sc.) Honours Geography (66 credits)
- Geology: section 11.13.10.9: Bachelor of Science (B.Sc.) Honours Geology (75 credits)
- Mathematics: section 11.13.22.16: Bachelor of Science (B.Sc.) Honours Mathematics (63 credits)
- Physics: section 11.13.30.13: Bachelor of Science (B.Sc.) Honours Physics (78 credits)
- Planetary Sciences: section 11.13.10.10: Bachelor of Science (B.Sc.) Honours Planetary Sciences (78 credits)
- Probability and Statistics: section 11.13.22.17: Bachelor of Science (B.Sc.) Honours Probability and Statistics (60-63) (63 credits)
- Software Engineering: section 11.13.9.16: Bachelor of Science (B.Sc.) Honours Software Engineering (75 credits)

### 11.10.1.4.5 Joint Honours Programs

- Mathematics and Computer Science: section 11.13.22.19: Bachelor of Science (B.Sc.) Honours Mathematics and Computer Science (78 credits)
- Mathematics and Physics: section 11.13.30.15: Bachelor of Science (B.Sc.) Honours Mathematics and Physics (81 credits)
- Physics and Chemistry: section 11.13.30.16: Bachelor of Science (B.Sc.) Honours Physics and Chemistry (80 credits)
- Physics and Computer Science: section 11.13.30.17: Bachelor of Science (B.Sc.) Honours Physics and Computer Science (81 credits)
- Statistics and Computer Science: section 11.13.22.18: Bachelor of Science (B.Sc.) Honours Statistics and Computer Science (79 credits)

### 11.10.2 Minor Programs

#### **Minor Programs**

Atmospheric Science: section 11.13.3.4: Bachelor of Science (B.Sc.) - Minor Atmospheric Science (18 credits)

**Biology**: section 11.13.5.6: Bachelor of Science (B.Sc.) - Minor Biology (25 credits)

**Biotechnology**: section 11.13.6.5: Bachelor of Science (B.Sc.) - Minor Biotechnology (for Science Students) (24 credits)

Chemical Engineering: section 11.13.7.6: Bachelor of Science (B.Sc.) - Minor Chemical Engineering (24 credits)

Chemistry: section 11.13.7.5: Bachelor of Science (B.Sc.) - Minor Chemistry (20 credits)

Cognitive Science: section 11.13.8.2: Bachelor of Science (B.Sc.) - Minor Cognitive Science (24 credits)

**Computer Science**: section 11.13.9.7: Bachelor of Science (B.Sc.) - Minor Computer Science (24 credits)

Earth System Science: section 11.13.11.3: Bachelor of Science - Minor Earth System Science (18 credits)

Education for Science Students: section 11.13.35.4: Bachelor of Science (B.Sc.) - Minor Education for Science Students (18 credits)

Electrical Engineering: section 11.13.30.7: Bachelor of Science (B.Sc.) - Minor Electrical Engineering (24 credits)

Entrepreneurship for Science Students: section 11.13.12.2: Bachelor of Science (B.Sc.) - Minor Entrepreneurship for Science Students (18 credits)

**Environment:** section 7.7.1.2: Bachelor of Science (Agricultural and Environmental Sciences) (B.Sc.(Ag.Env.Sc.)) or Bachelor of Science (B.Sc.) - Minor Environment (18 credits)

Field Study: section 11.13.15.1: Field Studies - Minor Field Studies (18 credits)

Finance for Non-Management Students: section 11.13.21.1: Bachelor of Commerce (B.Com.) - Minor Finance (For Non-Management Students) (18

#### **Major Concentrations**

**Economics**: section 3.10.10.5: Bachelor of Arts (B.A.) - Major Concentration Economics (36 credits)

English - Cultural Studies: section 3.10.13.11: Bachelor of Arts (B.A.) - Major Concentration English - Cultural Studies (36 credits)

English - Drama and Theatre: section 3.10.13.10: Bachelor of Arts (B.A.) - Major Concentration English - Drama and Theatre (36 credits)

English - Literature: section 3.10.13.9: Bachelor of Arts (B.A.) - Major Concentration English - Literature (36 credits)

Gender, Sexuality, Feminist, & Social Justice Studies: section 3.10.16.5: Bachelor of Arts (B.A.) - Major Concentration Gender, Sexuality, Feminist, & Social Justice Studies (36 credits)

Geography (Urban Studies): section 4.11.18.9: Bachelor of Arts (B.A.) - Major Concentration Geography (Urban Studies) (36 credits)

German Studies: section 3.10.24.14: Bachelor of Arts (B.A.) - Major Concentration German Studies (36 credits)

Hispanic Languages: section 3.10.24.18: Bachelor of Arts (B.A.) - Major Concentration Hispanic Studies (36 credits)

**History**: section 3.10.18.5: Bachelor of Arts (B.A.) - Major Concentration History (36 credits)

International Development Studies: section 3.10.21.6: Bachelor of Arts (B.A.) - Major Concentration International Development Studies (36 credits)

Italian Studies: section 3.10.24.22: Bachelor of Arts (B.A.) - Major Concentration Italian Studies (36 credits)

Jewish Studies: section 3.10.23.5: Bachelor of Arts (B.A.) - Major Concentration Jewish Studies (36 credits)

Langue et littérature françaises - Études et pratiques littéraires: section 3.10.8.9: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Études et pratiques littéraires (36 crédits)

Langue et littérature françaises - Traduction: section 3.10.8.10: Baccalauréat ès Arts (B.A.) - Concentration majeure Langue et littérature françaises - Traduction (36 crédits)

Latin American & Caribbean Studies: section 3.10.24.30.5: Bachelor of Arts (B.A.) - Major Concentration Latin American & Caribbean Studies (36 credits)

Linguistics: section 3.10.25.7: Bachelor of Arts (B.A.) - Major Concentration Linguistics (36 credits)

Music (available to students in B.Sc. Liberal only): section 3.10.29.7: Bachelor of Arts (B.A.) - Major Concentration Music (36 credits)

Philosophy: section 3.10.30.5: Bachelor of Arts (B.A.) - Major Concentration Philosophy (36 credits)

Political Science: section 3.10.31.7: Bachelor of Arts (B.A.) - Major Concentration Political Science (36 credits)

Religious Studies: section 3.10.33.11: Bachelor of Arts (B.A.) - Major Concentration Religious Studies (36 credits)

Russian: section 3.10.24.27: Bachelor of Arts (B.A.) - Major Concentration Russian (36 credits)

Sociology: section 3.10.38.6: Bachelor of Arts (B.A.) - Major Concentration Sociology (36 credits)

World Islamic and Middle East Studies: section 3.10.22.2.9: Bachelor of Arts (B.A.) - Major Concentration World Islamic & Middle East Studies (36 credits)

### 11.10.5.2 Minor Concentrations

### **Minor Concentrations**

African Studies: section 3.10.22.1.3: Bachelor of Arts (B.A.) - Minor Concentration African Studies (18 credits)

Anthropology: section 3.10.4.6: Bachelor of Arts (B.A.) - Minor Concentration Anthropology (18 credits)

Arabic Language: section 3.10.22.2.4: Bachelor of Arts (B.A.) - Minor Concentration Arabic Language (18 credits)

Art History: section 3.10.5.5: Bachelor of Arts (B.A.) - Minor Concentration Art History (18 credits)

Canadian Studies: section 3.10.20.7: Bachelor of Arts (B.A.) - Minor Concentration Canadian Studies (18 credits)

Classics: section 3.10.18.8: Bachelor of Arts (B.A.) - Minor Concentration Classics (18 credits)

Communication Studies – see Art History and Communication Studies: section 3.10.5.6: Bachelor of Arts (B.A.) - Minor Concentration Communication Studies (18 credits)

East Asian Language and Literature: section 3.10.9.4: Bachelor of Arts (B.A.) - Minor Concentration East Asian Language and Literature (18 credits)

East Asian Cultural Studies: section 3.10.9.5: Bachelor of Arts (B.A.) - Minor Concentration East Asian Cultural Studies (18 credits)

East Asian Language, Supplementary: section 3.10.9.6: Bachelor of Arts (B.A.) - Supplementary Minor Concentration East Asian Language (18 credits)

Economics: section 3.10.10.4: Bachelor of Arts (B.A.) - Minor Concentration Economics (18 credits)

English - Cultural Studies: section 3.10.13.8: Bachelor of Arts (B.A.) - Minor Concentration English - Cultural Studies (18 credits)

# **Minor Concentrations**

 $\textbf{English-Drama and Theatre}: \ \textit{section 3.10.13.7}: \ \textit{Bachelor of Arts (B.A.)-Minor Concentration English-Drama and Theatre (18\ \textit{credits}) \\$ 

 $\textbf{English-Literature}:\ section\ 3.10.13.6:\ Bachelor\ of\ Arts\ (B.A.)\ -\ Minor\ Concentration\ English\ -\ Literature\ (18\ credits)$ 

Gender, Sexuality, F

universities, and in the field. Many of these are organized through formal courses or programs organized by the Faculty of Science or its departments. For more information, see the following:

- section 11.11.1: Research Project Courses
- section 11.11.1.1: "396" Undergraduate Research Project Courses
- section 11.11.2: Undergraduate Student Research Awards such as the Tri-Agency USRA and SURA programs
- section 11.11.3: Undergraduate Poster Showcase
- section 11.11.4: Getting Involved in Research as an Undergraduate
- Dean's Multidisciplinary Undergraduate Research List see description in *University Regulations and Resources > Undergraduate > Graduation > Graduation Honours > section 1.9.3.3: Faculty of Science Dean's Multidisciplinary Undergraduate Research List.*

Because internships and field study programs may include a research component, please also refer to: section 11.12: Science Internships and Field Studies.Gr

#### 11.11.4 Getting Involved in Research as an Undergraduate

### Opportunities at McGill

Departments and individual researchers at McGill offer various opportunities for undergraduate students to get involved in research. These arrangements may be voluntary or remunerated by academic credit or income.

Some are formal programs that you can find more information about in the eCalendar at Faculty of Science > Undergraduate > Undergraduate Research Opportunities:

- section 11.11.1: Research Project Courses
- section 11.11.1.1: "396" Undergraduate Research Project Courses
- section 11.11.2: Undergraduate Student Research Awards

Others come about through informal discussions between students and professors.

For more information on finding research opportunities at McGill, including tips for contacting researchers, visit mcgill.ca/science/research/undergraduate-research/finding-opportunities.

#### **Internships and Field Studies**

Some science internships and field study programs include a research component. Refer to section 11.12: Science Internships and Field Studies for more information.

#### **Beyond McGill**

You may also want to look for opportunities funded or offered by external foundations or institutions, research agencies, other academic institutions, or scholarly societies. Examples include: a provincial cancer research society, the science funding agency of another country which you wish to visit or where you hold citizenship, research hospitals or universities in another city, or an international psychological association.

### 11.12 Science Internships and Field Studies

The Science Internships & Field Studies Office promotes field studies and internship opportunities to interested students seeking hands-on experience. The office coordinates the field study semesters offered through the Faculty of Science and provides information on internship opportunities to students who are in Science programs at McGill. Whether you decide to participate in a field study semester or apply classroom theory to practice, the Science Internships & Field Studies Office will offer you assistance in your decision.

Burnside Hall, Room 720 805 Sherbrooke Street West Montreal QC H3A 0B9

Telephone: 514-398-1063; 514-398-8365

Email: ifso.science@mcgill.ca

Website:mcgill.ca/science/undergraduate

### 11.12.1 Internship Program: Industrial Practicum (IP) and Internship Year in Science (IYS)

The Internship Program is open to all Science undergraduate students, as well as qualified students in undergraduate Arts or Arts & Science programs majoring in Environment, Computer Science, Software Engineering, Geography, Mathematics, and Psychology. Participating in an internship offers you the chance to add a practical element to your studies, solidify your career goals, gain some valuable experience, and earn money. Internships may have a basis in research.

To be eligible to apply:

- You must be registered as a full time student before and after the IP or the IYS is completed.
- You must have completed at least 27 credits and have at least 12 credits remaining in your degree program.
- Your CGPA must be 2.7 or higher.
- International McGill students are eligible to apply to summer IP and IYS positions (unless otherwise indicated on the job posting). Restrictions apply; interested students should visit the Internships & Field Studies Office's website at mcgill.ca/science/undergraduate/internships-field for details.

The program features the Industrial Practicum (4 months) and the Internship Year in Science (8, 12, 16 months).

### **Internship Program Designation**

The Internship Program will also give you the opportunity to enhance your degree: if you are a student in the Faculty of Science and you complete two *Industrial Practica* (IP) or participate in an *Internship Year in Science* (IYS), the name of your program will change to include the Internship Program designation (e.g., Bachelor of Science – Computer Science - Internship Program).

For more information on IP and IYS, please see mcgill.ca/science/undergraduate/internships-field/internships.

# 11.12.2 Field Study Semester Programs

McGill's Field Study Semester programs (in Africa, Arctic, Barbados, and Panama) are research-based, as are many shorter field courses offered by the Departments of Biology

Option 2) 3 courses from MATH and 3 courses from BIOL, CHEM or PHYS.

# **Science Complementary**

The seventh course is chosen from the list of Approved Freshman Science Courses.

### Notes:

- 1. Students who have not studied all of Biology, Chemistry, and Physics at the grade 12 level or equivalent are strongly advised to include at least one course in the missing discipline in their Freshman Program.
- 2. Many students will complete more than seven courses from the Approved Freshman Science Courses list, particularly those who wish to leave several options open for their choice of major.
- 3. Students entering the Freshman Program should be aware of the department specific requirements when selecting their courses. Detailed advising information is available at http://www

#### **Associate Professors**

Orest W. Blaschuk (joint appt. with Surgery); Craig Mandato; John F. Presley

#### Assistant Professors

Susanne Bechstedt; Khanh Huy Bui; Sean McWatt; Michael Strauss; Mikaela Stiver; Gabriel Venne; Nicole Ventura; Mina Zeroual; Natalie Zeytuni

#### **Associate Members**

Rosetta Antonacci (Ingram School of Nursing); Daniel Bernard (Pharmacology and Therapeutics); Claire Brown (Physiology); Colin Chalk (Neurology and Neurosurgery); Jean-François Cloutier (Neurology and Neurosurgery); Claudio Cuello (Pharmacology and Therapeutics); Giovanni Di Battista (Medicine and Health Sciences); Allen Ehrlicher (Bioengineering); Alyson Fournier (Neurology and Neurosurgery); Lisbet Haglund (Surgery); Janet Henderson (Medicine and Health Sciences); Loydie A. Jerome-Majewska (Pediatrics and Human Genetics); Mari T. Kaartinen (Dentistry); Svetlana Komarova (Dentistry); David Labbé (Surgery and Urology); Stephane Laporte (Medicine and Health Sciences); Andréa Leblanc (Neurology and Neurosurgery); Stéphanie Lehoux (Medicine and Health Sciences); Heidi McBride (Montreal Neurological Institute); Peter Metrakos (Surgery); Makato Nagano (Obstetrics and Gynecology); Stephen Robbins; Christian Rocheleau (Endocrinology and Metabolism); Edward S. Ruthazer (Neurology and Neurosurgery); Donna Senger; Peter Siegel (Medicine and Health Sciences, and Biochemistry); Charles E. Smith; Thomas Stroh (Neurology and Neurosurgery); Jason Tanny (Pharmacology and Therapeutics)

#### **Adjunct Professors**

Gregor Andelfinger; Philippe Campeau; Michel Cayouette; Frédéric Charron; Jean-François Côté; Daniel Cyr; Jacques Drouin; Jennifer Estall; Patrick Freud; Michael Greenwood; David Hipfner; Artur Kania; Justin Kollman; Stephane Lefrancois; Alexei Pshezhetsky; Isabelle Rouiller; Michael Sacher; Elitza Tocheva; Javier Vargas

### 11.13.2.4 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Anatomy and Cell Biology (48 credits)

Students may complete this program with a minimum of 47 credits or a maximum of 48 credits depending on their choice of complementary courses.

### Required Courses (32 credits)

Note: ANAT 261 must be taken in U1.

\* Students who have taken the equivalent of CHEM 212 and/or MATH 203 in CEGEP (as defined at http://www.mcgill.ca/students/courses/plan/transfer/) are exempt and must replace these credits with elective course credits to satisfy the total credit requirement for their degree.

ANAT 212	(3)	Molecular Mechanisms of Cell Function
ANAT 214	(3)	Systemic Human Anatomy
ANAT 261	(4)	Introduction to Dynamic Histology
ANAT 262	(3)	Introductory Molecular and Cell Biology
BIOL 200	(3)	Molecular Biology
BIOL 202	(3)	Basic Genetics
CHEM 212*	(4)	Introductory Organic Chemistry 1
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

One of the following statistics courses:

MATH 203 (3) Principles of Statistics 1

ANAT 322 (3) Neuroendocrinology ANAT 365 (3) Cellular Trafficking

CHEM 222*	(4)	Introductory Organic Chemistry 2
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

# One of the following statistics courses:

BIOL 373	(3)	Biometry
MATH 203*	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics

# **Complementary Courses (24 credits)**

Complementary courses are selected as follows with a minimum of 6 credits at the 400 level or higher:

12 credits of advanced anatomy courses (AAC) selected from:

ANAT 314	(3)	Human Musculoskeletal Anatomy
ANAT 321	(3)	Circuitry of the Human Brain
ANAT 322	(3)	Neuroendocrinology
ANAT 365	(3)	Cellular Trafficking
ANAT 381	(3)	Experimental Embryology
ANAT 416	(3)	Development, Disease and Regeneration
ANAT 458	(3)	Membranes and Cellular Signaling
ANAT 514	(3)	Advanced Human Anatomy Laboratory
ANAT 541	(3)	Cell and Molecular Biology of Aging
ANAT 565	(3)	Diseases-Membrane Trafficking
NEUR 310	(3)	Cellular Neurobiology

## 12 credits of biologically oriented courses (BOC) selected from:

ANAT 314	(3)	Human Musculoskeletal Anatomy
ANAT 321	(3)	Circuitry of the Human Brain
ANAT 322	(3)	Neuroendocrinology
ANAT 365	(3)	Cellular Trafficking
ANAT 381	(3)	Experimental Embryology
ANAT 416	(3)	Development, Disease and Regeneration
ANAT 458	(3)	Membranes and Cellular Signaling
ANAT 541	(3)	Cell and Molecular Biology of Aging
ANAT 565	(3)	Diseases-Membrane Trafficking
BIOC 311	(3)	Metabolic Biochemistry
BIOC 312	(3)	Biochemistry of Macromolecules
BIOC 450	(3)	Protein Structure and Function
BIOC 458	(3)	Membranes and Cellular Signaling
BIOC 503	(3)	Biochemistry of Immune Diseases
BIOL 300	(3)	Molecular Biology of the Gene

BIOL 303	(3)	Developmental Biology
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 313	(3)	Eukaryotic Cell Biology
BIOL 314	(3)	Molecular Biology of Cancer
BIOL 320	(3)	Evolution of Brain and Behaviour
BIOL 370	(3)	Human Genetics Applied
BIOL 518	(3)	Advanced Topics in Cell Biology
BIOL 520	(3)	Gene Activity in Development
BIOL 524	(3)	Topics in Molecular Biology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 544	(3)	Genetic Basis of Life Span
BIOL 546	(3)	Genetics of Model Systems
BIOL 551	(3)	Principles of Cellular Control
BIOL 575	(3)	Human Biochemical Genetics
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
BIOT 505	(3)	Selected Topics in Biotechnology
COMP 204	(3)	Computer Programming for Life Sciences
EXMD 401	(3)	Physiology and Biochemistry Endocrine Systems
EXMD 502	(3)	Advanced Endocrinology 1
EXMD 503	(3)	Advanced Endocrinology 02
EXMD 504	(3)	Biology of Cancer
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology
EXMD 507	(3)	Advanced Applied Respiratory Physiology
EXMD 508	(3)	Advanced Topics in Respiration
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology
MIMM 387	(3)	The Business of Science
MIMM 413	(3)	Parasitology
MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis
MIMM 509	(3)	Inflammatory Processes
NEUR 310	(3)	Cellular Neurobiology
PATH 300	(3)	Human Disease
PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHAR 303	(3)	Principles of Toxicology
		Neuropharmacology3)

18 credits of advanced anatomy courses (AAC) selected from:

<sup>\*</sup> Note: Students may take either ANAT 321 OR ANAT 323.

ANAT 314	(3)	Human Musculoskeletal Anatomy
ANAT 321**	(3)	Circuitry of the Human Brain
ANAT 322	(3)	Neuroendocrinology
ANAT 323**	(3)	Clinical Neuroanatomy
ANAT 365	(3)	Cellular Trafficking
ANAT 381	(3)	Experimental Embryology
ANAT 416	(3)	Development, Disease and Regeneration
ANAT 458	(3)	Membranes and Cellular Signaling
ANAT 514	(3)	Advanced Human Anatomy Laboratory
ANAT 541	(3)	Cell and Molecular Biology of Aging
ANAT 542	(3)	Transmission Electron Microscopy of Biological Samples
ANAT 565	(3)	Diseases-Membrane Trafficking
NEUR 310	(3)	Cellular Neurobiology

# 3 credits of biologically oriented courses (BOC) selected from:

ANAT 314	(3)	Human Musculoskeletal Anatomy
ANAT 321	(3)	Circuitry of the Human Brain
ANAT 322	(3)	Neuroendocrinology
ANAT 323	(3)	Clinical Neuroanatomy
ANAT 365	(3)	Cellular Trafficking
ANAT 381	(3)	Experimental Embryology
ANAT 416	(3)	Development, Disease and Regeneration
ANAT 458	(3)	Membranes and Cellular Signaling
ANAT 541	(3)	Cell and Molecular Biology of Aging
ANAT 542	(3)	Transmission Electron Microscopy of Biological Samples
ANAT 565	(3)	Diseases-Membrane Trafficking
BIOC 311	(3)	Metabolic Biochemistry
BIOC 312	(3)	Biochemistry of Macromolecules
BIOC 450	(3)	Protein Structure and Function
BIOC 458	(3)	Membranes and Cellular Signaling
BIOC 503	(3)	Biochemistry of Immune Diseases
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 303	(3)	Developmental Biology
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 313	(3)	Eukaryotic Cell Biology
BIOL 314	(3)	Molecular Biology of Cancer
BIOL 320	(3)	Evolution of Brain and Behaviour
BIOL 370	(3)	Human Genetics Applied
BIOL 518	(3)	Advanced Topics in Cell Biology

BIOL 520	(3)	Gene Activity in Development
BIOL 524	(3)	Topics in Molecular Biology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 544	(3)	Genetic Basis of Life Span
BIOL 546	(3)	Genetics of Model Systems
BIOL 551	(3)	Principles of Cellular Control
BIOL 575	(3)	Human Biochemical Genetics
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
BIOT 505	(3)	Selected Topics in Biotechnology
COMP 204	(3)	Computer Programming for Life Sciences
EXMD 401	(3)	Physiology and Biochemistry Endocrine Systems
EXMD 502	(3)	Advanced Endocrinology 1
EXMD 503	(3)	Advanced Endocrinology 02
EXMD 504	(3)	Biology of Cancer
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology
EXMD 507	(3)	Advanced Applied Respiratory Physiology
EXMD 508	(3)	Advanced Topics in Respiration
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology
MIMM 387	(3)	The Business of Science
MIMM 413	(3)	Parasitology
MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis
MIMM 509	(3)	Inflammatory Processes
NEUR 310	(3)	Cellular Neurobiology
NEUR 502	(3)	Basic and Clinical Aspects of Neuroimmunology
PATH 300	(3)	Human Disease
PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHAR 303	(3)	Principles of Toxicology
PHAR 562	(3)	Neuropharmacology
PHAR 563	(3)	Endocrine Pharmacology
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience
PHGY 451	(3)	Advanced Neurophysiology
PHGY 502	(3)	Exercise Physiology
PHGY 508	(3)	Advanced Renal Physiology
PHGY 513	(3)	Translational Immunology
PHGY 515	(3)	Blood-Brain Barrier in Health and Disease

PHGY 516	(3)	Physiology of Blood
PHGY 518	(3)	Artificial Cells
PHGY 552	(3)	Cellular and Molecular Physiology
PHGY 556	(3)	Topics in Systems Neuroscience
PSYT 455	(3)	Neurochemistry
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders

# 11.13.3 Atmospheric and Oceanic Sciences (ATOC)

## 11.13.3.1 Location

Burnside Hall, Room 305 805 Sherbrooke Street West Montreal QC H3A 0B9 Telephone: 514-398-3764 Fax: 514-398-6115

Email: <a href="mailto:info.aos@mcgill.ca">info.aos@mcgill.ca</a> Website: <a href="mailto:mcgill.ca/meteo">mcgill.ca/meteo</a>

# 11.13.3.2 About Atmospheric and Oceanic Sciences

The Department of Atmospheric and Oceanic Sciences offers, at the undergraduate level, :

### 11.13.3.3 Atmospheric and Oceanic Sciences Faculty

#### Chair

J.R. Gyakum (Interim)

### **Emeritus Professors**

P. Bartello (joint appt. with Mathematics and Statistics); J.F. Derome; H.G. Leighton; L.A. Mysak; M.K. Yau; I. Zawadzki

#### Professors

P. Ariya (joint appt. with Chemistry); J.R. Gyakum; B. Tremblay

#### **Associate Professors**

F. Fabry (joint appt. with Bieler School of Environment); Y. Huang; D. Kirshbaum; T. Preston (joint appt. with Chemistry); D. Straub; A. Zuend

### **Assistant Professors**

C. Dufour; D. Romanic; I. Tan

#### **Adjunct Professors**

L. Barrie; M. Buehner; P. Kollias; H. Lin; L.-P. Nadeau

### 11.13.3.4 Bachelor of Science (B.Sc.) - Minor Atmospheric Science (18 credits)

This Minor may be taken in conjunction with any program in the Faculty of Science.

### Required Courses (3 credits)

ATOC 214 (3) Introduction: Physics of the Atmosphere

### **Complementary Courses (15 credits)**

3-6 credits selected from:

ATOC 215	(3)	Oceans, Weather and Climate
ATOC 219*	(3)	Introduction to Atmospheric Chemistry
CHEM 219*	(3)	Introduction to Atmospheric Chemistry

<sup>\*</sup> Note: Students may select ATOC 219 or CHEM 219 but not both.

### **Complementary Course**

9-12 credits selected from:

ATOC 309	(3)	Weather Radars and Satellites
ATOC 312	(3)	Rotating Fluid Dynamics
ATOC 315	(3)	Thermodynamics and Convection
ATOC 357	(3)	Atmospheric and Oceanic Science Laboratory
ATOC 512	(3)	Atmospheric and Oceanic Dynamics
ATOC 513	(3)	Waves and Stability
ATOC 515	(3)	Turbulence in Atmosphere and Oceans
ATOC 517	(3)	Boundary Layer Meteorology
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
ATOC 525	(3)	Atmospheric Radiation
ATOC 531	(3)	Dynamics of Current Climates

ATOC 515	(3)	Turbulence in Atmosphere and Oceans
ATOC 517	(3)	Boundary Layer Meteorology
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
ATOC 525	(3)	Atmospheric Radiation
ATOC 531	(3)	Dynamics of Current Climates
ATOC 540	(3)	Synoptic Meteorology 1
ATOC 541	(3)	Synoptic Meteorology 2
ATOC 546	(1)	Current Weather Discussion
ATOC 548	(3)	Mesoscale Meteorology
ATOC 557	(3)	Research Methods: Atmospheric and Oceanic Science
ATOC 558	(3)	Numerical Methods and Laboratory
ATOC 568	(3)	Ocean Physics
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
MATH 203	(3)	Principles of Statistics 1
MATH 319	(3)	Partial Differential Equations
PHYS 333	(3)	Thermal and Statistical Physics
PHYS 340	(3)	Majors Electricity and Magnetism

# 11.13.3.6 Bachelor of Science (B.Sc.) - Major Atmospheric Science (62 credits)

# Required Courses (24 credits)

ATOC 214	(3)	Introduction: Physics of the Atmosphere
ATOC 312	(3)	Rotating Fluid Dynamics
ATOC 315	<b>(3)</b> (3MA	Thermodynamics and Convection
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
MATH 222	(3)	Calculus 3
		Linear

PHYS 257	(3)	Experimental Methods 1
3 credits selected from:		
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 251	(3)	Honours Classical Mechanics 1
3 credits selected from:		
PHYS 232	(3)	Heat and Waves
PHYS 253	(3)	Thermal Physics
6-9 credits selected from:		
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
		Introductory Ph

ATOC 309	(3)	Weather Radars and Satellites
ATOC 404+	(3)	Climate Physics
ATOC 517	(3)	Boundary Layer Meteorology
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods
PHYS 404+	(3)	Climate Physics
PHYS 512	(3)	Computational Physics with Applications

<sup>+</sup> Students may take either ATOC 404 or PHYS 404.

# General Stream (15-17 credits)

15-17 credits (at least 12 credits must be ATOC courses) selected from:

ATOC 309	(3)	Weather Radars and Satellites
ATOC 404+	(3)	Climate Physics
ATOC 512	(3)	Atmospheric and Oceanic Dynamics
ATOC 513	(3)	Waves and Stability
ATOC 517	(3)	Boundary Layer Meteorology
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
ATOC 525	(3)	Atmospheric Radiation
ATOC 531	(3)	Dynamics of Current Climates
ATOC 540	(3)	Synoptic Meteorology 1
ATOC 541	(3)	Synoptic Meteorology 2
ATOC 546	(1)	Current Weather Discussion
ATOC 548	(3)	Mesoscale Meteorology
ATOC 558	(3)	Numerical Methods and Laboratory
ATOC 568	(3)	Ocean Physics
CHEM 367	(3)	Instrumental Analysis 1
CHEM 575	(3)	Chemical Kinetics
EPSC 513	(3)	Climate and the Carbon Cycle
ESYS 300	(3)	Investigating the Earth System
ESYS 301	(3)	Earth System Modelling
GEOG 322	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments
MATH 555++	(4)	Fluid Dynamics
PHYS 404+	(3)	Climate Physics
PHYS 432++	(3)	Physics of Fluids
PHYS 512	(3)	Computational Physics with Application

<sup>+</sup> Students may take either ATOC 404 or PHYS 404.

<sup>++</sup> Students may take either PHYS 432 or MATH 555.

## 11.13.3.7 Bachelor of Science (B.Sc.) - Major Atmospheric Science and Physics (69 credits)

This Major provides a solid basis for postgraduate study in meteorology, atmospheric physics, or related fields, as well as the necessary preparation for embarking on a professional career as a meteorologist directly after the B.Sc.

The program is jointly administered by the Department of Physics and the Department of Atmospheric and Oceanic Sciences. Students should consult undergraduate advisers in both departments.

## Required Courses (57 credits)

ATOC 214	(3)	Introduction: Physics of the Atmosphere
ATOC 215	(3)	Oceans, Weather and Climate
ATOC 309	(3)	Weather Radars and Satellites
ATOC 312	(3)	Rotating Fluid Dynamics
ATOC 315	(3)	Thermodynamics and Convection
MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 314	(3)	Advanced Calculus
MATH 315	(3)	Ordinary Differential Equations
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 241	(3)	Signal Processing
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 331	(3)	Topics in Classical Mechanics
PHYS 333	(3)	Thermal and Statistical Physics
PHYS 340	(3)	Majors Electricity and Magnetism
PHYS 342	(3)	Majors Electromagnetic Waves
PHYS 346	(3)	Majors Quantum Physics

# **Complementary Course (12 credits)**

At least 6 of the 12 complementary credits must come from ATOC courses.

ATOC 357	(3)	Atmospheric and Oceanic Science Laboratory
ATOC 404*	(3)	Climate Physics

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ATOC 568	(3)	Ocean Physics
PHYS 339	(3)	Measurements Laboratory in General Physics
PHYS 404*	(3)	Climate Physics
PHYS 432	(3)	Physics of Fluids
PHYS 434	(3)	Optics
PHYS 439	(3)	Majors Laboratory in Modern Physics
PHYS 449	(3)	Majors Research Project
PHYS 512	(3)	Computational Physics with Applications

 $<sup>\</sup>ensuremath{^{*}}$  Students cannot take both ATOC 404 and PHYS 404.

Bachelor of Science (B.Sc.) - Honour

PHYS 230	(3)	Dynamics of Simple Systems
PHYS 251	(3)	Honours Classical Mechanics 1
3 credits selected from:		
PHYS 232	(3)	Heat and Waves
PHYS 253	(3)	Thermal Physics
		·
3 credits selected from:		
3 credits selected from:		
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
MATH 319	(3)	Partial Differential Equations
6-9 credits selected from:		
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods
CHEM 367	(3)	Instrumental Analysis 1
CHEM 575	(3)	Chemical Kinetics
MATH 203*	(3)	Principles of Statistics 1
MATH 317	(3)	Numerical Analysis
MATH 319	(3)	Partial Differential Equations
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
PHYS 333	(3)	Thermal and Statistical Physics
PHYS 340**	(3)	Majors Electricity and Magnetism
PHYS 342***	(3)	Majors Electromagnetic Waves
PHYS 350**	(3)	Honours Electricity and Magnetism
PHYS 352***	(3)	Honours Electromagnetic Waves

<sup>\*</sup> Students may take either MATH 203 or MATH 324.

# 21-23 credits from one of the following four streams:

# Weather Analysis and Forecasting Stream (22-23 credits)

16 credits from:

ATOC 309	(3)	Weather Radars and Satellites
ATOC 512	(3)	Atmospheric and Oceanic Dynamics
ATOC 521	(3)	Cloud Physics
ATOC 540	(3)	Synoptic Meteorology 1
ATOC 541	(3)	Synoptic Meteorology 2
ATOC 546	(1)	Current Weather Discussion

6-7 credits selected from:

ATOC 404+ (3) Climate Physics

<sup>\*\*</sup> Students may take either PHYS 340 or PHYS 350.

<sup>\*\*\*</sup> Students may take either PHYS 342 or PHYS 352.

ATOC 513	(3)	Waves and Stability
ATOC 515	(3)	Turbulence in Atmosphere and Oceans
ATOC 517	(3)	Boundary Layer Meteorology

PHYS 432++	(3)	Physics of Fluids
PHYS 512	(3)	Computational Physics with Applications

<sup>+</sup> Students may take either PHYS 432 or MATH 555.

# Atmospheric Chemistry and Physics Stream (21 credits)

15 credits from:

ATOC 309	(3)	Weather Radars and Satellites
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods

## 6 credits selected from:

ATOC 404+	(3)	Climate Physics
ATOC 512	(3)	Atmospheric and Oceanic Dynamics
ATOC 513	(3)	Waves and Stability
ATOC 517	(3)	Boundary Layer Meteorology
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 525	(3)	Atmospheric Radiation
ATOC 540	(3)	Synoptic Meteorology 1
ATOC 557	(3)	Research Methods: Atmospheric and Oceanic Science
ATOC 558	(3)	Numerical Methods and Laboratory
CHEM 367	(3)	Instrumental Analysis 1
CHEM 575	(3)	Chemical Kinetics
EPSC 513	(3)	Climate and the Carbon Cycle
MATH 423	(3)	Applied Regression
PHYS 404+	(3)	Climate Physics
PHYS 512	(3)	Computational Physics with Applications

<sup>+</sup> Students may take either ATOC 404 or PHYS 404.

## General Stream (21-22 credits)

(at least 15 credits must be ATOC courses) selected from:

ATOC 309	(3)	Weather Radars and Satellites
ATOC 404+	(3)	Climate Physics
ATOC 512	(3)	Atmospheric and Oceanic Dynamics
ATOC 513	(3)	Waves and Stability
ATOC 517	(3)	Boundary Layer Meteorology
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
ATOC 525	(3)	Atmospheric Radiation
ATOC 531	(3)	Dynamics of Current Climates
ATOC 540	(3)	Synoptic Meteorology 1

ATOC 541	(3)	Synoptic Meteorology 2
ATOC 546	(1)	Current Weather Discussion
ATOC 548	(3)	Mesoscale Meteorology
		Research Methods:

ATOC 513	(3)	Waves and Stability
ATOC 515	(3)	Turbulence in Atmosphere and Oceans
ATOC 517	(3)	Boundary Layer Meteorology

•	A practical science: Because biochemistry seeks to unravel the complex chemical reactions that occur in a wide variety of life forms, it provides the basis for practical advances in medicine, veterinary medicine, agriculture, and biotechnology. It underlies and includes such exciting new fields as molecular genetics and bioengineering. The knowledge and methods dev	;

# **Associate Members**

Gary Brouhard, Marc F

MATH 222	(3)	Calculus 3
PSYC 204	(3)	Introduction to Psychological Statistics

# **U3 Complementary Courses (3 credits)**

3 credits selected from:

BIOC 450 (3)	Protein Structure and Function
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BIOC 454 (3) Nucleic Acids

# 11.13.4.5 Bachelor of Science (B.Sc.) - Major Biochemistry (64 credits)

Students may transfer into the Major program at any time, provided they have met all course requirements.

# U1 Required Courses (23 credits)

<sup>\*</sup> Note: Students with CEGEP-level credit for the equivalents of CHEM 212 and/or CHEM 222 (see http://www.mcgill.ca/students/courses/plan/transfer/for accepted equivalents) may not take these courses at McGill and should replac1 122nmlents/\*t

BIOL 309	(3)	Mathematical Models in Biology
BIOL 373	(3)	Biometry
CHEM 267	(3)	Introductory Chemical Analysis
COMP 202	(3)	Foundations of Programming
COMP 204	(3)	Computer Programming for Life Sciences
MATH 203	(3)	Principles of Statistics 1
MATH 222	(3)	Calculus 3
PSYC 204	(3)	Introduction to Psychological Statistics

### U3 Required Courses (6 credits)

BIOC 450	(3)	Protein Structure and Function
BIOC 454	(3)	Nucleic Acids

# U3 Complementary Courses (6 credits)

### 3-6 credits selected from:

BIOC 458	(3)	Membranes and Cellular Signaling
BIOC 470	(3)	Lipids and Lipoproteins in Disease
BIOC 491	(6)	Independent Research
BIOC 503	(3)	Biochemistry of Immune Diseases
PSYT 455	(3)	Neurochemistry

# The remainder, if any, to be selected from the following list:

BIOL 300	(3)	Molecular Biology of the Gene
BIOL 303	(3)	Developmental Biology
BIOL 304	(3)	Evolution
BIOL 313	(3)	Eukaryotic Cell Biology
BIOL 314	(3)	Molecular Biology of Cancer
CHEM 267	(3)	Introductory Chemical Analysis
CHEM 482	(3)	Organic Chemistry: Natural Products
CHEM 502	(3)	Advanced Bio-Organic Chemistry
CHEM 532	(3)	Structural Organic Chemistry
CHEM 552	(3)	Physical Organic Chemistry
CHEM 572	(3)	Synthetic Organic Chemistry
EXMD 502	(3)	Advanced Endocrinology 1
MIMM 324	(3)	Fundamental Virology
PHAR 300	(3)	Drug Action
PHGY 311	(3)	Channels, Synapses and Hormones

# 11.13.4.6 Bachelor of Science (B.Sc.) - Honours Biochemistry (73 credits)

Admission to the Honours program will not be granted until U2. Students who wish to enter the Honours program in U2 should follow the U1 Major program. Those who satisfactorily complete the U1 Major program with a GPA of at least 3.20 and a mark of B- or better in every required course are eligible for admission to the Honours program.

Students seeking admission to the Honours program must obtain permission from the Departmental Student Affairs Officer, Christine Laberge (christine.laberge@mcgill.ca), during the Add/Drop period in September of their second year.

Promotion to U3 year is based on satisfactory completion of U2 courses with a GPA of at least 3.20 and a mark of B- or better in every required course. In borderline cases, the marks received in BIOC 311 and BIOC 312 will be of particular importance for continuation in the U3 Honours year.

For graduation in the Honours program, students must complete a minimum of 90 credits, pass all required courses with no grade less than B-, and achieve a CGPA of at least 3.20.

# **U1 Required Courses (23 credits)**

\* Note: Students with CEGEP-level credit for the equivalents of CHEM 212 and/or CHEM 222 (see http://www.mcgill.ca/students/courses/plan/transfer/

MATH 203	(3)	Principles of Statistics 1
MATH 222	(3)	Calculus 3
PSYC 204	(3)	Introduction to Psychological Statistics

# U3 Required Courses (15 credits)

BIOC 404 (3) Biophysical Methods in Biochemistry

Microbiology and Immunology Telephone: 514-934-1934, ext. 76143 Email: ciro.piccirillo@mcgill.ca

OR

Dr. Monroe Cohen Physiology

Telephone: 514-398-4342 Email: monroe.cohen@mcgill.ca

# 11.13.5 Biology (BIOL)

### 11.13.5.1 Location

Stewart Biology Building, Room N7/9B 1205 avenue Docteur Penfield Montreal QC H3A 1B1 Telephone: 514-398-4109

Website: mcgill.ca/biology

### 11.13.5.2 About Biology

Biology is the study of living things at the molecular, cellular, organismal, and ecosystem levels. It deals with fundamental questions such as:

- the origin and evolution of plants and animals;
- interactions between living organisms and their environment;
- · mechanisms of embryonic development;
- structure and function of the living cell and individual molecules within it;
- molecular basis of inheritance;
- biochemical and genetic basis of human diseases; and
- how the brain and the nervous system control behaviour.

The study of biology also has vast practical applications. The knowledge, methods, and concepts developed through research in the v

Our core undergraduate program will expose you to the broad areas of biology at all of these levels of complexity. At the same time you will be able to focus on topics related to your specific interests through complementary and elective courses. Beyond the large introductory classes, our class sizes are relatively small and you will hav

11.13541.1 MCDB: Molecular, Cellular, and Developmental Biology

BIOL 300, BIOL 301, BIOL 302, BIOL 303, BIOL 306, BIOL 309, BIOL 313, BIOL 314, BIOL 316, BIOL 324, BIOL 370, BIOL 377, BIOL 396, BIOL 413, BIOL 416, BIOL 466, BIOL 467, BIOL 468D1/D2, BIOL 469D1/D2, BIOL 518, BIOL 520, BIOL 524, BIOL 544, BIOL 546, BIOL 551, BIOL 565, BIOL 568, BIOL 569, BIOL 575, BIOL 588, BIOL 592, BIOC 311, HGEN 400, MIMM 314

11.135.4.1.1.1 NBB: Neurobiology and Behaviour

BIOL 300, BIOL 303, BIOL 304, BIOL 305, BIOL 306, BIOL 307, BIOL 309, BIOL 320, BIOL 377, BIOL 389, BIOL 413, BIOL 414, BIOL 466, BIOL 467, BIOL 468D1/D2, BIOL 469D1/D2, BIOL 506, BIOL 507, BIOL 517, BIOL 530, BIOL 532, BIOL 580, BIOL 588, BIOL 592, ANAT 321, ANAT 322, NEUR 310, PHAR 562, PHGY 311, PHGY 314, PHGY 425, PHGY 451, PHGY 556, PSYC 311, PSYC 318, PSYC 342, PSYC 410, PSYC 455, PSYT 500

### 11.13.5.5 Biology Faculty

#### Chair

Gregor Fussmann

#### **Graduate Program Director**

Tamara Western

Fiona Soper (Vice GPD)

#### **Emeritus Professors**

Gregory G. Brown; A. Howard Bussey; Robert L. Carroll, *in memoriam*; Ronald Chase; Rajinder S. Dhindsa; Jacob Kalff; Donald L. Kramer; Martin J. Lechowicz; Louis Lefebvre; Barid B. Mukherjee; Gerald S. Pollack; Ronald Poole; Derek Roff; Rolf Sattler

#### Professors

Ehab Abouheif; Graham A.C. Bell; Lauren Chapman; Melania Cristescu; Gregor Fussmann; Andrew Gonzalez; Irene Gregory-Eaves; Frédéric Guichard; Siegfried Hekimi; Andrew Hendry, *joint appt. with Redpath Museum*; Paul F. Lasko; Laura Nilson; Catherine Potvin; Neil M. Price; Richard Roy; Daniel J. Schoen; Hugo Zheng

### **Associate Professors**

Gary Brouhard; Thomas E. Bureau; David Dankort; Joseph A. Dent; Anna Hargreave; Paul Harrison; Michael Hendricks; Brian Leung; Nam-Sung Moon; Simon Reader; Rodrigo Reyes-Lamothe, *on sabbatical*); Jon Sakata; Frieder Schoeck; Jacalyn Vogel; Alanna Watt; Steph Weber; Tamara Western; Sarah Woolley; Monique Zetka

### **Assistant Professors**

Abigail Gerhold; Mélanie Guigueno; Arnold Hayer; Tomoko Ohyama; Lars Iversen; Laura Pollock; Fiona Soper; Jennifer Sunday

### **Associate Members**

BioEngineering: Adam Hendricks

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BIOL 313	(3)	Eukaryotic Cell Biology
Block C-Neuro/Behav	iour:	
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 307	(3)	Behavioural Ecology

### Other (15 credits)

15 credits other Biology courses at the 300-500 levels, of which 6 credits must be at the 400-500 levels; may include up to 6 credits of research, and may include up to 6 credits of other non-BIOL science courses subject to Adviser approval.

# 11.13.5.9 Bachelor of Science (B.Sc.) - Major Biology - Quantitative Biology (73 credits)

Interdisciplinary research that draws from the natural and physical sciences is an important aspect of modern biology. The Quantitative Biology option is designed for students with a deep interest in biology who wish to gain a strong grounding in physical sciences and their application to biological questions. The program has two options: an ecology and evolutionary biology stream, and a physical biology stream. Both streams provide a balance of theory and experimental components.

Students may complete this program with a minimum of 68 credits or a maximum of 73 credits depending on whether MATH 222 and CHEM 212 are completed.

### Advising notes for U0 students

It is highly recommended that freshman BIOL, CHEM, MATH, and PHYS courses be selected with the Program

Course Requirements for Quantitative Biology Streams (21 credits)	
21 credits from one of the following two streams:	
Stream 1: Theoretical Ecology and Evolutionary Biology (21 credits)	
Biology	

Heat and Waves

Functional Biology of Plants and Animals

(3)

(3)

**PHYS 232** 

BIOL 309	(3)	Mathematical Models in Biology
BIOL 313	(3)	Eukaryotic Cell Biology

500-level complementary courses: 6 credits from the following:

BIOL 518	(3)	Advanced Topics in Cell Biology
BIOL 520	(3)	Gene Activity in Development
BIOL 524	(3)	Topics in Molecular Biology
BIOL 530	(3)	Advances in Neuroethology
BIOL 551	(3)	Principles of Cellular Control
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology

# **Complementary Courses**

 $Quantitative\ Biology\ -\ Theoretical\ Ecology\ and\ Evolutionary\ Biology,\ and\ Physical\ Biology\ streams$ 

9 credits from the following:

Recommendations for either Theoretical Ecology and Evolutionary Biology or Physical Biology streams

BIOL 466	(3)	Independent Research Project 1
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 350*	(3)	Numerical Computing
COMP 364	(3)	Computer Tools for Life Sciences
MATH 235**	(3)	Algebra 1
MATH 240**	(3)	Discrete Structures
MATH 314	(3)	Advanced Calculus
MATH 317*	(3)	Numerical Analysis
MATH 319	(3)	Partial Differential Equations
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 348	(3)	Euclidean Geometry
MATH 437	(3)	Mathematical Methods in Biology
MATH 447	(3)	Introduction to Stochastic Processes

<sup>\*</sup> Students may take COMP 350 OR MATH 317.

# Recommendations for Physical Biology stream

BIEN 310	(3)	Introduction to Biomolecular Engineering
BIEN 320	(3)	Molecular, Cellular and Tissue Biomechanics
BIEN 340	(3)	Transport Phenomena in Biological Systems 2
BIEN 510	(3)	Engineered Nanomaterials for Biomedical Applications
BIEN 530	(3)	Imaging and Bioanalytical Instrumentation
CHEM 222	(4)	Introductory Organic Chemistry 2

<sup>\*\*</sup>MATH 235 or MATH 240 are required for COMP 251.

PHYS 257 (3) Experimental Methods 1

Majors Electromagnetic W

# **Biology and Mathematics Core**

9 credits

BIOL 215

(3)

Introduction to Ecology and Evolution

MATH 437 (3) Mathematical Methods in Biology MATH 523 (4) Generalized Linear Models MATH 524 (4) Nonparametric Statistics				
MATH 524 (4) Nonparametric Statistics	MATH 437 (	(3)	Mathematical Methods in Biology	
	MATH 523 (	(4)	Generalized Linear Models	
	MATH 524 (	(4)	Nonparametric Statistics	
Sampl3n1oBT/F1 8.1 Tf1 0 0 1 2678.2r3			Sampl3n1oBT/F1 8.1 Tf1 0 0 1 2678.2r3	

# At least 12 credits selected from the following list:

BIOL 303	(3)	Developmental Biology
BIOL 304	(3)	Evolution
BIOL 313	(3)	Eukaryotic Cell Biology
BIOL 518	(3)	Advanced Topics in Cell Biology
BIOL 569	(3)	Developmental Evolution
BIOL 592	(3)	Integrated Bioinformatics

BIOL 201	(3)	Cell Biology and Metabolism
BIOL 205	(3)	Functional Biology of Plants and Animals
BIOL 206	(3)	Methods in Biology
BIOL 215	(3)	Introduction to Ecology and Evolution
BIOL 216	(3)	Biology of Behaviour
BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 302	(3)	Fundamentals of Genetics and Genomics
BIOL 311	(3)	Advanced Methods in Organismal Biology
BIOL 499D1	(2)	Honours Seminar in Biology
BIOL 499D2	(2)	Honours Seminar in Biology
COMP 204	(3)	Computer Programming for Life Sciences

# Complementary Courses (36-37 credits)

Core 12-13 credits:

3 or 4 credits selected from CHEM block:

CHEM 204	(3)	Physical Chemistry/Biological Sciences 1
CHEM 212*	(4)	Introductory Organic Chemistry 1

<sup>\*</sup> If a student has already taken CHEM 212 or its equivalent, the credits can be made up with CHEM 204, CHEM 222, or a 3- or 4-credit Biology complementary course to be approved by the Biology Adviser.

9 credits (3 credits from each of Block A, Block B and Block C):

# Block A- Ecology and Evolution:

BIOL 304	(3)	Evolution
BIOL 305	(3)	Animal Diversity
BIOL 308	(3)	Ecological Dynamics

# Block B- Molecular and Cellular:

BIOL 300	(3)	Molecular Biology of the Gene
BIOL 303	(3)	Developmental Biology
BIOL 313	(3)	Eukaryotic Cell Biology

### Block C-Neuro/Behaviour:

BIOL 306	(3)	Neural Basis of Behaviour
BIOL 307	(3)	Behavioural Ecology

# Honours Block (9-12 credits)

BIOL 479D1	(4.5)	Honours Research Project 1
BIOL 479D2	(4.5)	Honours Research Project 1

OR

BIOL 480D1 (6) Honours Research Project 2

Other (12-15 credits)

(6)

15 credits of Biology courses at the 300-500 levels if taking BIOL 479D1/D2, or 12 credits if taking BIOL 480D1/D2. With permission of the Biology Adviser, up to 6 credits may be taken from other science department courses (300-500 levels). Up to 3 credits of previous independent research courses may be included. Must include 6 credits of 400-500 levels.

# 11.13.5.12 Bachelor of Science (B.Sc.) - Honours Biology - Quantitative Biology (79 credits)

79 credits

Interdisciplinary research that draws from the natural and physical sciences is an important aspect of modern biology. The Quantitative Biology (QB) Honours

# **Biology (6 credits)**

BIOL 202	(3)	Basic Genetics
BIOL 215	(3)	Introduction to Ecology and Evolution

# **Research Component (6 credits)**

# Physics (6 credits)

### 6 credits from:

PHYS 230*	(3)	Dynamics of Simple Systems
PHYS 232**	(3)	Heat and Waves
PHYS 251*	(3)	Honours Classical Mechanics 1
PHYS 253**	(3)	Thermal Physics

<sup>\*</sup> Students take PHYS 230 or PHYS 251.

# **Course Requirements for Quantitative Biology Streams**

21 credits from one of the following two streams:

# Stream 1: Theoretical Ecology and Evolutionary Biology (21 credits)

### Biology

12 credits from the following:

BIOL 205	(3)	Functional Biology of Plants and Animals
BIOL 206	(3)	Methods in Biology
BIOL 304	(3)	Evolution
BIOL 308	(3)	Ecological Dynamics

### Field Courses

3 credits from the following list or any other field course with permission:

BIOL 240	(3)	Monteregian Flora
BIOL 331	(3)	Ecology/Behaviour Field Course
BIOL 432	(3)	Limnology

 $6\ credits\ chosen$  from the following list of courses at the  $400\ level$  or above:

<sup>\*</sup> Students choose either both BIOL 596 and BIOL 597, or BIOL 598.

BIOL 432	(3)	Limnology
BIOL 434	(3)	Theoretical Ecology
BIOL 435	(3)	Natural Selection
BIOL 465	(3)	Conservation Biology
BIOL 509	(3)	Methods in Molecular Ecology
BIOL 510	(3)	Advances in Community Ecology

<sup>\*\*</sup> Students take PHYS 232 or PHYS 253.

BIOL 515	(3)	Advances in Aquatic Ecology
BIOL 540	(3)	Ecology of Species Invasions
BIOL 594	(3)	Advanced Evolutionary Ecology
BIOL 596*	(1)	Advanced Experimental Design
BIOL 597*	(2)	Advanced Biostatistics
BIOL 598*	(3)	Advanced Design and Statistics

MATH 240**	(3)	Discrete Structures
MATH 314	(3)	Advanced Calculus
MATH 317*	(3)	Numerical Analysis
MATH 319	(3)	Partial Differential Equations
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 348	(3)	Euclidean Geometry
MATH 437	(3)	Mathematical Methods in Biology
MATH 447	(3)	Introduction to Stochastic Processes

<sup>\*</sup> Students may take COMP 350 OR MATH 317.

### Recommendations for Physical Biology stream

BIEN 310	(3)	Introduction to Biomolecular Engineering
BIEN 320	(3)	Molecular, Cellular and Tissue Biomechanics
BIEN 340	(3)	Transport Phenomena in Biological Systems 2
BIEN 510	(3)	Engineered Nanomaterials for Biomedical Applications
BIEN 530	(3)	Imaging and Bioanalytical Instrumentation
CHEM 222	(4)	Introductory Organic Chemistry 2
PHYS 242*	(2)	Electricity and Magnetism
PHYS 257	(3)	Experimental Methods 1
PHYS 342	(3)	Majors Electromagnetic Waves
PHYS 413	(3)	Physical Basis of Physiology
PHYS 434	(3)	Optics
PHYS 519	(3)	Advanced Biophysics
PHYS 534	(3)	Nanoscience and Nanotechnology

<sup>\*</sup> PHYS 242 is required for PHYS 342 and PHYS 434.

# Recommendations for Theoretical Ecology and Evolutionary Biology stream

BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 324	(3)	Ecological Genetics
MATH 242	(3)	Analysis 1
MATH 340	(3)	Discrete Mathematics
MATH 423	(3)	Applied Regression
MATH 524	(4)	Nonparametric Statistics
MATH 525	(4)	Sampling Theory and Applications
PHYS 329	(3)	Statistical Physics with Biophysical Applications

# 11.13.5.13 Biology (BIOL) Related Programs and Study Semesters 11.13.5.13.1 Joint Major in Computer Science and Biology

For more information, see section 11.13.9.11: Bachelor of Science (B.Sc.) - Major Computer Science and Biology (74 credits).

# 11.135.132 Joint Honours in Computer Science and Biology

For more information, see section 11.13.9.15: Bachelor of Science (B.Sc.) - Honours Computer Science and Biology (77 credits).

<sup>\*\*</sup> MATH 235 or MATH 240 are required for COMP 251.

# 11.135.133 Panama Field Study Semester

The program is a joint venture between McGill University and the Smithsonian Tropical Research Institute (STRI) in Panama. For more information, see Study Abroad & Field Studies > Undergraduate > Field Study Semesters and Off-Campus Courses > Field Study Minor > section 12.2.1.5: Panama Field Study Semester. You can also visit the following website for details: mcgill.ca/science/under

# 11.13.6.5 Bachelor of Science (B.Sc.) - Minor Biotechnology (for Science Students) (24 credits)

To obtain the Minor Biotechnology, Science students must:

a) satisfy both the requirements for the departmental program and for the Minor;

b) complete 24 credits, 18 of which must be exclusively for the Minor program.\*

# **Required Courses (15 credits)**

\* Students may take either BIOL 201 or BIOC 212.

BIOC 212*	(3)	Molecular Mechanisms of Cell Function
BIOL 200	(3)	Molecular Biology
BIOL 201*	(3)	Cell Biology and Metabolism
BIOL 202	(3)	Basic Genetics
BIOT 505	(3)	Selected Topics in Biotechnology
MIMM 211	(3)	Introductory Microbiology

### **Complementary Courses (9 credits)**

9 credits selected from courses outside the department of the student's main program. Students may select three courses from one of the lists below, or may choose three alternate courses with adviser approval.

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ANAT 541	(3)	Cell and Molecular Biology of Aging
EXMD 504	(3)	Biology of Cancer
PATH 300	(3)	Human Disease

### **Chemical Engineering**

CHEE 200	(3)	Chemical Engineering Principles 1
CHEE 204	(3)	Chemical Engineering Principles 2
CHEE 474	(3)	Biochemical Engineering

### Chemistry

CHEM 482	(3)	Organic Chemistry: Natural Products
CHEM 502	(3)	Advanced Bio-Organic Chemistry
CHEM 552	(3)	Physical Organic Chemistry

### General

# **Immunology**

ANAI 261	(4)	Introduction to Dynamic Histology
BIOC 503	(3)	Biochemistry of Immune Diseases
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 414	(3)	Advanced Immunology
PHGY 513	(3)	Translational Immunology

<sup>\*</sup> Approved substitutions must be made for any of the required courses which are part of the student's main program.

# Management

ECON 208	(3)	Microeconomic Analysis and Applications
MGCR 211	(3)	Introduction to Financial Accounting
		Introduction to Finance(3)

# 11.13.6.6 Biotechnology (BIOT) Related Programs 11.13.6.6.1 Program for Students in the Faculty of Engineering

See Faculty of Engineering > Undergraduate > Browse Academic Units & Programs > Minor Programs > section 6.12.10.5: Bachelor of Engineering (B.Eng.) - Minor Biotechnology (for Engineering Students) (24 credits) for details.

### 11.13.7 Chemistry (CHEM)

### 11.13.7.1 Location

Otto Maass Chemistry Building 801 Sherbrooke Street West Montreal QC H3A 0B8 Departmental Office: Room 322 Telephone: 514-398-6999

Website: mcgill.ca/chemistry

Student advising: mcgill.ca/chemistry/current-undergraduate-students/advising.

### 11.13.7.2 Office for Science and Society

The office for Science and Society is dedicated to the promotion of critical thinking and the presentation of practical scientific information to the public, educators, and students in an accurate and responsible fashion. The office answers queries from the public as well as from the media, with a view toward establishing scientific accuracy. The office also offers a variety of educational and interesting presentations on scientific topics and its members contribute to a number of courses under the umbrella of "The World of Chemistry".

### Director

Joseph A. Schwarcz

#### Members

Ariel Fenster; David N. Harpp

### 11.13.7.3 About Chemistry

Chemistry is both a pure science, offering a challenging intellectual pursuit, and an applied science whose technology is of fundamental importance to the economy and society. Modern chemists seek an understanding of the structure and properties of atoms and molecules to predict and interpret the properties and transformations of matter and the energy changes that accompany those transformations. Many of the concepts of physics and mathematics are basic to chemistry, while chemistry is of fundamental importance to many other disciplines, such as the biological and medical sciences, geology, metallurgy, etc.

A degree in chemistry leads to a wide variety of professional vocations. The large science-based industries (petroleum refining, plastics, pharmaceuticals, etc.) all employ chemists in research, development, and quality control. Many federal and provincial departments and agencies employ chemists in research and testing laboratories. Such positions are expected to increase with the currently growing concern for the enm(y federal 3ons. Man)Tj1 u1 233.284981 233.to temistry

\*\* Any level 300-500 CHEM course can be substituted for courses within this list.

# 11.13.7.6 Bachelor of Science (B.Sc.) - Minor Chemical Engineering (24 credits)

The B.Sc.; Minor in Chemical Engineering is designed for Chemistry students who wish to study the problems of process engineering and its related subjects,

CHEM 345	(3)	Introduction to Quantum Chemistry
CHEM 367	(3)	Instrumental Analysis 1
CHEM 377	(3)	Instrumental Analysis 2
CHEM 392	(3)	Experimental Chemistry 1
PHYS 242	(2)	Electricity and Magnetism

### **Complementary Course (6 credits)**

6 credits from:

CHEM 355	(3)	Applications of Quantum Chemistry
MATH 315	(3)	Ordinary Differential Equations

Chemistry courses at the 300+ level.

### 11.13.7.8 Bachelor of Science (B.Sc.) - Major Chemistry (59 credits)

### **Program Prerequisites**

PRE-PROGRAM REQUIREMENTS:

Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

### Required Courses (53 credits)

The required courses in this program consist of 53 credits in chemistry, physics and mathematics, listed below. The courses marked with an asterisk (\*) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.

See http://www.mcgill.ca/chemistry/current-undergraduate-students/advising/.

A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 during U1 is also strongly recommended. Physics PHYS 242 should be completed during U2.

<sup>\*\*</sup> Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.

CHEM 212*	(4)	Introductory Organic Chemistry 1
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
		Introductory Org

<sup>\*</sup> Denotes courses with CEGEP equivalents.

CHEM 493	(2)	Advanced Physical Chemistry Laboratory
MATH 222**	(3)	Calculus 3
PHYS 242	(2)	Electricity and Magnetism

# **Complementary Courses (6 credits)**

6 credits of Chemistry (CHEM) courses at the 400 level or higher, or MATH 315 plus 3 credits of Chemistry courses at the 400 level or higher.

# 11.13.7.9 Bachelor of Science (B.Sc.) - Major Chemistry - Bio-organic (63 credits)

# **Program Prerequisites**

PRE-PROGRAM REQUIREMENTS:

Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, B6s120 5, 1 CHE120 5, 2,

BIOL 202	(3)	Basic Genetics
BIOL 301	(4)	Cell and Molecular Laboratory
CHEM 365	(2)	Statistical Thermodynamics
MATH 315	(3)	Ordinary Differential Equations
MIMM 211	(3)	Introductory Microbiology
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

### 11.13.7.10 Bachelor of Science (B.Sc.) - Major Chemistry: Biophysical Chemistry (66 credits)

This program trains students in the fundamentals of chemistry and develops the physical science, computational, and mathematical skills needed for advanced biophysical chemistry research in the biomedical and biotechnology industries. The program features integrative, interdisciplinary courses in bio-physical sciences.

### **Program Prerequisites**

Pre-Program Requirements: Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

### Required Courses (59 credits)

The courses marked with an asterisk (\*) are omitted from the program of students who have successfully completed them at the CEGEP level. Students completing the program will not be eligible for admission to the Ordre des chimistes du Québec without additional chemistry electives. This program is not currently accredited by the Canadian Society for Chemistry.

Completion of Mathematics MATH 222 and MATH 315 during U1 is strongly recommended.

<sup>\*\*</sup> Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.

Rio-Phy	zsical	Sciences	Core
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BIOL 219	(4)	Introduction to Physical Molecular and Cell Biology
BIOL 319	(3)	Introduction to Biophysics
BIOL 395	(1)	Quantitative Biology Seminar
CHEM 212*	(4)	Introductory Organic Chemistry 1
MATH 222**	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 315	(3)	Ordinary Differential Equations
MATH 323	(3)	Probability
PHYS 329	(3)	Statistical Physics with Biophysical Applications
Chemistry		
Chemistry CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
•	(3) (4)	Introductory Physical Chemistry 1: Thermodynamics Introductory Organic Chemistry 2
CHEM 213		
CHEM 213 CHEM 222*	(4)	Introductory Organic Chemistry 2
CHEM 213 CHEM 222* CHEM 267	(4)	Introductory Organic Chemistry 2 Introductory Chemical Analysis
CHEM 213 CHEM 222* CHEM 267 CHEM 273	(4) (3) (3)	Introductory Organic Chemistry 2 Introductory Chemical Analysis Introductory Physical Chemistry 2: Kinetics and Methods
CHEM 213 CHEM 222* CHEM 267 CHEM 273 CHEM 281	(4) (3) (3) (3)	Introductory Organic Chemistry 2 Introductory Chemical Analysis Introductory Physical Chemistry 2: Kinetics and Methods Inorganic Chemistry 1

<sup>\*</sup> Denotes courses with CEGEP equivalents.

CHEM 212*	(4)	Introductory Organic Chemistry 1
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
CHEM 222*	(4)	Introductory Organic Chemistry 2
CHEM 267	(3)	Introductory Chemical Analysis
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods
CHEM 281	(3)	Inorganic Chemistry 1
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 332	(3)	Biological Chemistry
CHEM 345	(3)	Introduction to Quantum Chemistry
CHEM 355	(3)	Applications of Quantum Chemistry
CHEM 365	(2)	Statistical Thermodynamics
CHEM 367	(3)	Instrumental Analysis 1
CHEM 377	(3)	Instrumental Analysis 2
CHEM 381	(3)	Inorganic Chemistry 2
CHEM 392	(3)	Experimental Chemistry 1
CHEM 493	(2)	Advanced Physical Chemistry Laboratory
MATH 222**	(3)	Calculus 3
PHYS 242	(2)	Electricity and Magnetism

# **Complementary Courses (18 credits)**

6 credits of research\*:

\* Students may tak

<sup>\*\*</sup> Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.

BIOL 200	(3)	Molecular Biology
BIOL 201	(3)	Cell Biology and Metabolism
CHEM 212*	(4)	Introductory Organic Chemistry 1
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
CHEM 222*	(4)	Introductory Organic Chemistry 2
CHEM 267	(3)	Introductory Chemical Analysis
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods
CHEM 281	(3)	Inorganic Chemistry 1
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 345	(3)	Introduction to Quantum Chemistry
CHEM 355	(3)	Applications of Quantum Chemistry
CHEM 367	(3)	Instrumental Analysis 1
CHEM 377	(3)	Instrumental Analysis 2
CHEM 381	(3)	Inorganic Chemistry 2
CHEM 392	(3)	Experimental Chemistry 1
CHEM 493	(2)	Advanced Physical Chemistry Laboratory
CHEM 502	(3)	Advanced Bio-Organic Chemistry
MATH 222**	(3)	Calculus 3
PHYS 242	(2)	Electricity and Magnetism

# **Complementary Courses (18 credits)**

18 credits selected as follows:

6 credits of research\*:

<sup>\*</sup> Students may take up to 12 Research Project credits but only 6 of these may be used to fulfil the program requirement.

CHEM 470	(6)	Research Project 1
CHEM 480	(3)	Undergraduate Research Project 2

### 9 credits from the following:

BIOL 202	(3)	Basic Genetics
BIOL 301	(4)	Cell and Molecular Laboratory
CHEM 365	(2)	Statistical Thermodynamics
MATH 315	(3)	Ordinary Differential Equations
MIMM 211	(3)	Introductory Microbiology
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

and 3 credits of additional Chemistry courses at the 400 level or higher.

<sup>\*</sup> Denotes courses with CEGEP equivalents.

### 11.13.7.13 Bachelor of Science (B.Sc.) - Honours Chemistry: Biophysical Chemistry (75 credits)

This program trains students in the fundamentals of chemistry and develops the physical science, computational, and mathematical skills needed for advanced biophysical chemistry research in the biomedical and biotechnology industries. The program features integrative, interdisciplinary courses in bio-physical sciences.

### **Program Prerequisites**

Note: Attainment of the Honours degree requires a CGPA of at least 3.00.

Pre-Program Requirements: Students entering from the Freshman program must have included CHEM 110 and CHEM 120 or CHEM 115, BIOL 111 or BIOL 112, MATH 133, MATH 140/MATH 141 or MATH 150/MATH 151, PHYS 131/PHYS 142, or their equivalents in their Freshman year. Quebec students must have completed the DEC with appropriate science and mathematics courses. Note that students who have successfully completed MATH 150 and MATH 151 do not have to take MATH 222.

### Required Courses (65 credits)

The courses marked with an asterisk (\*) are omitted from the program of students who have successfully completed them at the CEGEP level. Students completing the program will not be eligible for admission to the Ordre des chimistes du Québec without additional chemistry electives. This program is not currently accredited by the Canadian Society for Chemistry.

Introduction to Physical Molecular and Cell Biology

Completion of Mathematics MATH 222 and MATH 315 during U1 is strongly recommended.

\* Denotes courses with CEGEP equivalents.

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\*\* Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.

	Bio-Physical	Sciences	Core
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**BIOL 219** 

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BIOL 319	(3)	Introduction to Biophysics
BIOL 395	(1)	Quantitative Biology Seminar
CHEM 212*	(4)	Introductory Organic Chemistry 1
MATH 222**	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 315	(3)	Ordinary Differential Equations
MATH 323	(3)	Probability
PHYS 329	(3)	Statistical Physics with Biophysical Applications
Chemistry		
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
CHEM 222*	(4)	Introductory Organic Chemistry 2
CHEM 267	(3)	Introductory Chemical Analysis
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods
CHEM 281	(3)	Inorganic Chemistry 1
CHEM 345	(3)	Introduction to Quantum Chemistry
CHEM 355	(3)	Applications of Quantum Chemistry
CHEM 367	(3)	Instrumental Analysis 1
CHEM 377	(3)	Instrumental Analysis 2
CHEM 470	(6)	Research Project 1
CHEM 493	(2)	Advanced Physical Chemistry Laboratory
PHYS 242	(2)	Electricity and Magnetism

### Complementar

(9-10 credits) 3 credits of:		
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 381	(3)	Inorganic Chemistry 2
6-7 credits of:		
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 316	(3)	Biomembranes and Organelles
BIOL 551	(3)	Principles of Cellular Control
CHEM 302	(3)	Introductory Organic Chemistry 3
CHEM 381	(3)	Inorganic Chemistry 2
CHEM 502	(3)	Advanced Bio-Organic Chemistry
CHEM 514	(3)	Biophysical Chemistry
CHEM 520	(3)	Methods in Chemical Biology
CHEM 555	(3)	Magnetic Resonance Spectroscopy

# 11.13.9 Computer Science (COMP)

## 11.13.9.1 Location

## Main Office

McConnell Engineering Building, Room 318 3480 University Street Montreal QC H3A 0E9

Telephone: 514-398-7071 Fax: 514-398-3883

# **Undergraduate Student Affairs Office**

McConnell Engineering Building, Room 320

3480 University Street Montreal QC H3A 0E9

Telephone: 514-398-7071 ext. 00739

Fax: 514-398-3883

 ${\bf Email:}\ ugrad\text{-}sec@cs.mcgill.ca$ 

Website:

- Major and Honours in Physics and Computer Science (see section 11.13.30: Physics (PHYS));
- Major and Honours in Computer Science and Biology (see section 11.13.5: Biology (BIOL)).

The School also offers a Major Concentration and Minor concentrations in Computer Science, and a Major Concentration in Software Engineering through the Faculty of Arts (see *Faculty of Arts > Undergraduate > Browse Academic Units & Programs > section 3.10.7: Computer Science*), or as part of a Bachelor of Arts and Science (see *Bachelor of Arts & Science > Undergraduate > Browse Academic Units & Programs > section 4.11.9: Computer Science (COMP)*).

The School's courses are available as electives to Engineering students. Engineering students interested in a minor in Computer Science should consult Faculty of Engineering > Undergraduate > Browse Academic Units & Programs > Minor Programs > section 6.12.10.7: Computer Science Courses and Minor Program.

Most course instructors are faculty members of the School that do research in the areas they teach. The school favours interactive teaching practices where students get to know their professors and have the opportunity to do cutting-edge research. Some graduate courses in Computer Science are available to suitably qualified senior undergraduates. The School offers large computing labs in the Lorne Trottier Building, which is dedicated to undergraduate students.

All students planning to enter Computer Science programs are strongly encouraged to make an appointment with an academic adviser through the School's Undergraduate Student Affairs Office (see cs.mcgill.ca/academic/undergrad/advising).

#### 11.13.9.3 Internship Opportunities

Students who want to get practical experience in industry before graduation are encouraged to participate in one of the following internship programs:

- The **Internship Year in Science** (IYS) is offered for a duration of 8, 12, or 16 months. It will be reflected on the student's transcript and is included in the program name (Bachelor of Science Internship Program).
- The **Industrial Practicum** (IP) has a duration of four months and is usually carried out starting in May. It will appear as a 0-credit, Pass/Fail course on the student's transcript. If a student completes two IPs, the program name will change to include the word "internship".

For more information on these opportunities, consult section 11.12: Science Internships and Field Studies or mcgill.ca/science/undergraduate/internships-field.

#### 11.13.9.4 Research Opportunities

Computer science undergraduates have excellent opportunities to participate in research. Each summer, several awards are available, such as the NSERC Undergraduate Student Research Awards; these offer financial support for a research experience in an academic setting. Other research assistantship and volunteering opportunities in research labs are also available.

Students may also take undergraduate research project courses such as COMP 396 *Undergraduate Research Project*, COMP 400 *Project in Computer Science*, and COMP 401 *Project in Biology and Computer Science*. Students who have participated in substantial and broad undergraduate research may qualify for the Dean's Multidisciplinary Undergraduate Research List at graduation time. For more information, consult *University Regulations & Resources* > *Undergraduate* > *Graduation* > *Graduation Honours* > *section 1.9.3.3: Faculty of Science Dean's Multidisciplinary Undergraduate Research List*.

#### 11.13.9.5 Admissions

Students intending to pursue a program in Computer Science or Software Engineering should have a reasonable mathematical background and should have completed MATH 140 (or MATH 150), MATH 141 (or MATH 151), and MATH 133, or their CEGEP equivalents. These three mathematics courses should have been completed with at least an average of B-. A background in computer science is not necessary as students may start their studies with the introductory course COMP 202 or COMP 204 or COMP 208. For example, taking COMP 202 in the Freshman year, or completing an equivalent course in CEGEP, would be an asset that would allow students to take more advanced courses earlier in their program.

More information about the admission process and programs is available on the School of Computer Science website at cs.mcgill.ca.

## 11.13.9.6 Computer Science Faculty

#### Director

M. Blanchette

#### **Emeritus Professors**

D. Avis; R. De Mori; T.H. Merrett; M.M. Newborn; C. Paige; D. Thérien; C. Tropper

#### **Professors (Post-Retirement)**

N. Friedman; C. Tropper; G.F.G. Ratzer

#### Professors

L. Devroye; G. Dudek; B. Kemme; J. Kienzle; X. Liu; Propper; ET67ropper; Ean2ductory

# **Assistant Professors**

O. Balmau; J. Guo; Y.Li; H.C. Lin; E. Patitsas; R. Rabbany; M. Ravanbakhsh; S. Reddy; B. Richards; R. Robere; D. Rolnick

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MATH 240	(3)	Discrete Structures

# **Complementary Courses (27 credits)**

3 credits from each of the groups A, B, C, and D.

Group A		
MATH 222	(3)	Calculus 3
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
Group B		
MATH 223	(3)	Linear Algebra
MATH 318	(3)	Mathematical Logic
MATH 340	(3)	Discrete Mathematics
Group C		
COMP 330	(3)	Theory of Computation

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COMP 361D2	(3)	Software Engineering Project
MATH 223	(3)	Linear Algebra
MATH 240	(3)	Discrete Structures

## **Complementary Courses (13 credits)**

3	credits	selected	from:

3 credits selected from:		
COMP 330	(3)	Theory of Computation
COMP 360	(3)	Algorithm Design
10 credits from:		
COMP 322	(1)	Introduction to C++
COMP 409	(3)	Concurrent Programming
COMP 421	(3)	Database Systems
COMP 520	(4)	Compiler Design
COMP 525	(3)	Formal Verification
COMP 529	(4)	Software Architecture
COMP 533	(3)	Model-Driven Software Development
COMP 535	(4)	Computer Networks 1
ECSE 326	(3)	Software Requirements Engineering
ECSE 437	(3)	Software Delivery
ECSE 539	(4)	Advanced Software Language Engineering

Or any COMP courses at the 300 level or above (excluding COMP 364 and COMP 396.)

## 11.13.9.10 Bachelor of Science (B.Sc.) - Major Computer Science (63 credits)

This program is the standard Major program offered by the School of Computer Science. It provides a broad introduction to the principles of computer science and offers ample opportunity to acquire in-depth knowledge of several sub-disciplines. At the same time, its credit requirements allow students to take an additional minor.

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from taking COMP 202.

## Required Courses (33 credits)

\* Students who have sufficient knowledge in a programming language do not need to take COMP 202.

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
COMP 310	(3)	Operating Systems
MATH 222	(3)	Calculus 3
MA	(3)	Linear Algebra

COMP 204**	(3)	Computer Programming for Life Sciences
COMP 206	(3)	Introduction to Software Systems
		Introduction to Computer Science

\* Students must take both COMP 361D1 and COMP 361D2.

# **Biology Block**

9-12 credits from the follo

# **Required Courses**

(46-49 credits)

\* Students who have sufficient knowledge in a programming language do not need to take COMP 202.

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
COMP 310	(3)	Operating Systems
COMP 322	(1)	Introduction to C++
COMP 330	(3)	Theory of Computation
COMP 361D1	(3)	Software Engineering Project
COMP 361D2	(3)	Software Engineering Project
COMP 557	(4)	Fundamentals of Computer Graphics
MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 240	(3)	Discrete Structures
MATH 323	(3)	Probability

# **Complementary Courses (16 credits)**

3 credits selected from:

COMP 350	(3)	Numerical Computing
COMP 360	(3)	Algorithm Design

At least 7 credits selected from:

COMP 308	(1)	Computer Systems Lab
COMP 424	(3)	Artificial Intelligence
COMP 521	(4)	Modern Computer Games
COMP 529	(4)	Software Architecture
COMP 533	(3)	Model-Driven Software Development
COMP 551	(4)	Applied Machine Learning
COMP 559	(4)	Fundamentals of Computer Animation

At least 6 credits selected from:

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ECSE 420*	(3)	Parallel Computing
ECSE 424	(3)	Human-Computer Interaction
ECSE 437	(3)	Software Delivery
ECSE 539	(4)	Advanced Software Language Engineering
Group D: Applications		
COMP 350	(3)	Numerical Computing
COMP 417	(3)	Introduction Robotics and Intelligent Systems
COMP 421	(3)	Database Systems
COMP 424	(3)	Artificial Intelligence
COMP 512	(4)	Distributed Systems
COMP 520	(4)	Compiler Design
COMP 521	(4)	Modern Computer Games
COMP 535	(4)	Computer Networks 1
COMP 551	(4)	Applied Machine Learning
COMP 557	(4)	Fundamentals of Computer Graphics
COMP 558	(4)	Fundamentals of Computer Vision

# 11.13.9.14 Bachelor of Science (B.Sc.) - Honours Computer Science (75 credits)

Students may complete this program with a minimum of 72 credits or a maximum of 75 credits depending if they are exempt from taking COMP 202. Honours students must maintain a CGPA of at least 3.00 during their studies and at graduation.

Intelligent Software Systems

## Required Courses (48 credits)

COMP 585

(4)

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 252	(3)	Honours Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
COMP 310	(3)	Operating Systems
COMP 330	(3)	Theory of Computation
COMP 350	(3)	Numerical Computing
COMP 362	(3)	Honours Algorithm Design
COMP 400	(3)	Project in Computer Science
MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 240	(3)	Discrete Structures
MATH 340**	(3)	Discrete Mathematics
MATH 350**	(3)	Honours Discrete Mathematics

<sup>\*</sup> Students who have sufficient knowledge in a programming language do not need to take COMP 202.

<sup>\*\*</sup> Students take either MATH 340 or MATH 350.

#### **Complementary Courses (27 credits)**

6 credits selected from:

MATH 318	(3)	Mathematical Logic
MATH 323	(3)	Probability
MATH 324	(3)	Statistics

The remaining credits selected from computer science courses at the 300 level or above (except COMP 364 and COMP 396) and ECSE 539. At least 12 credits must be at the 500 level.

#### 11.13.9.15 Bachelor of Science (B.Sc.) - Honours Computer Science and Biology (77 credits)

This program focuses on the fundamentals of biology with a focus on molecular biology, and gives them computational and mathematical skills needed to manage, analyze, and model large biological datasets. Compared to the Joint Major counterpart, this program requires additional research credits and a larger number of advanced courses. Students must maintain a minimum CGPA of 3.5. To graduate with First Class Honours, the CGPA must be at least 3.75.

Students may complete this program with a minimum of 67 and a maximum of 77 credits, depending upon whether they take COMP 202/204, CHEM 212, MATH 222.

Program Prerequisites: U0 (freshman) students should take: BIOL 111-112, CHEM 110-120, MATH 133, MATH 140-141 or MATH 150-151, PHYS 101-102 or PHYS 131-142. Note that MATH 150-151 provides equivalence for required course MATH 222.

Students who do not have a background in computer programming at the level of COMP 202 or COMP 204 must take one of these courses. COMP 204 is considered equivalent to COMP 202 as a prerequisite for COMP 206 and COMP 250.

## **Required Courses**

43-53 credits:

## **Bio-Physical Sciences Core**

BIOL 219	(4)	Introduction to Physical Molecular and Cell Biology
BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 395	(1)	Quantitative Biology Seminar
CHEM 212*	(4)	Introductory Organic Chemistry 1
COMP 202**	(3)	Foundations of Programming
MATH 222*	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 323	(3)	Probability

## **Computer Science and Mathematics**

COMP 204**	(3)	Computer Programming for Life Sciences
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 252***	(3)	Honours Algorithms and Data Structures
COMP 561	(4)	Computational Biology Methods and Research
MATH 240	(3)	Discrete Structures

## **Biology**

BIOL 202	(3)	Basic Genetics
BIOL 215	(3)	Introduction to Ecology and Evolution

#### Joint Courses

COMP 402D1	(3)	Honours Project in Computer Science and Biology
COMP 402D2	(3)	Honours Project in Computer Science and Biology

<sup>\*</sup> Students with CEGEP-level credit for the equivalents of MATH 222 and/or CHEM 212 (see http://www.mcgill.ca/students/courses/plan/transfer/ for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.

## **Complementary Courses (24 credits)**

3-6 credits from the following:

MATH 315 (3) Ordinary Differential Equations
MATH 324 (3) Statistics

The remaining 18-21 credits to be chosen from the following, with at least 9 credits at the 400 level or above:

## **Computer Science Block**

9-12 credits from the following, with at least 3 credits at the 400 level or above.

COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
COMP 307	(2)	Principles of Web Development
COMP 310	(3)	Operating Systems
COMP 322	(1)	Introduction to C++
COMP 330	(3)	Theory of Computation
COMP 350	(3)	Numerical Computing
COMP 360	(3)	Algorithm Design
COMP 361D1^	(3)	Software Engineering Project
COMP 361D2^	(3)	Software Engineering Project

All COMP courses at the 400 level or above except COMP 400, 401, 402, 462, 561.

## **Biology Block**

9-12 credits from the following, with 3-6 credits at the 400 level or above:

BIOL 300	(3)	Molecular Biology of the Gene
BIOL 303	(3)	Developmental Biology
BIOL 304	(3)	Evolution
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 308	(3)	Ecological Dynamics
BIOL 309	(3)	Mathematical Models in Biology
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 313	(3)	Eukaryotic Cell Biology

<sup>\*\*</sup> Students may take either COMP 202 or COMP 204, but not both. Students who have sufficient knowledge of programming are not required to take these courses.

<sup>\*\*\*</sup> Students with credit for COMP 251 cannot take COMP 252, and must instead include at least 6 credits at the 400-level or above, 3 credits of which must be at the 500-level.

<sup>^</sup> Students must take both COMP 361D1 and COMP 361D2 or neither.

BIOL 314	(3)	Molecular Biology of Cancer
BIOL 316	(3)	Biomembranes and Organelles
BIOL 319	(3)	Introduction to Biophysics
BIOL 320	(3)	Evolution of Brain and Behaviour
BIOL 370	(3)	Human Genetics Applied
BIOL 389	(3)	Laboratory in Neurobiology
BIOL 395	(1)	Quantitative Biology Seminar
BIOL 416	(3)	Genetics of Mammalian Development
BIOL 434	(3)	Theoretical Ecology
BIOL 435	(3)	Natural Selection
BIOL 509	(3)	Methods in Molecular Ecology
BIOL 518	(3)	Advanced Topics in Cell Biology
BIOL 520	(3)	Gene Activity in Development
BIOL 524	(3)	Topics in Molecular Biology
BIOL 530	(3)	Advances in Neuroethology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 546	(3)	Genetics of Model Systems
BIOL 551	(3)	Principles of Cellular Control
BIOL 568	(3)	Topics on the Human Genome
BIOL 569	(3)	Developmental Evolution
BIOL 575	(3)	Human Biochemical Genetics
BIOL 580	(3)	Genetic Approaches to Neural Systems
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
NEUR 310	(3)	Cellular Neurobiology

## 11.13.9.16 Bachelor of Science (B.Sc.) - Honours Software Engineering (75 credits)

This program provides a more challenging and research-oriented version of the Major Software Engineering program.

Students may complete this program with a maximum of 75 credits or a minimum of 72 credits if they are exempt from taking COMP 202.

Honours students must maintain a CGPA of at least 3.00 during their studies and at graduation.

## **Required Courses**

39-42 credits

\* Students who have sufficient knowledge in a programming language do not need to take COMP 202.

COMP 202*	(3)	Foundations of Programming
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 303	(3)	Software Design
COMP 310	(3)	Operating Systems
COMP 361D1	(3)	Software Engineering Project
COMP 361D2	(3)	Software Engineering Project

COMP 400	(4)	Project in Computer Science
ECSE 429	(3)	Software Validation
MATH 223	(3)	Linear Algebra
MATH 240	(3)	Discrete Structures

# **Complementary Courses (33 credits)**

At least 9 credits must be from Groups A and B, with at least 3 credits from each:

At least 18 credits must be from Groups C and D, with at least 9 credits from Group C and at least 6 credits from Group D.

At least 12 credits must be from COMP courses at the 500 level or above.

## Group A:

MATH 222	(3)	Calculus 3
MATH 323	(3)	Probability
MATH 324	(3)	Statistics

# Group B:

COMP 330	(3)	Theory of Computation
COMP 360	(3)	Algorithm Design

# **Group C: Software Engineering Specialization**

<sup>\*</sup> Students may select either COMP 409 or ECSE 420, but not both.

COMP 409*	(3)	Concurrent Programming
COMP 523	(3)	Language-based Security
COMP 525	(3)	Formal Verification
COMP 529	(4)	Software Architecture
COMP 533	(3)	Model-Driven Software Development
COMP 555	(4)	Software Privacy
ECSE 326	(3)	Software Requirements Engineering
ECSE 420*	(3)	Parallel Computing
ECSE 424	(3)	Human-Computer Interaction
ECSE 437	(3)	Software Delivery
ECSE 539	(4)	Advanced Software Language Engineering

# **Group D: Applications**

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COMP 557	(4)	Fundamentals of Computer Graphics
COMP 558	(4)	Fundamentals of Computer Vision
COMP 585	(4)	Intelligent Software Systems

11.13.9.17 Computer Science (COMP) Related Programs
11.13.9.17.1 Major and Honours/lin Mathematics and Computer Science

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or should consult the Undergraduate Director:

Professor Jeanne Paquette Frank Dawson Adams Building, Room 214

Telephone: 514-398-4402

Email: jeanne.paquette@mcgill.ca

## 11.13.10.4 Earth and Planetary Sciences Faculty

#### Chair

Galen Halverson

#### **Emeritus Professors**

Jafar Arkani-Hamed; Donald Francis; Reinhard Hesse; Andrew J. Hynes; Robert F. Martin; Alfonso Mucci

#### **Professors**

Don Baker; Eric Galbraith; Galen Halverson; Olivia G. Jensen; Jeffrey McKenzie; John Stix; A.E. (Willy) Williams-Jones

#### **Associate Professors**

Genevieve Ali; Kim Berlo; Nicolas Cowan; Peter Douglas; Natalya Gomez; James Kirkpatrick; Yajing Liu; Jeanne Paquette; Christie Rowe; Vincent van Hinsberg

#### **Assistant Professor**

Nagissa Mahmoudi

#### **Faculty Lecturer**

W. Minarik

## **Adjunct Professors**

R. Harrington; R. Léveillé; B. Sundby

## 11.13.10.5 Bachelor of Science (B.Sc.) - Minor Geology (18 credits)

The Minor Geology offers students from other departments the opportunity to obtain exposure to the Earth Sciences.

## Required Courses (6 credits)

EPSC 210	(3)	Introductory Mineralogy
EPSC 212	(3)	Introductory Petrology

## **Complementary Courses (12 credits)**

3 credits, one of:

EPSC 201 (3) Understanding Planet Earth
EPSC 233 (3) Earth and Life History

9 credits selected from the list below and other 300-lev

11.13.10.6 Bachelor of Science (B.Sc.) - Minor Geochemistry (18 credits)

EPSC 334	(3)	Invertebrate Paleontology
EPSC 340	(3)	Earth and Planetary Inference
EPSC 350	(3)	Tectonics
EPSC 355	(3)	Sedimentary Geology
EPSC 423	(3)	Igneous Petrology
EPSC 425	(3)	Sediments to Sequences
EPSC 435	(3)	Applied Geophysics
EPSC 445	(3)	Metamorphic Petrology
EPSC 452	(3)	Mineral Deposits
EPSC 501	(3)	Crystal Chemistry
EPSC 519	(3)	Isotopes in Earth and Environmental Science
EPSC 530	(3)	Volcanology
EPSC 547	(3)	Modelling Geochemical Processes
EPSC 548	(3)	Igneous Petrogenetic Mechanisms
EPSC 549	(3)	Hydrogeology
EPSC 550	(3)	Selected Topics 1
EPSC 551	(3)	Selected Topics 2
EPSC 552	(3)	Selected Topics 3
EPSC 561	(3)	Ore-forming Processes
EPSC 567	(3)	Advanced Volcanology
EPSC 570	(3)	Cosmochemistry
EPSC 590	(3)	Applied Geochemistry Seminar
ESYS 300	(3)	Investigating the Earth System
ESYS 301	(3)	Earth System Modelling
ESYS 500	(3)	Earth System Applications

#### 11.13.10.8 Bachelor of Science (B.Sc.) - Major Geology (66 credits)

The program curriculum provides a rigorous foundation in the fundamental earth science subjects and in the advanced subjects relevant to exploration for energy resources, industrial and ore minerals, and to environmental geosciences. The program meets the academic requirements shared by the professional orders for geologists and environmental geoscientists in most Canadian provinces. It also offers students the opportunity to take courses or acquire experience in areas of current research. It is a path to a wide range of careers in industry, teaching and research in earth sciences.

## Required Courses (30 credits)

EPSC 210	(3)	Introductory Mineralogy
EPSC 212	(3)	Introductory Petrology
EPSC 220	(3)	Principles of Geochemistry
EPSC 231	(3)	Field School 1
EPSC 233	(3)	Earth and Life History
EPSC 240	(3)	Geology in the Field
EPSC 303	(3)	Structural Geology
EPSC 320	(3)	Elementary Earth Physics
EPSC 340	(3)	Earth and Planetary Inference
MATH 222	(3)	Calculus 3

# **Complementary Courses (36 credits)**

15 credits	$\cap$ t	advanced	earth	ccience
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EPSC 334	(3)	Invertebrate Paleontology
EPSC 355	(3)	Sedimentary Geology
EPSC 423	(3)	Igneous Petrology
EPSC 425	(3)	Sediments to Sequences
EPSC 445	(3)	Metamorphic Petrology
EPSC 452	(3)	Mineral Deposits

## 3 credits of field school

EPSC 331	(3)	Field School 2
EPSC 341	(3)	Field School 3

# 3 credits of environmental and ore-forming processes

EPSC 513	(3)	Climate and the Carbon Cycle
EPSC 519	(3)	Isotopes in Earth and Environmental Science
EPSC 549	(3)	Hydrogeology
EPSC 561	(3)	Ore-forming Processes
EPSC 590	(3)	Applied Geochemistry Seminar

15 credits of other specializations can be drawn from the categories above or from:

EPSC 350	(3)	Tectonics
EPSC 435	(3)	Applied Geophysics
EPSC 470D1	(3)	Undergraduate Thesis Research
EPSC 470D2	(3)	Undergraduate Thesis Research

Research in Earth and Planetary Sciences

## 11.13.10.9 Bachelor of Science (B.Sc.) - Honours Geology (75 credits)

The program curriculum is designed to provide a rigorous foundation in the fundamental earth science disciplines and in the advanced subjects relevant to fundamental and applied research in exploration for energy resources or industrial and ore minerals, and in environmental geosciences. The program meets the academic requirements shared by the professional orders for geologists and environmental geoscientists in most Canadian provinces. It is intended to provide an excellent preparation for graduate work in the earth sciences but offers enough flexibility to prepare for a wide range of careers in industry and teaching.

## Required Courses (42 credits)

EPSC 210	(3)	Introductory Mineralogy
EPSC 212	(3)	Introductory Petrology
EPSC 220	(3)	Principles of Geochemistry
EPSC 231	(3)	Field School 1
EPSC 233	(3)	Earth and Life History
EPSC 240	(3)	Geology in the Field
EPSC 303	(3)	Structural Geology
EPSC 320	(3)	Elementary Earth Physics
EPSC 340	(3)	Earth and Planetary Inference
EPSC 480D1	(3)	Honours Research Thesis
EPSC 480D2	(3)	Honours Research Thesis
MATH 222	(3)	Calculus 3
MATH 314	(3)	Advanced Calculus
MATH 315	(3)	Ordinary Differential Equations

# **Complementary Courses (33 credits)**

15 credits of advanced earth science

EPSC 334	(3)	Invertebrate Paleontology
EPSC 355	(3)	Sedimentary Geology
EPSC 423	(3)	Igneous Petrology
EPSC 425	(3)	Sediments to Sequences
EPSC 445	(3)	Metamorphic Petrology
EPSC 452	(3)	Mineral Deposits

# 3 credits of field school

EPSC 331	(3)	Field School 2
EPSC 341	(3)	Field School 3

3 credits of environmental and ore-forming processes

EPSC 513 (3) Climate and the Carbon Cycle

12 credits of other specializations can be drawn from the categories above or from:

EPSC 350	(3)	Tectonics
EPSC 435	(3)	Applied Geophysics
EPSC 501	(3)	Crystal Chemistry
EPSC 503	(3)	Advanced Structural Geology
EPSC 510	(3)	Geodynamics
EPSC 520	(3)	Earthquake Physics and Geology
EPSC 530	(3)	Volcanology
EPSC 547	(3)	Modelling Geochemical Processes
EPSC 548	(3)	Igneous Petrogenetic Mechanisms
EPSC 550	(3)	Selected Topics 1
EPSC 551	(3)	Selected Topics 2
EPSC 552	(3)	Selected Topics 3
EPSC 567	(3)	Advanced Volcanology

Courses from other departments may also be used, with the permission of the Director of undergraduate studies, when they meet the academic requirements of professional orders in most Canadian provinces.

11.13.10.10 Bachelor of Science (B.Sc.) - Honours Planetary Sciences (78 credits)

MATH 317	(3)	Numerical Analysis
MATH 319	(3)	Partial Differential Equations
PHYS 340	(3)	Majors Electricity and Magnetism

## **Complementary Courses (12 credits)**

3	credits	from:
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PHYS 230	(3)	Dynamics of Simple Systems
PHYS 251	(3)	Honours Classical Mechanics 1

plus 9 credits (three courses) chosen from the following:

Note: Courses at the 300 level or higher in other departments in the Faculties of Science and Engineering may also be used as complementary credits, with the permission of the Director of undergraduate studies.

EPSC 334	(3)	Invertebrate Paleontology
EPSC 425	(3)	Sediments to Sequences
EPSC 445	(3)	Metamorphic Petrology
EPSC 501	(3)	Crystal Chemistry
EPSC 519	(3)	Isotopes in Earth and Environmental Science
EPSC 520	(3)	Earthquake Physics and Geology
EPSC 530	(3)	Volcanology
EPSC 540	0	Crustal Rheology
EPSC 547	(3)	Modelling Geochemical Processes
EPSC 548	(3)	Igneous Petrogenetic Mechanisms
EPSC 549	(3)	Hydrogeology
EPSC 550	(3)	Selected Topics 1
EPSC 551	(3)	Selected Topics 2
EPSC 552	(3)	Selected Topics 3
EPSC 561	(3)	Ore-forming Processes
EPSC 567	(3)	Advanced Volcanology
EPSC 590	(3)	Applied Geochemistry Seminar

# 11.13.10.11 Earth and Planetary Sciences (EPSC) Related Programs 11.13.10.11.1 Joint Major in Physics and Geophysics

For more information, see section 11.13.30: Physics (PHYS).

#### 11.1310112 Earth System Science Interdepartmental Major

This program is offered by the Departments of Atmospheric and Oceanic Sciences; Earth and Planetary Sciences; and Geography. Students in the Department of Earth and Planetary Sciences who are interested in this program should contact Professor William Minarik (william.minarik@mcgill.ca).

For more information, see section 11.13.11: Earth System Science (ESYS).

## 11.13.10.11.3 Earth System Science Interdepartmental Honours

This program is offered by the Departments of Atmospheric and Oceanic Sciences; Earth and Planetary Sciences; and Geography. Students in the Department of Earth and Planetary Sciences who are interested in this program should contact Professor William Minarik (william.minarik@mcgill.ca).

For more information, see section 11.13.11: Earth System Science (ESYS).

#### 11.13.11 Earth System Science (ESYS)

#### 11.13.11.1 Location

Program Adviser Dr. William Minarik Frank Dawson Adams, Room 215 Telephone: 514-398-2596

Email: william.minarik@mcgill.ca

Website: ess.mcgill.ca

#### 11.13.11.2 About Earth System Science

The McGill interdepartmental **Major** program in Earth System Science (ESYS) is designed to equip students with the skills and knowledge to address six "Grand Challenges" that are fundamental to our understanding of the way in which the Earth operates. These Grand Challenges are being tackled with scientific and technological innovation and interdisciplinary research, creating bountiful employment opportunities for ESYS graduates in industry, research institutions, and government. They are:

- Global biogeochemical cycles;
- · Climate variability and change;
- · Land use and land cover change;
- Energy and resources;
- · Earth hazards: volcanoes, earthquakes, and hurricanes; and
- Earth-atmosphere observation, analysis, and prediction.

Many of our graduates go on to M.Sc. or Ph.D. programs in a variety of scientific fields that address these grand challenges, including those arising from the interaction of human activities and natural systems.

Career opportunities after a B.Sc. are diverse and increasing. Our graduates work for environmental consulting firms (assessing suitable sites for new industrial facilities and predicting their environmental impact, and cleaning contaminated sites), research groups in re-insurance firms (evaluating risks of natural disasters), in product life cycle management (studying energy and resources use, and the effect of recycling or waste disposal), and software companies that develop algorithms to assist farmers on choices of crops and soil management practices, and business owners with inventory management.

The **Honours** program in Earth System Science (ESYS) prepares students for graduate studies in a wide range of transdisciplinary programs that address these challenges.

The ESS programs are offered jointly by the Department of section 11.13.3: Atmospheric and Oceanic Sciences (ATOC), the Department of section 11.13.10: Earth and Planetary Sciences (EPSC), and the Department of section 11.13.17: Geography (GEOG).

The individual departments, their disciplines, and specific courses offered by them are described in their respective entries in this publication.

11.13.11.3t6 aucheholecsta actieng coeth Minor Earth System Science (18 credits)

Atmospheric and Oceanic Sciences (ATOC)

Earth and Planetary Sciences (EPSC)

Geography (GEOG)

Earth System Science (ESYS) views Earth as a single integrated system that provides a unifying context to examine the interrelationships between all components of the Earth system. The approach concentrates on the nature of linkages among the biological, chemical, human, and physical subsystems of the Earth. Earth System Science primarily involves studying the cycling of matter and energy through the atmosphere, biosphere, cryosphere, and hydrosphere. It examines the dynamics and interrelationships among these processes at time scales that range from billions of years to days, and seeks to understand how these interrelationships have changed over time.

## Required Courses (18 credits)

ENVR 201	(3)	Society, Environment and Sustainability
ESYS 200	(3)	Earth System Processes
		Investigating the 1.949 573.8.372 573pl951165.864 589.541 Tm((3: 573pl9511 70.3l951165.864 589.541 Tm. 0 0 1 165

3 credits from the following:

Introduction to Ecology and Evolution

BREE 515	(3)	Soil Hydrologic Modelling
BREE 533	(3)	Water Quality Management
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
EPSC 212	(3)	Introductory Petrology
EPSC 320	(3)	Elementary Earth Physics
EPSC 331	(3)	Field School 2
EPSC 334	(3)	Invertebrate Paleontology
EPSC 340	(3)	Earth and Planetary Inference
EPSC 341	(3)	Field School 3
EPSC 350	(3)	Tectonics
EPSC 355	(3)	Sedimentary Geology
EPSC 423	(3)	Igneous Petrology
EPSC 425	(3)	Sediments to Sequences
EPSC 445	(3)	Metamorphic Petrology
EPSC 452	(3)	Mineral Deposits
EPSC 519	(3)	Isotopes in Earth and Environmental Science
EPSC 525	(3)	Microbiology of the Earth System
EPSC 530	(3)	Volcanology
EPSC 549	(3)	Hydrogeology
EPSC 561	(3)	Ore-forming Processes
EPSC 567	(3)	Advanced Volcanology
EPSC 590	(3)	Applied Geochemistry Seminar
GEOG 272	(3)	Earth's Changing Surface
GEOG 305	(3)	Soils and Environment
GEOG 321	(3)	Climatic Environments
GEOG 322	(3)	Environmental Hydrology
GEOG 351	(3)	Quantitative Methods
GEOG 372	(3)	Running Water Environments
GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 470	(3)	Wetlands
GEOG 495	(3)	Field Studies - Physical Geography
GEOG 499	(3)	Subarctic Field Studies
GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 523	(3)	Global Ecosystems and Climate
GEOG 530	(3)	Global Land and Water Resources
GEOG 535	(3)	Remote Sensing and Interpretation
GEOG 536	(3)	Geocryology
GEOG 537	(3)	Advanced Fluvial Geomorphology
GEOG 550	(3)	Historical Ecology Techniques
MATH 314	(3)	Advanced Calculus

MATH 315*	(3)	Ordinary Differential Equations
MATH 317	(3)	Numerical Analysis
MATH 319	(3)	Partial Differential Equations
MATH 323	(3)	Probability
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 423	(3)	Applied Regression
MATH 437	(3)	Mathematical Methods in Biology
MATH 447	(3)	Introduction to Stochastic Processes
		Sampling.67 631.24 Tm(M.88tic P371T2864 ,5al Methods in 5 Tm(Sampling.67 6artial Dif)Tj1 0 0 1 2864 615.52 1 8

COMP 202	(3)	Foundations of Programming
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
3 credits from the follo	owing:	
ATOC 214	(3)	Introduction: Physics of the Atmosphere
ATOC 219	(3)	Introduction to Atmospheric Chemistry
3 credits from the follo	owing:	
EPSC 210	(3)	Introductory Mineralogy
EPSC 220	(3)	Principles of Geochemistry
3 credits from the follo	owing:	
GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 314	(3)	Geospatial Analysis
3 credits from the follo	owing:	
ENVR 200	(3)	The Global Environment
GEOG 203	(3)	Environmental Systems
3 credits from the follo	owing:	
BIOL 215	(3)	Introduction to Ecology and Evolution
ENVR 202	(3)	The Evolving Earth
3 credits from the follo	owing:	
ANTH 339	(3)	Ecological Anthropology
GEOG 217	(3)	Cities in the Modern World
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geography
	(3)	Development and Livelihoods

Note: Courses at the 300 level or higher in other departments in the Faculties of Science and Engineering may also be used as complementary credits, with the permission of an academic adviser.

ATOC 215	(3)	Oceans, Weather and Climate
ATOC 309	(3)	Weather Radars and Satellites
	(3)	Rotating Fluid Dynamics

ATOC 513	(3)	Waves and Stability
ATOC 515	(3)	Turbulence in Atmosphere and Oceans
ATOC 519	(3)	Advances in Chemistry of Atmosphere
ATOC 521	(3)	Cloud Physics
ATOC 525	(3)	Atmospheric Radiation
ATOC 531	(3)	Dynamics of Current Climates
ATOC 540	(3)	Synoptic Meteorology 1
ATOC 541	(3)	Synoptic Meteorology 2
BIOL 308	(3)	Ecological Dynamics
BIOL 309	(3)	Mathematical Models in Biology
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 432	(3)	Limnology
BIOL 434	(3)	Theoretical Ecology
BIOL 441	(3)	Biological Oceanography
BIOL 465	(3)	Conservation Biology
BIOL 540	(3)	Ecology of Species Invasions
BIOL 573	(3)	Vertebrate Palaeontology Field Course
BREE 217	(3)	Hydrology and Water Resources
BREE 319	(3)	Engineering Mathematics
BREE 509	(3)	Hydrologic Systems and Modelling.
BREE 510	(3)	Watershed Systems Management
BREE 515	(3)	Soil Hydrologic Modelling
BREE 533	(3)	Water Quality Management
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
EPSC 212	(3)	Introductory Petrology
EPSC 320	(3)	Elementary Earth Physics
EPSC 331	(3)	Field School 2
EPSC 334	(3)	Invertebrate Paleontology
EPSC 340	(3)	Earth and Planetary Inference
EPSC 341	(3)	Field School 3
EPSC 350	(3)	Tectonics
EPSC 355	(3)	Sedimentary Geology
EPSC 423	(3)	Igneous Petrology
EPSC 425	(3)	Sediments to Sequences
EPSC 445	(3)	Metamorphic Petrology
EPSC 452	(3)	Mineral Deposits
EPSC 519	(3)	Isotopes in Earth and Environmental Science
EPSC 525	(3)	Microbiology of the Earth System
EPSC 530	(3)	Volcanology
EPSC 549	(3)	Hydrogeology
EPSC 561	(3)	Ore-forming Processes
EPSC 567	(3)	Advanced Volcanology

EPSC 590	(3)	Applied Geochemistry Seminar
GEOG 272	(3)	Earth's Changing Surface
GEOG 305	(3)	Soils and Environment
GEOG 321	(3)	Climatic Environments
GEOG 322	(3)	Environmental Hydrology
GEOG 351	(3)	Quantitative Methods
GEOG 372	(3)	Running Water Environments
GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation
GEOG 414	(3)	Advanced Geospatial Analysis
GEOG 470	(3)	Wetlands
GEOG 495	(3)	Field Studies - Physical Geography
GEOG 499	(3)	Subarctic Field Studies
GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 523	(3)	Global Ecosystems and Climate
GEOG 530	(3)	Global Land and Water Resources
GEOG 535	(3)	Remote Sensing and Interpretation

 $GEOG~531.2~Tm (anced~Geograph) \\ T \textit{Geograph} (GcUl~Geograph anced~Fluvial~Geomorphology) \\ Tj1~0~0~1~165.864~4~Geograph (3)$ 

cooperatives as well as intrapreneurship initiatives. The program covers the essentials of management and is interdisciplinary and integrative. Many courses in the Minor will address a mix of students from across multiple McGill faculties.

Students in this Minor are not permitted to take the Desautels Minors in Management, Marketing, Finance or Operations Management (for Non-Management students)

To obtain the Minor, all courses must be completed with a grade of C or better.

Advising note: Desautels Faculty of Management courses in this Minor have limited enrolment and include INTG 201, INTG 202, MGPO 362, MGPO 364, MGPO 438, and BUSA 465. For advising regarding Management courses, students should contact the Desautels Faculty of Management, B.Com. Office (see coordinates in the calendar notes). For advising regarding MIMM 387, see your adviser in the Science Office for Undergraduate Student Advising (SOUSA) in Dawson Hall.

## Required Courses (12 credits)

INTG 201	(3)	Integrated Management Essentials 1
INTG 202	(3)	Integrated Management Essentials 2
MGPO 362	(3)	Fundamentals of Entrepreneurship
MGPO 364	(3)	Entrepreneurship in Practice

#### **Complementary Courses (6 credits)**

Choose 6 credits from the following:

BUSA 465	(3)	Technological Entrepreneurship
MGPO 438	(3)	Social Entrepreneurship and Innovation
MIMM 387	(3)	The Business of Science

## 11.13.13 Environment

Science students who are interested in studying the environment should refer to Bieler School of Environment > Undergraduate.

• Minor: section 7.7.1: Minor in Environment

• Major: section 7.7.4: Major in Environment - B.Sc. (Ag. Env. Sc.) and B.Sc. or section 7.7.5: Major in Environment - B.Sc.

• Honours: section 7.7.6: Honours Program in Environment

• Diploma: section 7.7.8: Diploma in Environment

## 11.13.14 Experimental Medicine (EXMD)

## 11.13.14.1 Location

 $Division\ of\ Experimental\ Medicine TM (USA\ 465) Tj1\ 0\ 0\ 1\ 18\ 0\ 1\ 251.6 Email (Major:\ ) Tj0\ 0\ 1\ rg0\ 0\ 1\ RG/F2\ 8.1\ Tf1\ 0\ 0\ 0\ 1\ 8\ 0\ 1\ 251.6 ie\ Boule \emph{onment}$  Department of\ Medicine

1001 Decarie Boulev

Experimental Medicine Courses				
Experimental Medicine Courses				
EXMD 502	(3)	Advanced Endocrinology 01		
EXMD 503	(3)	Advanced Endocrinology 02		
EXMD 504	(3)	Biology of Cancer		
EXMD 505	(3)	Directed Readings in Regenerative Medicine		
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology		
EXMD 507	(3)	Advanced Applied Respiratory Physiology		
EXMD 508	(3)	Advanced Topics in Respiration		
EXMD 509	(3)	Gastrointestinal Physiology and Pathology		
EXMD 510	(3)	Bioanalytical Separation Methods		
EXMD 511	(3)	Joint Venturing with Industry		

## 11.13.15 Field Study

For details about the available Field Study Semesters, see  $\ \textit{Field Study Programs}\ .$ 

## 11.13.15.1 Field Studies - Minor Field Studies (18 credits)

Students participating in any one of the field study semesters, i.e., the Africa Field Study Semester, the Barbados Field Study Semester, the Barbados Interdisciplinary Tropical Studies (BITS) Field Study Semester, McGill Arctic Field Study Semester, or the Panama Field Study Semester may complete the 18-credit Minor in Field Studies.

The Minor consists of the 15 credits of a field study semester plus three additional complementary credits chosen by the student in consultation with their departmental adviser and/or the Field Study Minor adviser.

F

BIOL 428	(3)	Biological Diversity in Africa
BIOL 429	(3)	East African Ecology
GEOG 404*	(3)	Environmental Management 2
GEOG 408	(3)	Geography of Development
GEOG 423	(3)	Dilemmas of Development
HIST 498	(3)	Independent Research
NRSC 405	(3)	Natural History of East Africa
NUTR 404	(3)	Nutrition Field Studies in East Africa
		Natural History of East

BIOL 553	(3)	Neotropical Environments
ENVR 451	(6)	Research in Panama

## Panama Field Study Semester - Complementary Courses

6 credits

Complementary courses change from year to year. Students will register for the 6 credits offered the Winter of their participation in the field study semester. First Winter semester complementary courses:

AGRI 550	(3)	Sustained Tropical Agriculture
GEOG 498	(3)	Humans in Tropical Environments

Second Winter semester complementary courses:

GEOG 404	(3)	Environmental Management 2
HIST 510	(3)	Environmental History of Latin America (Field)

## McGill Arctic Field Study Semester

## Required Courses (15 credits)

9 credits		
ATOC 373	(3)	Arctic Climate and Climate Change
EPSC 373	(3)	Arctic Geology
GEOG 373	(3)	Arctic Geomorphology
and 6 credits from		
ATOC 473	(6)	Artic Field Research
EPSC 473	(6)	Arctic Field Research
GEOG 473	(6)	Arctic Field Research

## **Minor Field Studies - Complementary Course**

In consultation with their departmental adviser and/or the Field Study Minor adviser, students who have completed one of the field study semesters described above may select a 3-credit complementary course to complete the requirements for the Minor and ask for it to be added to their academic records.

#### 11.13.16 General Science

# **Complementary Courses (18 credits)**

Courses are to be chosen according to the following guidelines:

All courses must be offered by the Faculty of Science and must be at or above the 200 level\*.

All courses must be different from the student's core science component courses.

Two options:

9 credits at the 300 level or above and at least 9 credits outside the student's core science component subject.

or

12 credits at the 300 le

# **Emeritus Professors**

T.R. Moore; S. Olson; W.H. Pollard; G.W. Wenzel

## **Professors**

Geography Approved Course List - Major, Honours and Liberal Programs

GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation
GEOG 404	(3)	Environmental Management 2
GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 523	(3)	Global Ecosystems and Climate
GEOG 530	(3)	Global Land and Water Resources
GEOG 535	(3)	Remote Sensing and Interpretation
GEOG 536	(3)	Geocryology
GEOG 537	(3)	Advanced Fluvial Geomorphology
GEOG 550	(3)	Historical Ecology Techniques
GEOG 555	(3)	Ecological Restoration

# 11.13.17.8 Bachelor of Science (B.Sc.) - Major Geography (58 credits)

The BSc Major in Geography provides students with strong training in the theory and tools of physical geography. Students will explore the science of how physical, chemical, and biological processes interact at various spatial and temporal scales to produce distinct environments over the planet, and study different suites of ecosystem services while investigating sustainability challenges for human communities that depend on them.

3 credits of field courses: (Field course av

GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 523	(3)	Global Ecosystems and Climate
GEOG 530	(3)	Global Land and Water Resources
GEOG 535	(3)	Remote Sensing and Interpretation
GEOG 536	(3)	Geocryology
GEOG 537	(3)	Advanced Fluvial Geomorphology
GEOG 550	(3)	Historical Ecology Techniques
GEOG 555	(3)	Ecological Restoration

# 11.13.17.9 Bachelor of Science (B.Sc.) - Honours Geography (66 credits)

The Honours program provides specialize systematic training in physical geography. In addition to the Faculty of Science 3.00 CGPA requirement, students in a Geography Honours program must maintain a program GPA of 3.30 and complete a 6-credit Honours thesis.

# Required Courses (21 credits)

GEOG 201	(3)	Introductory Geo-Information Science
GEOG 203	(3)	Environmental Systems
GEOG 272	(3)	Earth's Changing Surface
GEOG 351	(3)	Quantitative Methods
GEOG 381	(3)	Geographic Thought and Practice

9 credits	of sy	vstematic	physical	geography:
) Cicuits	OI S	ystematic	priysical	i geography.

GEOG 305	(3)	Soils and Environment
GEOG 321	(3)	Climatic Environments
GEOG 322	(3)	Environmental Hydrology
GEOG 372	(3)	Running Water Environments
GEOG 470	(3)	Wetlands

### 3 credits of field courses:

GEOG 495	(3)	Field Studies - Physical Geography
GEOG 496	(3)	Geographical Excursion
GEOG 499	(3)	Subarctic Field Studies

Students must take a total of 15 credits from the next 2 blocks; they will choose 9 credits from one block and 6 credits from the other block, depending on their training focus

6 or 9 credits of environmental analysis/techniques

GEOG 308	(3)	Remote Sensing for Earth Observation
GEOG 314	(3)	Geospatial Analysis
GEOG 384	(3)	Principles of Geospatial Web
GEOG 414	(3)	Advanced Geospatial Analysis

# 6 or 9 credits (In Environment, Earth Science and Sustainability sciences)

ENVR 200	(3)	The Global Environment
ENVR 201	(3)	Society, Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ESYS 200	(3)	Earth System Processes
ESYS 300	(3)	Investigating the Earth System
GEOG 302	(3)	Environmental Management 1
GEOG 360	(3)	Analyzing Sustainability
GEOG 460	(3)	Research in Sustainability

6 credits of approved advanced courses in Geography, or elsewhere in the Faculty of Science that have been approved by the Program Adviser, including any geography courses from the above complementary lists.

Geography Approved Course List - Major, Honours and Liberal Programs

GEOG 401	(3)	Socio-Environmental Systems: Theory and Simulation
GEOG 404	(3)	Environmental Management 2
GEOG 505	(3)	Global Biogeochemistry
GEOG 506	(3)	Advanced Geographic Information Science
GEOG 523	(3)	Global Ecosystems and Climate
GEOG 530	(3)	Global Land and Water Resources
GEOG 535	(3)	Remote Sensing and Interpretation
GEOG 536	(3)	Geocryology

GEOG 537	(3)	Advanced Fluvial Geomorphology
GEOG 550	(3)	Historical Ecology Techniques
GEOG 555	(3)	Ecological Restoration

# 11.13.17.10 Geography (GEOG) Related Programs and Study Semesters

The following programs, as well as several other opportunities for field study, are offered by the Faculty of Science. For further information, refer to mcgill.ca/mcgillabroad/students-going-abroad/plan-and-prepare/field-study-semester or the Science Internship & Field Studies Office.

# 11.13.17.10.1 Africa Field Study Semester

The Africa program introduces students to East Africa specifically with a view to increasing their understanding of the goals, circumstances, challenges, and opportunities of people living in the areas visited. For more information, see *mcgill.ca/africa*.

# 11.13.17.102 Panama Field Study Semester

The Panama program is a joint v

The program is a demanding one which will prepare students for graduate work in immunology.

Students who do not maintain Honours standing must transfer their registration to a program in one of the three participating departments.

Apply to:

Dr. Monroe Cohen Physiology McIntyre Medical Sciences Building, Room 1136 3655 Promenade Sir-Willam-Osler, Montreal QC H3G 1Y6 Telephone: 514-398-4342

Email: monroe.cohen@mcgill.ca

or

Dr. C. Piccirillo Microbiology and Immunology McGill University Health Centre – Glen Site 1001 Decarie Boulevard, Bloc E, Office EM23248 Montreal QC H3G 1A4

Telephone: 514-934-1934, 3

# **U3 Required Courses**

15 credits from the following:

Advanced Immunology

BIOL 301***	(4)	Cell and Molecular Laboratory
MIMM 384**	(3)	Molecular Microbiology Laboratory
MIMM 385**	(3)	Laboratory in Immunology
PHGY 212***	(1)	Introductory Physiology Laboratory 1
PHGY 213***	(1)	Introductory Physiology Laboratory 2

plus 6 credits, selected from:

\* Students take either BIOL 309 or MATH 315, but not both.

ANAT 365 (3) Cellular Trafficking

BIOL 520	(3)	Gene Activity in Development
EXMD 504	(3)	Biology of Cancer
MIMM 413	(3)	Parasitology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis
MIMM 509	(3)	Inflammatory Processes
NEUR 502	(3)	Basic and Clinical Aspects of Neuroimmunology
PHAR 503	(3)	Drug Discovery and Development 1
PHAR 504	(3)	Drug Discovery and Development 2
PHGY 488	(3)	Stem Cell Biology
PHGY 531	(3)	Topics in Applied Immunology
PHGY 552	(3)	Cellular and Molecular Physiology

# 11.13.19 Interdisciplinary Life Sciences

# 11.13.19.1 Location

Interdisciplinary Programs Advisor

Curtis Sharman

Email: curtis.sharman@mcgill.ca

# 11.13.19.2 About the Interdisciplinary Life Sciences Minor

The Interdisciplinary Life Sciences Minor allows students to obtain exposure to Life Sciences and life science related areas. Students must consult with the adviser to review course selection.



**Please note:** Students studying in Anatomy and Cell Biology; Biochemistry; Honours Immunology; Microbiology and Immunology; Neuroscience; Pharmacology; and Physiology are not permitted to complete this Minor.

Bachelor of Science (B.Sc.) - Minor Interdisciplinary Lif

* Students t	ake either	ANAT 212 or	· BIOC 212	but not both
- Singenis i	аке еппег	AINAL ZIZ OI	DIU	DIII HOLDOID

		,
ANAT 212*	(3)	Molecular Mechanisms of Cell Function
ANAT 214	(3)	Systemic Human Anatomy
ANAT 261	(4)	Introduction to Dynamic Histology
ANAT 262	(3)	Introductory Molecular and Cell Biology
ANAT 321	(3)	Circuitry of the Human Brain
ANAT 365	(3)	Cellular Trafficking
ANAT 381	(3)	Experimental Embryology
BIOC 212*	(3)	Molecular Mechanisms of Cell Function
BIOC 311	(3)	Metabolic Biochemistry
BIOC 450	(3)	Protein Structure and Function
BIOC 458	(3)	Membranes and Cellular Signaling
BIOL 200	(3)	Molecular Biology
BIOL 201	(3)	Cell Biology and Metabolism
BIOL 202	(3)	Basic Genetics
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 301	(4)	Cell and Molecular Laboratory
		D

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PHAR 504	(3)	Drug Discovery and Development 2
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PHGY 311	(3)	Channels, Synapses and Hormones
		Respiratory, Renal, and Cardiov

SOCI 515	(3)	Medicine and Society
SOCI 525	(3)	Health Care Systems in Comparative Perspective
SOCI 538	(3)	Selected Topics in Sociology of Biomedical Knowledge

### **Empirical Science and Technology**

At least 3 credits from:

Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

BIOL 309	(3)	Mathematical Models in Biology
BIOL 373	(3)	Biometry
COMP 202	(3)	Foundations of Programming
COMP 364	(3)	Computer Tools for Life Sciences
COMP 462	(3)	Computational Biology Methods
GEOG 202	(3)	Statistics and Spatial Analysis
MATH 203	(3)	Principles of Statistics 1
MATH 204	(3)	Principles of Statistics 2
MATH 323	(3)	Probability
MATH 324*	(3)	Statistics
PSYC 204	(3)	Introduction to Psychological Statistics
PSYC 305	(3)	Statistics for Experimental Design

# 11.13.20 Kinesiology for Science Students

## 11.13.20.1 Location

Department of Kinesiology and Physical Education

Currie Gymnasium

475 Pine Avenue West, 2nd Floor

Montreal QC H2W 1S4

Telephone: 514-398-4184, ext. 0367

Fax: 514-398-4186

Email: studentaffairs.kpe@mcgill.ca

Website: mcgill.ca/edu-kpe/programs/ug/bsckinminor

Program Adviser: Nada Abu-Merhy; studentaffairs.kpe@mcgill.ca

### 11.13.20.2 About Kinesiology for Science Students

Students planning a career in the health sciences, whether as a health professional or a biomedical researcher, will find courses in Kinesiology to be of interest from both theoretical and applied perspectives. There is a focus on the benefits of physical activity for health and well-being, as well as appropriate prescription of exercise in the treatment of various diseases, injuries, and disabilities. Courses deal with both prevention and rehabilitation.

 $Students \ are \ not \ permitted \ to \ enrol \ in \ more \ than \ the \ 18 \ credits \ of \ EDKP \ courses \ required \ for \ the \ Minor \ in \ Kinesiology \ for \ Science \ Students.$ 

### 11.13.20.3 Bachelor of Science (B.Sc.) - Minor Kinesiology (24 credits)

The Minor Kinesiology is designed to provide students in B.Sc. programs with basic but comprehensive knowledge of scientific bases of human physical activity and its relationship with health and well-being.

Students registered in the Minor Kinesiology may not take additional courses outside the Faculties of Arts and of Science.

This minor program requires an application due to limited enrolment space. Please see http://www.mcgill.ca/isa/faculty-advising/minor-programs for procedures and deadlines.

<sup>\*</sup> Students who have already received credit for MATH 324 will NOT receive credit for GEOG 202, MATH 203, PSYC 204, BIOL 373, MATH 204, or PSYC 305

# Required Courses (15 credits)

EDKP 206	(3)	Biomechanics of Human Movement
EDKP 261	(3)	Motor Development
EDKP 395	(3)	Exercise Physiology
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

## **Complementary Courses (9 credits)**

9 credits, three of the following courses:

EDKP 330	(3)	Physical Activity and Public Health
EDKP 394	(3)	Historical Perspectives
EDKP 396	(3)	Adapted Physical Activity
EDKP 405	(3)	Sport in Society
EDKP 444	(3)	Ergonomics
EDKP 445	(3)	Exercise Metabolism
EDKP 446	(3)	Physical Activity and Ageing
EDKP 447	(3)	Motor Control
EDKP 448	(3)	Exercise and Health Psychology
EDKP 449	(3)	Neuromuscular and Inflammatory Pathophysiology
EDKP 485	(3)	Cardiopulmonary Exercise Pathophysiology
EDKP 495	(3)	Scientific Principles of Training
EDKP 498	(3)	Sport Psychology
EDKP 542	(3)	Environmental Exercise Physiology
EDKP 566	(3)	Advanced Biomechanics Theory

# 11.13.21 Management for Science Students - Currently under review

The Desautels Faculty of Management offers four minor programs for non-Management students open for application to students in the Faculty of Science. Please refer to Desautels Faculty of Management > Undergraduate > Overview of Programs Offered by the Desautels Faculty of Management > section 9.8.7: Minors for Non-Management Students for detailed information about program requirements and applying.

Also available to Science students is the Minor in Entrepreneurship for Science students; see section 11.13.12: Entrepreneurship for Science Students.

9 credits selected from any other undergraduate FINE course.

#### 11.13.21.2 Bachelor of Commerce (B.Com.) - Minor Management (For Non-Management Students) (18 credits)

The Minor Management consists of 18 credits of Management courses and is currently offered to non-Management students in the following Faculties: Arts, Engineering, Science, Agricultural & Environmental Sciences, Music, Religious Studies, and Kinesiology.

This Minor is designed to provide non-management students with the opportunity to obtain basic knowledge in various aspects of management.

### **Complementary Courses (18 credits)**

Selected from categories A, B, and C:

#### Category A

3 credits selected from:

MGCR 211	(3)	Introduction to Financial Accounting
MGCR 341*	(3)	Introduction to Finance

#### Category B

9 credits selected from:

MGCR 222	(3)	Introduction to Organizational Behaviour
MGCR 271**	(3)	Business Statistics
MGCR 293***	(3)	Managerial Economics
MGCR 331	(3)	Information Technology Management
MGCR 352	(3)	Principles of Marketing
MGCR 382	(3)	International Business
MGCR 472*	(3)	Operations Management

### Category C

6 credits selected from:

Note: Students should select their Statistics course only after consulting the "Course Overlap" section in the Faculty of Arts, the "Course Overlap" section in the Faculty of Science, and the "Course Overlap" section in the Desautels Faculty of Management to avoid overlapping Statistics courses.

## 11.13.21.3 Bachelor of Commerce (B.Com.) - Minor Marketing (For Non-Management Students) (18 credits)

The Minor Marketing consists of 18 credits of Management courses and is currently offered to non-Management students in the Faculties of Arts, Engineering, Science, and the Schulich School of Music.

This Minor is designed to provide students with an understanding of the fundamental concepts in marketing and a framework for applying marketing in a decision-making context. Students will be introduced to the basic concepts in marketing. The use of marketing theory and concepts for decision making will be covered. Marketing research methods for marketing decisions is introduced. Subsequently, students will be able to specialize by choosing from the list of complementary courses.

### Required Courses (9 credits)

MGCR 352	(3)	Principles of Marketing
MRKT 354	(3)	Marketing Strategy
MRKT 451	(3)	Marketing Research

<sup>3-6</sup> credits from any 300- or 400-level Management courses for which prerequisites have been met.

<sup>0-3</sup> credits may be from a specifically designated course by the student's home faculty.

<sup>\*</sup> Prerequisite: MGCR 271, Business Statistics, or another equivalent Statistics course approved by the Program Adviser.

<sup>\*\* 3</sup> credits of statistics: Students who have taken an equivalent Statistics course in another faculty may not count those credits towards the Minor; an additional 3-credit complementary course must be chosen from the course list above.

<sup>\*\*\*</sup> Students who have taken an equivalent Economics course in another faculty may not count those credits toward the Minor; an additional 3-credit complementary course must be chosen from the course list above.

# **Complementary Courses (9 credits)**

1		1	•	
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MGCR 271*	(3)	Business Statistics
6 credits selected from:		
MRKT 357	(3)	Marketing Planning 1
MRKT 365	(3)	New Products
MRKT 438	(3)	Brand Management
MRKT 452	(3)	Consumer Behaviour
MRKT 453	(3)	Advertising and Media
MRKT 455	(3)	Sales Management
MRKT 459	(3)	Retail Management

International Mark

MGSC 578 (3) Simulation of Management Systems

or other appropriate 300- or 400-level MGSC courses with the approval of the Program Adviser.

\* 3 credits of Statistics: Students who have taken an equivalent Statistics course in another faculty may not count those credits toward the Minor; an additional 3-credit complementary course must be chosen from the course list above.

Note: Students should select their Statistics course only after consulting the "Course Overlap" section in the Faculty of Arts, the "Course Overlap" section in the Faculty of Science, and the "Course Overlap" section in the Desautels Faculty of Management to avoid overlapping Statistics courses.

### 11.13.22 Mathematics and Statistics (MATH)

#### 11.13.22.1 Location

Burnside Hall, Room 1005 805 Sherbrooke Street West Montreal QC H3A 0B9 Telephone: 514-398-3800 Website: mcgill.ca/mathstat

#### 11.13.22.2 About Mathematics and Statistics

Mathematics and statistics are omnipresent in today's world of information and technology. Their theories, models, and methods are integral to the way we analyze, understand, and build the world around us. They play a key role in nearly every effort to push the boundaries of science, engineering, medicine, and social sciences, and contribute—in a major way—to solving some of the most pressing human, environmental, and economic problems of our time.

The Department of Mathematics and Statistics is one of the oldest and most distinguished of its kind in Canada. It is home to active, internationally acclaimed, and award-winning researchers in the three principal subdisciplines in the mathematical sciences.

**Pure mathematics** is concerned with abstract structures and concepts mainly with respect to their intrinsic and technical nature, although many areas in pure mathematics have developed from questions in science and technology. Core areas of expertise in pure mathematics include algebra, analysis, geometry, number theory, and topology.

Applied mathematics develops and utilizes advanced mathematical methods to solve problems in a broad range of applications in science, technology, engineering, computer science, and business. Core areas of expertise in applied mathematics include discrete mathematics, game theory, machine learning, graph theory, mathematical physics, numerical analysis, optimization, and probability.

**Statistics** is motivated by the need to extract information from data, to quantify uncertainty, and to make predictions about random phenomena. To do this effectively, sophisticated mathematical and probabilistic techniques and computational tools are needed. Core areas of expertise include Bayesian inference, biostatistics, computational statistics, extreme-value analysis, high-dimensional data modelling, multivariate analysis, and survival analysis.

#### 11.13.22.3 Undergraduate Program Options

Our programs provide a broad and solid mathematical and statistical education that paves the way to many interesting career options in academia, government, and industry. Top students typically get admitted to prestigious graduate schools around the world and often become leaders in their areas of research in academic or industrial settings. Our graduates at all levels are in high demand in government departments, health research centers, banks, insurance and pharmaceutical companies, statistical agencies, and multinational high-technology industries.

There are two popular undergraduate streams. The **Honours** programs in Mathematics, Applied Mathematics, and Probability/Statistics (including **Joint Honours** with Physics or Computer Science) are at an advanced level for students who wish to specialize their studies in the mathematical sciences. The Honours stream is well suited for students who intend to move on to graduate school and essential for those who are envisaging research careers in the mathematical sciences. The **Major** programs in Mathematic and Statistics are less intense and more flexible, leaving room for a **Minor** or a second Major Concentration in another discipline. The Major stream is particularly suited for students whose future creative activity will involve Mathematics, Statistics, or Data Science and its applications in another area. With satisfactory performance in an appropriate selection of courses, the **Major Statistics** program can lead to the professional accreditation A. Stat from the Statistical Society of Canada, which is regarded as the entry level requirement for a Statistician practicing in Canada. Several **Joint Major** programs and a **Liberal** program are also available.

Furthermore, the Desautels Faculty of Management offers the B.Com. degree with a Major in Mathematics.

Students considering programs in Mathematics and Statistics are encouraged to contact the Department of Mathematics and Statistics to arrange for academic advising.

## 11.13.22.4 Research Opportunities

During their undergraduate degree, students in the Department of Mathematics and Statistics are encouraged to engage in research. The two main opportunities are:

- · Funded summer research projects allowing students to engage in state-of-the art research with faculty members
- Opportunities for hands-on experience with data analysis offered through the Statistical Consulting Service

# 11.13.22.5 Internship Opportunities

Students who want to get practical experience in industry before graduation are encouraged to participate in one of the following internship programs:

- The Internship Year in Science (IYS) is an option offered for a duration of 8, 12, or 16 months. It is reflected on the transcript and included in the program name (Bachelor of Science Internship Program). Eligible students usually take this program between their U2 and U3 years.
- The Industrial Practicum (IP) has a duration of four months and is usually carried out starting in May. It will appear as a 0-credit, Pass/Fail course on

# 11.13.22.7 Bachelor of Science (B.Sc.) - Minor Mathematics (24 credits)

The Minor may be taken in conjunction with any primary program in the Faculty of Science (other than programs in Mathematics). Students should declare their intention to follow the Minor Mathematics at the beginning of the penultimate year and should obtain approval for the selection of courses to fulfil the requirements for the Minor from the Departmental Chief

MATH 523	(4)	Generalized Linear Models
MATH 524	(4)	Nonparametric Statistics
MATH 525	(4)	Sampling Theory and Applications
MATH 545	(4)	Introduction to Time Series Analysis
MATH 556	(4)	Mathematical Statistics 1
MATH 557	(4)	Mathematical Statistics 2
MATH 558	(4)	Design of Experiments
MATH 559	(4)	Bayesian Theory and Methods
MATH 562	(4)	Theory of Machine Learning
PHYS 362	(3)	Statistical Mechanics
PHYS 559	(3)	Advanced Statistical Mechanics
SOCI 504	(3)	Quantitative Methods 1

No more than 6 credits from the above list of complementary courses may be taken outside the Department of Mathematics and Statistics.

### 11.13.22.9 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Mathematics (45 credits)

### **Program Prerequisites**

Students entering the Core Science Component in Mathematics are normally expected to have completed the courses below or their equivalents. Otherwise, they will be required to make up any deficiencies in these courses over and above the 45 credits required for the program.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2

### **Guidelines for Selection of Courses**

The following informal guidelines should be discussed with the student's adviser. Where appropriate, Honours courses may be substituted for equivalent Major courses. Students planning to pursue graduate studies are encouraged to make such substitutions.

Students interested in computer science are advised to choose courses from the following: MATH 317, MATH 318, MATH 327, MATH 328, MATH 335, MATH 340, MATH 417 and to complete the Computer Science Minor.

Students interested in probability and statistics are advised to take MATH 204, MATH 324, MATH 423, MATH 447, MATH 523, MATH 525.

Students interested in applied mathematics should take MATH 317, MATH 319, MATH 324, MATH 326, MATH 327, MATH 417.

Students considering a career in secondary school teaching are advised to take MATH 318, MATH 328, MATH 338, MATH 339, MATH 346, MATH 348.

Students interested in careers in business, industry or government are advised to select courses from the following list:

MATH 317, MATH 319, MATH 327, MATH 329, MATH 417, MATH 423, MATH 430, MATH 447, MATH 523, MATH 525.

### **Required Courses (27 credits)**

<sup>\*\*</sup> Students who have successfully completed a course equivalent to MATH 222 with a grade of C or better may omit MATH 222, but must replace it with 3 credits of complementary courses.

MATH 222**	(3)	Calculus 3
MATH 235	(3)	Algebra 1
MATH 236	(3)	Algebra 2
MATH 242	(3)	Analysis 1
MATH 243	(3)	Analysis 2
MATH 249*	(3)	Honours Complex Variables
MATH 314	(3)	Advanced Calculus

<sup>\*</sup> Students may select either MATH 249 or MATH 316 but not both.

# **Program Prerequisites**

Students entering the Core Science Component in Statistics are normally expected to have completed the courses below or their equivalents. Otherwise they will be required to make up any deficiencies in these courses over and above the 45 credits required for the program.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2

MATH 340	(3)	Discrete Mathematics
MATH 350	(3)	Honours Discrete Mathematics
MATH 378	(3)	Nonlinear Optimization
MATH 417	(3)	Linear Optimization
MATH 430	(3)	Mathematical Finance
MATH 463	()	Convex Optimization

Students interested in applied mathematics should take MATH 317, MATH 319, MATH 324, MATH 326, MATH 327, MATH 417.

Students considering a career in secondary school teaching are advised to take MATH 318, MATH 338, MATH 346, MATH 348.

Students interested in careers in business, industry or government are advised to select courses from the following list:

MATH 317, MATH 319, MATH 327, MATH 329, MATH 417, MATH 423, MATH 430, MATH 447, MATH 523, MATH 525.

## Required Courses (27 credits)

Note: Students who have done well in MATH 235 and MATH 242 should consider entering the Honours stream by registering in MATH 251 and MATH 255 instead of MATH 236 and MATH 243.

<sup>\*\*</sup> Students who have successfully completed a course equivalent to MATH 222 with a grade of C or better may omit MATH 222, but must replace it with 3 credits of complementary courses.

I	MATH 222**	(3)	Calculus 3
I	MATH 235	(3)	Algebra 1
1	MATH 236	(3)	Algebra 2
1	MATH 242	(3)	Analysis 1
1	MATH 243	(3)	Analysis 2
1	MATH 249*	(3)	Honours Complex Variables
1	MATH 314	(3)	Advanced Calculus
I	MATH 315	(3)	Ordinary Differential Equations
ľ	MATH 316*	(3)	Complex Variables
I	MATH 323	(3)	Probability

### **Complementary Courses (27 credits)**

27 credits selected as follows:

6-12 credits selected from the following:

MATH 317	(3)	Numerical Analysis
MATH 324	(3)	Statistics
MATH 335	(3)	Computational Algebra
MATH 340	(3)	Discrete Mathematics

15-21 credits selected from the following: at least 6 credits must be at the 400 or 500 level.

MATH 204	(3)	Principles of Statistics 2
MATH 208	(3)	Introduction to Statistical Computing
MATH 308	(3)	Fundamentals of Statistical Learning
MATH 318	(3)	Mathematical Logic
MATH 319	(3)	Partial Differential Equations
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 327	(3)	Matrix Numerical Analysis
MATH 329	(3)	Theory of Interest
MATH 338	(3)	History and Philosophy of Mathematics
MATH 346	(3)	Number Theory
MATH 348	(3)	Euclidean Geometry
MATH 352	(1)	Problem Seminar

<sup>\*</sup> Students may select either MATH 249 or MATH 316 but not both.

MATH 378	(3)	Nonlinear Optimization
MATH 410	(3)	Majors Project
MATH 417	(3)	Linear Optimization
MATH 423	(3)	Applied Regression
MATH 427	(3)	Statistical Quality Control
MATH 430	(3)	Mathematical Finance
MATH 447	(3)	Introduction to Stochastic Processes
MATH 463	()	Convex Optimization
MATH 478	(3)	Computational Methods in Applied Mathematics
MATH 523	(4)	Generalized Linear Models
MATH 525	(4)	Sampling Theory and Applications
MATH 545	(4)	Introduction to Time Series Analysis

If necessary, 6 additional credits in Mathematics or related disciplines selected in consultation with the Adviser.

## 11.1322.12 Bachelor of Science (B.Sc.) - Major Statistics (54 credits)

The program provides training in statistics, with a solid mathematical core, and basic training in computing. With satisfactory performance in an appropriate selection of courses, this program can lead to the professional accreditation A. Stat from the Statistical Society of Canada, which is regarded as the entry level requirement for a Statistician practicing in Canada. The program is a path to a wide variety of careers in industry, academia and government in the statistical sciences, and provides preparation for graduate work in statistics and data sciences.

### **Program Prerequisites**

Students entering the Major in Statistics program are normally expected to have completed the courses below or their equivalents. Otherwise they will be required to make up any deficiencies in these courses over and above the 54 credits of program courses.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2

In addition, a student that has not completed the equivalent of MATH 203 upon entering the program must consult an academic adviser. If a student is advised to take MATH 203, this course has to be taken as a complementary course in the first semester, increasing the total number of program credits from 54 to 57.

Students are strongly advised to complete all required courses and all Part I complementary courses by the end of U2, except for MATH 423 and MATH 523

Students interested in the professional accreditation should consult an academic adviser.

Where appropriate, Honours courses may be substituted for equivalent Major courses. Students planning to pursue graduate studies are encouraged to make such substitutions, and to take MATH 556 and MATH 557 as complementary courses.

## Required Courses (34 credits)

MATH 243	(3)	Analysis 2
MATH 323	(3)	Probability
MATH 324*	(3)	Statistics
MATH 423	(3)	Applied Regression
MATH 523	(4)	Generalized Linear Models

# Complementary Courses (20-23 credits)

0-3 credits selected from:

MATH 203 (3) Principles of Statistics 1

# Part I: 6 credits selected from:

<sup>\*</sup> Students take either MATH 317 or COMP 350, but not both.

COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 350*	(3)	Numerical Computing
MATH 314	(3)	Advanced Calculus
MATH 315	(3)	Ordinary Differential Equations
MATH 316	(3)	Complex Variables

Numerical

MATH 540	(4)	Life Actuarial Mathematics
MATH 541	(4)	Nonlife Actuarial Models
MATH 545	(4)	Introduction to Time Series Analysis
MATH 556	(4)	Mathematical Statistics 1
MATH 557	(4)	Mathematical Statistics 2
MATH 558	(4)	Design of Experiments

# **Complementary Courses (18 credits)**

9 credits from the following.

Other MATH courses, at the undergraduate level, not included in this list may be chosen in consultation with an adviser.

MATH 208 (3) Introduction to Statistical Computing MATH 308 (3) Fundamentals of Statistical Learning MATH 319 (3) Partial Differential Equations MATH 324 (3) Statistics MATH 326 (3) Nonlinear Dynamics and Chaos MATH 327 (3) Matrix Numerical Analysis MATH 329 (3) Theory of Interest MATH 338 (3) History and Philosophy of Mathematics MATH 346 (3) Number Theory MATH 348 (3) Euclidean Geometry MATH 378 (3) Nonlinear Optimization MATH 410 (3) Majors Project MATH 417 (3) Linear Optimization MATH 423 (3) Applied Regression MATH 427 (3) Statistical Quality Control MATH 430 (3) Mathematical Finance MATH 447 (3) Introduction to Stochastic Processes MATH 463 (3) Computational Methods in Applied Mathematics	MATH 204	(3)	Principles of Statistics 2
MATH 319 (3) Partial Differential Equations MATH 324 (3) Statistics  MATH 326 (3) Nonlinear Dynamics and Chaos MATH 327 (3) Matrix Numerical Analysis  MATH 329 (3) Theory of Interest MATH 338 (3) History and Philosophy of Mathematics  MATH 346 (3) Number Theory  MATH 348 (3) Euclidean Geometry  MATH 378 (3) Nonlinear Optimization  MATH 410 (3) Majors Project  MATH 417 (3) Linear Optimization  MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 208	(3)	Introduction to Statistical Computing
MATH 324  (3)  Statistics  MATH 326  (3)  Nonlinear Dynamics and Chaos  MATH 327  (3)  Matrix Numerical Analysis  MATH 329  (3)  Theory of Interest  MATH 338  (3)  History and Philosophy of Mathematics  MATH 346  (3)  Number Theory  MATH 348  (3)  Euclidean Geometry  MATH 378  (3)  Nonlinear Optimization  MATH 410  (3)  Majors Project  MATH 417  (3)  Linear Optimization  MATH 423  (3)  Applied Regression  MATH 427  (3)  Statistical Quality Control  MATH 430  (3)  Mathematical Finance  MATH 447  (3)  Introduction to Stochastic Processes  MATH 463  (3)  Convex Optimization	MATH 308	(3)	Fundamentals of Statistical Learning
MATH 326 (3) Matrix Numerical Analysis MATH 327 (3) Matrix Numerical Analysis MATH 329 (3) Theory of Interest MATH 338 (3) History and Philosophy of Mathematics MATH 346 (3) Number Theory MATH 348 (3) Euclidean Geometry MATH 378 (3) Nonlinear Optimization MATH 410 (3) Majors Project MATH 417 (3) Linear Optimization MATH 423 (3) Applied Regression MATH 427 (3) Statistical Quality Control MATH 430 MATH 440 (3) Mathematical Finance MATH 447 (3) Introduction to Stochastic Processes MATH 463 (3) Convex Optimization	MATH 319	(3)	Partial Differential Equations
MATH 327 (3) Matrix Numerical Analysis  MATH 329 (3) Theory of Interest  MATH 338 (3) History and Philosophy of Mathematics  MATH 346 (3) Number Theory  MATH 348 (3) Euclidean Geometry  MATH 378 (3) Nonlinear Optimization  MATH 410 (3) Majors Project  MATH 417 (3) Linear Optimization  MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 324	(3)	Statistics
MATH 329 (3) Theory of Interest  MATH 338 (3) History and Philosophy of Mathematics  MATH 346 (3) Number Theory  MATH 348 (3) Euclidean Geometry  MATH 378 (3) Nonlinear Optimization  MATH 410 (3) Majors Project  MATH 417 (3) Linear Optimization  MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 338  (3) History and Philosophy of Mathematics  MATH 346  (3) Number Theory  MATH 348  (3) Euclidean Geometry  MATH 378  (3) Nonlinear Optimization  MATH 410  (3) Majors Project  MATH 417  (3) Linear Optimization  MATH 423  (3) Applied Regression  MATH 427  (3) Statistical Quality Control  MATH 430  MATH 440  (3) Mathematical Finance  MATH 447  (3) Introduction to Stochastic Processes  MATH 463  (3) Convex Optimization	MATH 327	(3)	Matrix Numerical Analysis
MATH 346 (3) Number Theory  MATH 348 (3) Euclidean Geometry  MATH 378 (3) Nonlinear Optimization  MATH 410 (3) Majors Project  MATH 417 (3) Linear Optimization  MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 329	(3)	Theory of Interest
MATH 348  (3) Euclidean Geometry  MATH 378  (3) Nonlinear Optimization  MATH 410  (3) Majors Project  MATH 417  (3) Linear Optimization  MATH 423  (3) Applied Regression  MATH 427  (3) Statistical Quality Control  MATH 430  (3) Mathematical Finance  MATH 447  (3) Introduction to Stochastic Processes  MATH 463  (3) Convex Optimization	MATH 338	(3)	History and Philosophy of Mathematics
MATH 378 (3) Nonlinear Optimization MATH 410 (3) Majors Project MATH 417 (3) Linear Optimization MATH 423 (3) Applied Regression MATH 427 (3) Statistical Quality Control MATH 430 (3) Mathematical Finance MATH 447 (3) Introduction to Stochastic Processes MATH 463 (3) Convex Optimization	MATH 346	(3)	Number Theory
MATH 410 (3) Majors Project  MATH 417 (3) Linear Optimization  MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 348	(3)	Euclidean Geometry
MATH 417 (3) Linear Optimization  MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 378	(3)	Nonlinear Optimization
MATH 423 (3) Applied Regression  MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 410	(3)	Majors Project
MATH 427 (3) Statistical Quality Control  MATH 430 (3) Mathematical Finance  MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 417	(3)	Linear Optimization
MATH 430 (3) Mathematical Finance MATH 447 (3) Introduction to Stochastic Processes MATH 463 (3) Convex Optimization	MATH 423	(3)	Applied Regression
MATH 447 (3) Introduction to Stochastic Processes  MATH 463 (3) Convex Optimization	MATH 427	(3)	Statistical Quality Control
MATH 463 (3) Convex Optimization	MATH 430	(3)	Mathematical Finance
(-,	MATH 447	(3)	Introduction to Stochastic Processes
MATH 478 (3) Computational Methods in Applied Mathematics	MATH 463	(3)	Convex Optimization
	MATH 478	(3)	Computational Methods in Applied Mathematics

9 credits selected from Computer Science courses at the 300 level or above (except COMP 364 and COMP 396) and ECSE 508.

# 11.13.22.14 Bachelor of Science (B.Sc.) - Major Statistics and Computer Science (72 credits)

This program provides students with a solid training in both computer science and statistics together with the necessary mathematical background. As statistical endeavours involve ever increasing amounts of data, some students may want training in both disciplines.

# **Program Prerequisites**

Students entering the Joint Major in Statistics and Computer Science are normally expected to have completed the courses belo

COMP 250	(3)	Introduction to Computer Science
COMP 251	(3)	Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 330	(3)	Theory of Computation
COMP 350**	(3)	Numerical Computing
COMP 360	(3)	Algorithm Design
MATH 222	(3)	Calculus 3
MATH 223***	(3)	Linear Algebra
MATH 235	(3)	Algebra 1
MATH 236***	(3)	Algebra 2
MATH 242	(3)	Analysis 1
MATH 314	(3)	Advanced Calculus
MATH 317**	(3)	Numerical Analysis
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
MATH 423	(3)	Applied Regression

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9 credits in Computer Science selected as follows:

At least 6 credits selected from:

COMP 424	(3)	Artificial Intelligence
COMP 462	(3)	Computational Biology Methods
COMP 540**	(4)	Matrix Computations
COMP 547	(4)	Cryptography and Data Security
COMP 551	(4)	Applied Machine Learning
COMP 564	(3)	Advanced Computational Biology Methods and Research
COMP 566	(3)	Discrete Optimization 1
COMP 567	(3)	Discrete Optimization 2

The remaining Computer Science credits are selected from COMP courses at the 300 level or above (except COMP 396) and ECSE 508.

### 11.13.22.15 Bachelor of Science (B.Sc.) - Honours Applied Mathematics (63 credits)

Applied Mathematics is a very broad field and students are encouraged to choose a coherent program of complementary courses. Most students specialize in "continuous" or "discrete" applied mathematics, but there are many sensible combinations of courses, and the following informal guidelines should be discussed with the student's adviser. Also, aside from seeking to develop a sound basis in Applied Mathematics, one of the objectives of the program is to kindle the students' interest in possible areas of application. To develop an appreciation of the diversity of Applied Mathematics, students are advised to develop some depth (e.g., by completing a minor) in a field related to Applied Mathematics such as Atmospheric and Oceanic Sciences, Biology, Biochemistry, Chemistry, Computer Science, Earth and Planetary Sciences, Economics, Engineering, Management, Physics, Physiology, and Psychology.

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from MATH 222.

### **Program Prerequisites**

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents:

MATH 133	(3)	Linear Algebra and Geometry
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

In particular, MATH 150/151 and MATH 140/222 are considered equivalent.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/151 are not required to take MATH 222.

Note: COMP 202—or an equivalent introduction to computer programming course—is a program prerequisite. U0 students may take COMP 202 as a Freshman Science course; new U1 students should take it as an elective in their first semester.

Students who transfer to Honours in Applied Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.

To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of at least 3.00 in the required and complementary Mathematics courses of the program, as well as an overall CGPA of at least 3.00.

### **Required Courses**

(39-42 credits)

- \* Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.
- \*\* Students select either MATH 251 or MATH 247, but not both.
- \*\*\* Students who have successfully completed MATH 150/151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.
- COMP 250\* (3) Introduction to Computer Science
  COMP 252 (3) Honours Algorithms and Data Structures

and the remainder of credits selected from:

COMP 362	(3)	Honours Algorithm Design
MATH 352	(1)	Problem Seminar
MATH 377	(3)	Honours Number Theory
MATH 398	(3)	Honours Euclidean Geometry
MATH 454++	(3)	Honours Analysis 3
MATH 455	(3)	Honours Analysis 4
MATH 456	(3)	Honours Algebra 3
MATH 457	(3)	Honours Algebra 4
MATH 458	(3)	Honours Differential Geometry
MATH 462	(3)	Honours Mathematics for Machine Learning
MATH 480	(3)	Honours Independent Study
MATH 488	(3)	Honours Set Theory

<sup>++</sup> Not open to students who have taken MATH 354.

All MATH 500-level courses.

Other courses with the permission of the Department.

# 11.13.22.16 Bachelor of Science (B.Sc.) - Honours Mathematics (63 credits)

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending if they are exempt from MATH 222.

## **Program Prerequisites**

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses below or their equivalents.

MATH 133	(3)	Linear Algebra and Geometry
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

In particular, MATH 150/151 and MATH 140/141/222 are considered equivalent.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/1151 are not required to take MATH 222.

Students who transfer to Honours in Mathematics from other programs will have credits for previous courses assigned, as appropriate, by the Department.

To be awarded the Honours degree, the student must have, at time of graduation, a CGPA of me ri0R5511j1 0 0 1 350+Q.1 of j1 0 0 1 71.821 249.681 Tm(B)Tj1 0 0 124

MATH 357	(3)	Honours Statistics
MATH 358	(3)	Honours Advanced Calculus
MATH 454*	(3)	Honours Analysis 3
MATH 455	(3)	Honours Analysis 4
MATH 456	(3)	Honours Algebra 3
MATH 457	(3)	Honours Algebra 4
MATH 458	(3)	Honours Differential Geometry
MATH 466	(3)	Honours Complex Analysis
MATH 470	(3)	Honours Research Project
MATH 475	(3)	Honours Partial Differential Equations

# **Complementary Courses (15 credits)**

3 credits selected from:

MATH 242	(3)	Analysis 1
MATH 254**	(3)	Honours Analysis 1

<sup>\*\*</sup> It is strongly recommended that students take MATH 254.

0-6 credits from the following courses for which no Honours equi

++ Students with limited programming experience should take COMP 202 or COMP 204 or COMP 208 or equivalent before COMP 250.

Students may select other courses with the permission of the Department.

## 11.13.22.17 Bachelor of Science (B.Sc.) - Honours Probability and Statistics (60-63) (63 credits)

The B.Sc.; Honours in Probability and Statistics provides training, at the honours level, in probability and statistics, with a solid mathematical core, and basic training in computing. With a suitable selection of complementary courses, the program can focus on probability, mathematical statistics, applied statistics, actuarial science and finance, or data science. With satisfactory performance in an appropriate selection of courses, this program can lead to the professional accreditation A.Stat from the Statistical Society of Canada, which is regarded as the entry level requirement for a Statistician practicing in Canada.

### Program Requirements (60-63) (63 credits)

Students may complete this program with a minimum of 60 credits or a maximum of 63 credits depending on whether or not they are required to take MATH 222.

### **Program Prerequisites**

The minimum requirement for entry into the Honours program is that the student has completed with high standing the following courses or their equivalents:

MATH 133	(3)	Linear Algebra and Geometry
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

In particular, MATH 150/MATH 151 and MATH 140/MATH 141/MATH 222 are considered equivalent.

## Required Courses (28-31 credits)

- \* Students with limited programming experience should take COMP 202/COMP 204/COMP 208 or equivalent before COMP 250.
- \*\* Students select either MATH 251 or MATH 247, but not both.
- \*\*\* Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.

Students who have not completed an equivalent of MATH 222 on entering the program must consult an academic adviser and take MATH 222 as a required course in the first semester, increasing the total number of program credits from 60 to 63. Students who have successfully completed MATH 150/MATH 151 are not required to take MATH 222.

Note: Students with limited knowledge of computer programming should take COMP 202/COMP 204/COMP 208 or equi

MATH 308	(3)	Fundamentals of Statistical Learning
MATH 523	(4)	Generalized Linear Models
MATH 524	(4)	Nonparametric Statistics
MATH 525	(4)	Sampling Theory and Applications
MATH 545	(4)	Introduction to Time Series Analysis
MATH 547	(4)	Stochastic Processes
MATH 556	(4)	Mathematical Statistics 1
MATH 557	(4)	Mathematical Statistics 2
MATH 558	(4)	Design of Experiments
		Bayesian

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2

# Required Courses (46 credits)

<sup>\*</sup> Students who have sufficient knowledge in a programming language are not required to take COMP 202.

<sup>\*\*</sup> Students tak

MATH 558	(4)	Design of Experiments
MATH 559	(4)	Bayesian Theory and Methods

The remaining Mathematics credits selected from:

<sup>\*\*</sup> MATH 578 and COMP 540 cannot both be taken for program credit.

MATH 350	(3)	Honours Discrete Mathematics
MATH 352	(1)	Problem Seminar
MATH 454	(3)	Honours Analysis 3
MATH 462	(3)	Honours Mathematics for Machine Learning
MATH 545	(4)	Introduction to Time Series Analysis
MATH 563	()	Honours Convex Optimization
MATH 578**	(4)	Numerical Analysis 1
MATH 587	(4)	Advanced Probability Theory 1
MATH 594	(4)	Topics in Mathematics and Statistics

15 credits in Computer Science selected as follows:

#### At least 6 credits selected from:

COMP 424	(3)	Artificial Intelligence
COMP 462	(3)	Computational Biology Methods
COMP 540**	(4)	Matrix Computations
COMP 547	(4)	Cryptography and Data Security
COMP 551	(4)	Applied Machine Learning
COMP 552	(4)	Combinatorial Optimization
COMP 564	(3)	Advanced Computational Biology Methods and Research
COMP 566	(3)	Discrete Optimization 1
COMP 567	(3)	Discrete Optimization 2

The remaining Computer Science credits are selected from COMP courses at the 300 level or above excluding COMP 396.

# 11.132219 Bachelor of Science (B.Sc.) - Honours Mathematics and Computer Science (78 credits)

Students may complete this program with a minimum of 72 credits or a maximum of 78 credits depending if they are exempt from COMP 202, COMP 204, COMP 208 and/or MATH 222.

# **Program Prerequisites**

Students must consult an Honours adviser in both departments to ensure that they have sufficient background to enter the program. The minimum requirements are the follo

### **Required Courses**

(36-39 credits)

\* Students who have successfully completed MATH 150/MATH 151 or an equivalent of MATH 222 on entering the program are not required to take MATH 222.

COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
COMP 252	(3)	Honours Algorithms and Data Structures
COMP 273	(3)	Introduction to Computer Systems
COMP 302	(3)	Programming Languages and Paradigms
COMP 310	(3)	Operating Systems
COMP 330	(3)	Theory of Computation
COMP 362	(3)	Honours Algorithm Design
MATH 222*	(3)	Calculus 3
MATH 235	(3)	Algebra 1
MATH 251	(3)	Honours Algebra 2
MATH 255	(3)	Honours Analysis 2
MATH 350	(3)	Honours Discrete Mathematics

### **Complementary Courses**

36-39 credits

0-3 credits selected from:

COMP 202**	(3)	Foundations of Programming
COMP 204**	(3)	Computer Programming for Life Sciences
COMP 208**	(3)	Computer Programming for Physical Sciences and Engineering

<sup>\*\*</sup> Students who have sufficient knowledge of computer programming are not required to take COMP 202/COMP 204/COMP 208.

#### 3 credits selected from:

MATH 242	(3)	Analysis 1
MATH 254***	(3)	Honours Analysis 1

<sup>\*\*\*</sup> It is strongly recommended that students take MATH 254.

### 3 credits selected from:

MATH 248	(3)	Honours Vector Calculus
MATH 358	(3)	Honours Advanced Calculus

18 credits in Mathematics, at least 9 credits selected from:

MATH 455	(3)	Honours Analysis 4
MATH 456	(3)	Honours Algebra 3
MATH 457	(3)	Honours Algebra 4

The remaining credits should be selected from honours courses and 500-level courses given by the Department of Mathematics and Statistics.

12 credits in Computer Science, selected from Computer Science courses at the 300 level or above excluding COMP 364 and COMP 396. ECSE 508 may also be taken.

# 11.13.22.20 Mathematics and Statistics (MATH) Related Programs 11.1322.201 Major in Biology and Mathematics

For more information, see section 11.13.5: Biology (BIOL) > section 11.13.5.10: Bac

An online undergraduate handbook, containing course and program information and information on careers in microbiology and immunology is available on our *website*.

All new students should attend a departmental **orientation/advising session** in August. Please check mcgill.ca/microimm/undergraduate-programs/advising for dates

#### 11.13.23.3 Microbiology and Immunology Faculty

#### Chair

Samantha Gruenheid (Interim)

#### **Emeritus Professors**

N. Acheson, M. Baines, J.W. Coulton

#### **Professors**

J. Archambault, A. Berghuis, S. Gruenheid, G.J. Matlashewski, M. Olivier, C. Piccirillo, D. Sheppard, M. Stevenson

#### **Associate Professors**

D.J. Briedis, B. Cousineau, S. Fournier, J. Fritz, I. King,, G.T. Marczynski, S. Sagan, A. Shapiro

#### **Assistant Professors**

J Chahal, C. Maurice

#### **Associate Members**

Epidemiology and Infectious Diseases: M. Behr, A. Dascal

Genetics: K. Dewar, E. Schurr

Immunology, Autoimmunity, Host Defense: J. Antel, M. Burnier, I. Colmegna, P. Gros, A. Kristof, J. Mandl, A. Orthwein, J. Rauch, J. Spicer, C. Tsoukas, S. Vidal

Immunology and Parasitology: B. Brenner, C.T. Costiniuk, M. Ndao, P. Rohrbach, B. Ward, J. Zhang

Microbiology: D. Cuong Vinh, M. Divangahi, C. Liang, D. Nguyen, M. Reed

Molecular Biology: N. Cermakian, A. Jardim, D. Langlais, A. Mouland, K. Pantopoulos, M. Tremblay, B. Turcotte, J. Xia

Virology: A. Gatignol, A.E. Koromilas, R. Lin, J. Teodoro

#### **Adjunct Professors**

E. Cohen, A. Descoteaux, J.M. Di Noia, A. Finzi, C. Krawczyk, G. Kukolj, P. Lau, S. Lesage, A. Petronela, K. Pike, W-K. Suh

#### 11.13.23.4 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Microbiology and Immunology (50 credits)

#### **U1 Required Courses (19 credits)**

\* Students who have taken CHEM 212 in CEGEP are exempt and must replace these credits with an elective course(s).

BIOL 200	(3)	Molecular Biology
BIOL 202	(3)	Basic Genetics
CHEM 212*	(4)	Introductory Organic Chemistry 1
MIMM 211	(3)	Introductory Microbiology
MIMM 212	(3)	Laboratory in Microbiology
MIMM 214	(3)	Introductory Immunology: Elements of Immunity

#### **U1 Complementary Course (3 credits)**

3 credits, select one from:

BIOC 212	(3)	Molecular Mechanisms of Cell Function
BIOL 201	(3)	Cell Biology and Metabolism

### U1, U2, or U3 Required Course (3 credits)

3 credits, select one from:

BIOL 373	(3)	Biometry
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics

### **U2 Required Courses (16 credits)**

MIMM 301	(1)	Scientific Writing Skills in MIMM
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology
MIMM 384	(3)	Molecular Microbiology Laboratory
MIMM 385	(3)	Laboratory in Immunology

# **U3 Complementary Courses (6 credits)**

6 credits selected from:

MIMM 387	(3)	The Business of Science
MIMM 413	(3)	Parasitology
MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	<b>Bacterial Pathogenesis</b>
MIMM 466	(3)	Viral Pathogenesis
MIMM 509	(3)	Inflammatory Processes

### U1, U2 or U3 Complementary Courses (3 credits)

3 credits selected from:

<sup>\*</sup> Students who have taken CHEM 212 or CHEM 222 in CEGEP must replace it with another complementary course.

ANAT 261	(4)	Introduction to Dynamic Histology
ANAT 262	(3)	Introductory Molecular and Cell Biology
ANAT 365	(3)	Cellular Trafficking
ANAT 458	(3)	Membranes and Cellular Signaling
BIOC 311	(3)	Metabolic Biochemistry
BIOC 312	(3)	Biochemistry of Macromolecules
BIOC 450	(3)	Protein Structure and Function
BIOC 454	(3)	Nucleic Acids
BIOC 458	(3)	Membranes and Cellular Signaling
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 309	(3)	Mathematical Models in Biology
BIOL 314	(3)	Molecular Biology of Cancer
BIOT 505	(3)	Selected Topics in Biotechnology
CHEM 203	(3)	Survey of Physical Chemistry
CHEM 204	(3)	Physical Chemistry/Biological Sciences 1
CHEM 222*	(4)	Introductory Organic Chemistry 2

### U1, U2, or U3 Required Course (3 credits)

One of:

BIOL 373	(3)	Biometry
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics

# U2 Required Courses (19 credits)

BIOC 311	(3)	Metabolic Biochemistry
MIMM 301	(1)	Scientific Writing Skills in MIMM
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology
MIMM 384	(3)	Molecular Microbiology Laboratory
MIMM 385	(3)	Laboratory in Immunology

# U3 Required Course (3 credits)

MIMM 413 (3) Parasitology

# **U3 Complementary Courses (6 credits)**

6 credits selected from:

MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis

# **Complementary Courses (9 credits)**

9 credits selected from:

ANAT 261 (4) Introduction to Dynamic Histology

 $Introductory\ Molecular\ and\ Cey1cIr\ 0\ 1\ 81.933\ 7B7Tj\ 0\ 0\ 1\ 67.52\ 4\ Cey1cIr\ 0\ 0\ 1\ 226(6\ credits\ 58CbP7HIr\ 0\ 0\ 1\ 225(6\ cred\ credits\ 58CbP7HIr\ 0\ 0\ 1\ 225(6\ credits\ 58CbP7HIr\ 0\ 0\$ 

<sup>\*</sup> Students may select either ANAT 458 or BIOC 458, but not both.

CHEM 302	(3)	Introductory Organic Chemistry 3
COMP 204	(3)	Computer Programming for Life Sciences
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
EXMD 504	(3)	Biology of Cancer
MIMM 387	(3)	The Business of Science
MIMM 390	(3)	SEA-PHAGES: Phage Discovery
MIMM 391	(3)	SEA-PHAGES: Genome Annotation
MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis
MIMM 496D1	(3)	Microbiology Advanced Research Project
MIMM 496D2	(3)	Microbiology Advanced Research Project
MIMM 497D1	(3)	Immunology Advanced Research Project
MIMM 497D2	(3)	Immunology Advanced Research Project
MIMM 509	(3)	Inflammatory Processes
PATH 300	(3)	Human Disease
PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2

#### 11.13.23.6 Bachelor of Science (B.Sc.) - Honours Microbiology and Immunology (72 credits)

The Honours program is designed to offer, in addition to the substantial background given by the Major program, a significant research experience in a laboratory within the Department during the U3 year. Students are prepared for this independent research project by following an advanced laboratory course in U2. This program is intended to prepare students for graduate study in microbiology and immunology or related fields, but could also be chosen by students intending to enter medical research after medical school, or intending to enter the job market in a laboratory research environment.

Students intending to apply to Honours must follow the Major program in U1 and U2 and must obtain a CGPA of at least 3.50 at the end of their U2 year. For graduation in Honours, students must pass all required courses with a C or better, and achieve a sessional GPA of at least 3.30 in the U3 year.

U1 Required Courses (n mRequired Coui121 0 U.52 es (n mReq 67.52 285.44f65.382Tj-0.519 ho haach1 13aicrobiology a04 Tm(TH 300)Tj1 (

### U1, U2, or U3 Required Course (3 credits)

( )n		

BIOL 373	(3)	Biometry
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics

# U2 Required Courses (19 credits)

BIOC 311	(3)	Metabolic Biochemistry
MIMM 301	(1)	Scientific Writing Skills in MIMM
MIMM 314	(3)	Intermediate Immunology
MIMM 323	(3)	Microbial Physiology
MIMM 324	(3)	Fundamental Virology
MIMM 384	(3)	Molecular Microbiology Laboratory
MIMM 385	(3)	Laboratory in Immunology

# U3 Required Courses (15 credits)

MIMM 413	(3)	Parasitology
MIMM 501D1*	(6)	Honours Research Project in Immunology
MIMM 501D2*	(6)	Honours Research Project in Immunology
MIMM 502D1*	(6)	Honours Research Project in Microbiology
MIMM 502D2*	(6)	Honours Research Project in Microbiology

<sup>\*</sup> Students take either MIMM 501D1 and MIMM 501D2 or MIMM 502D1 and MIMM 502D2.

### U3 Complementary Courses (6 credits)

6 credits selected from:

MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis

### **Complementary Courses (3 credits)**

3 credits selected from:

ANAT 261	(4)	Introduction to Dynamic Histology
ANAT 262	(3)	Introductory Molecular and Cell Biology
ANAT 365	(3)	Cellular Trafficking
ANAT 458	(3)	Membranes and Cellular Signaling
BIOC 312	(3)	Biochemistry of Macromolecules
BIOC 404	(3)	Biophysical Methods in Biochemistry
BIOC 450	(3)	Protein Structure and Function
BIOC 454	(3)	Nucleic Acids
BIOC 458	(3)	Membranes and Cellular Signaling
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 309	(3)	Mathematical Models in Biology

BIOL 314	(3)	Molecular Biology of Cancer
BIOL 520	(3)	Gene Activity in Development
BIOT 505	(3)	Selected Topics in Biotechnology
CHEM 203	(3)	Survey of Physical Chemistry
CHEM 204	(3)	Physical Chemistry/Biological Sciences 1
CHEM 302	(3)	Introductory Organic Chemistry 3
COMP 204	(3)	Computer Programming for Life Sciences
COMP 206	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
EXMD 504	(3)	Biology of Cancer
MIMM 387	(3)	The Business of Science
MIMM 390	(3)	SEA-PHAGES: Phage Discovery
MIMM 391	(3)	SEA-PHAGES: Genome Annotation
MIMM 414	(3)	Advanced Immunology
MIMM 465	(3)	Bacterial Pathogenesis
MIMM 466	(3)	Viral Pathogenesis
MIMM 509	(3)	Inflammatory Processes
PATH 300	(3)	Human Disease
PHAR 300	(3)	Drug Action
PHAR 301	(3)	Drugs and Disease
PHAR 562	(3)	Neuropharmacology
PHAR 563	(3)	Endocrine Pharmacology
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PSYT 455	(3)	Neurochemistry

# 11.13.23.7 Microbiology and Immunology (MIMM) Related Programs 11.13.23.7.1 Interdepartmental Honours in Immunology

For more information, see section 11.13.18: Immunology.

This program is offered by the departments of Biochemistry, Microbiology and Immunology, and Physiology.

Students interested in immunology may choose between this Honours program and the Honours program of the Department of Microbiology and Immunology. Details of this program may also be obtained from:

Dr. Monroe Cohen Department of Physiology

McIntyre Medical Sciences Building, Room 1136

Telephone: 514-398-4342 Email: monroe.cohen@mcgill.ca

OR

Dr. Ciro Piccirillo

Department of Microbiology and Immunology McGill University Health Centre, Glen Site 1001 Decarie Boulevard, Bloc E, Office EM23248

Telephone: 514-934-1934, ext. 76143 Email: *ciro.piccirillo@mcgill.ca* 

#### 11.13.24 Music for Science Students

#### 11.13.24.1 Location

Strathcona Music Building 555 Sherbrooke Street West Montreal QC H3A 1E3 Telephone: 514-398-4535 Fax: 514-398-1540

Website: mcgill.ca/music

# 11.13.24.2 About Music

The Schulich School of Music offers some programs that are open to students in the Faculty of Science. For more information, see *Schulich School of Music > Undergraduate > section 10.8: Browse Academic Units & Programs*.

### 11.13.24.3 Music Faculty

### 11.13.25.2 About Neurology and Neurosurgery

There are no B.Sc. programs in Neurology and Neurosurgery, but the course NEUR 310 *Cellular Neurobiology*, which is part of the Minor in Neuroscience, is taught by the Faculty of Science.

Students wishing to obtain more information about Neurology and Neurosurgery can refer to the Faculty of Medicine and Health Sciences': Neurology and Neurosurgery page.

- At least 6 of the 12-13 credits ha

PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYT 455	(3)	Neurochemistry
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders
PSYT 505	(3)	Neurobiology of Schizophrenia

#### 11.13.26.4 Bachelor of Science (B.Sc.) - Major Neuroscience (65 credits)

The Neuroscience Major is a focused program for students interested in how the nervous system functions. It is highly interdisciplinary and borrows principles and methodologies from a number of fields including: biology, biochemistry, physiology, psychology, mathematics, physics, computer science, and immunology. To ensure that they have the appropriate foundation, students are required to take 29 credits in lower-level courses from physiology, biology, mathematics, computer science, psychology, and ethics. The program offers students a concentrated selection of 15 credits to be taken from one of three areas of current scientific activities in the neurosciences: Cell/Molecular, Neurophysiology/Computation, or Cognition/Behaviour. In addition, students select 21 credits from a wide array of complementary courses to obtain more specialized training in areas of neuroscience that best suit their interests.

Enrolment in the Neuroscience Major is limited to a total of 50 students per year. U0 students seeking admission to this program should consult the neuroscience website for admissions requirements and should have completed the courses listed below or their equivalents.

#### **Program Prerequisites**

Students may complete this program with a minimum of 65 or a maximum of 67 credits.

Notes on admission to the Neuroscience Major program: Enrolment in the Neuroscience Major is limited to a total of 50 students per year. U0 students seeking admission to this program should consult the neuroscience website for admissions requirements and should have completed the courses listed below or equivalent.

- \* Students complete one of MATH 139, MATH 140 OR MATH 150.
- \*\* Students complete one of either MATH 141 OR MATH 151.
- \*\*\* Students complete one of either PHYS 101 OR PHYS 131.
- +++ Students complete one of either PHYS 102 OR PHYS 142.

BIOL 112	(3)	Cell and Molecular Biology
CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
MATH 139*	(4)	Calculus 1 with Precalculus
MATH 140*	(3)	Calculus 1
MATH 141**	(4)	Calculus 2
MATH 150*	(4)	Calculus A
MATH 151**	(4)	Calculus B
PHYS 101***	(4)	Introductory Physics - Mechanics
PHYS 102+++	(4)	Introductory Physics - Electromagnetism
PHYS 131***	(4)	Mechanics and Waves
PHYS 142+++	(4)	Electromagnetism and Optics

#### Core Required Courses (20 credits)

Note: Students who have successfully completed an equivalent of CHEM 212 in CEGEP or elsewhere must replace these credits with a 3-credit elective course to satisfy the total credit requirement for the Neuroscience Major.

BIOL 200	(3)	Molecular Biology
CHEM 212	(4)	Introductory Organic Chemistry 1
	(3)	Introduction to Neuroscience 1

NSCI 400D1	(.5)	Neuroscience Seminar
NSCI 400D2	(.5)	Neuroscience Seminar
PSYC 311	(3)	Human Cognition and the Brain

# **Complementary Courses (45-47 credits)**

_		
~~	credits	trom

BIOL 373	(3)	Biometry
MATH 324	(3)	Statistics
PSYC 305	(3)	Statistics for Experimental Design

#### 3 credits from:

COMP 202	(3)	Foundations of Programming
COMP 204	(3)	Computer Programming for Life Sciences

#### 3 credits from:

Note: Students who have successfully completed an equivalent to MATH 222 at CEGEP or elsewhere, must replace these credits with a 3-credit elective course to satisfy the total credit requirement for the Neuroscience Major.

BIOL 309	(3)	Mathematical Models in Biology
MATH 222	(3)	Calculus 3

#### Streams

15 credits selected from one of the following streams:

# A. Cell and Molecular Stream

9 credits as follows:

BIOC 311	(3)	Metabolic Biochemistry
BIOL 202	(3)	Basic Genetics
PHGY 311	(3)	Channels, Synapses and Hormones
3 credits from:		
BIOC 212	(3)	Ms Pe Cutal Me Chanisms of Cell Function
BIOL 201	(3)	Cell Biology and Metabolism

_	4.		0 1	
- '- '-	credits	20	tal	Ome.

BIOC 212	(3)	Molecular Mechanisms of Cell Function
BIOL 201	(3)	Cell Biology and Metabolism

#### 3 credits from:

BIOL 306	(3)	Neural Basis of Behaviour
PHGY 314	(3)	Integrative Neuroscience

#### 6 credits from:

Note: Students who have successfully completed an equivalent to MATH 222 at CEGEP or elsewhere, must replace these credits with a 3-credit elective course to satisfy the total credit requirement for the Neuroscience Major.

ANAT 321	(3)	Circuitry of the Human Brain
BIOL 309	(3)	Mathematical Models in Biology
COMP 206**	(3)	Introduction to Software Systems
COMP 250	(3)	Introduction to Computer Science
MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra

# C. Cognitive/Behavioural Stream

#### 6 credits as follows:

PSYC 213	(3)	Cognition
PSYC 318	(3)	Behavioural Neuroscience 2

# 3 credits from:

BIOL 306	(3)	Neural Basis of Behaviour	
PHGY 314	(3)	Integrative Neuroscience	

#### 6 credits from:

ANAT 321	(3)	Circuitry of the Human Brain
PSYC 302	(3)	The Psychology of Pain
PSYC 317	(3)	Genes and Behaviour
PSYC 342	(3)	Hormones and Behaviour

#### **Other Complementary Courses**

21-23 credits chosen as follows:

#### 3-16 credits from:

BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 389	(3)	Laboratory in Neurobiology
NSCI 410D1	(3)	Independent Research 1
NSCI 410D2	(3)	Independent Research 1

NSCI 420D1	(4.5)	Independent Research 2
NSCI 420D2	(4.5)	Independent Research 2

5-20 of the credits should be taken from the following lists. At least 15 of the 21-23 credits must be at the 400- or 500-level, which could include the above NSCI 410D1/NSCID2 or NSCI 420D1/NSCI 420D2 research courses:

### 200- and 300-level courses:

- \* Students take either BIOL 201 OR BIOC 212, but not both.
- \*\* Students take either COMP 206 or COMP 250, but not both.

ANAT 321	(3)	Circuitry of the Human Brain
BIOC 212*	(3)	Molecular Mechanisms of Cell Function
BIOC 311	(3)	Metabolic Biochemistry
BIOL 201*	(3)	Cell Biology and Metabolism
BIOL 202	(3)	Basic Genetics
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 307	(3)	Behavioural Ecology
BIOL 320	(3)	Evolution of Brain and Behaviour
CHEM 222	(4)	Introductory Organic Chemistry 2
COMP 206**	(3)	Introduction to Software Systems
COMP 250**	(3)	Introduction to Computer Science
MATH 223	(3)	Linear Algebra
MATH 315	(3)	Ordinary Differential Equations
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 314	(3)	Intermediate Immunology
NEUR 310	(3)	Cellular Neurobiology
PHAR 300	(3)	Drug Action
PHGY 210	(3)	Mammalian Physiology 2
PHGY 311	(3)	Channels, Synapses and Hormones
	(3)	Integrative Neuroscience

BIOL 530	(3)	Advances in Neuroethology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 580	(3)	Genetic Approaches to Neural Systems
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
BMDE 519	(3)	Biomedical Signals and Systems
COMP 546	(4)	Computational Perception
MATH 437	(3)	Mathematical Methods in Biology
MIMM 414	(3)	Advanced Immunology
MIMM 509	(3)	Inflammatory Processes
NEUR 502	(3)	Basic and Clinical Aspects of Neuroimmunology
NEUR 503	(3)	Computational Neuroscience
NEUR 507	(3)	Topics in Radionuclide Imaging
NEUR 550	(3)	Free Radical Biomedicine
PHAR 562	(3)	Neuropharmacology
PHGY 425	(3)	Analyzing Physiological Systems
PHGY 451	(3)	Advanced Neurophysiology
PHGY 513	(3)	Translational Immunology
PHGY 520	(3)	Ion Channels
PHGY 524	(3)	Chronobiology
PHGY 556	(3)	Topics in Systems Neuroscience
PSYC 410	(3)	Special Topics in Neuropsychology
PSYC 427	(3)	Sensorimotor Neuroscience
PSYC 433	(3)	Cognitive Science
PSYC 443	(3)	Affective Neuroscience
PSYC 444	(3)	Sleep Mechanisms and Behaviour
PSYC 470	(3)	Memory and Brain
PSYC 502	(3)	Psychoneuroendocrinology
PSYC 506	(3)	Cognitive Neuroscience of Attention
PSYC 513	(3)	Human Decision-Making
PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYT 455	(3)	Neurochemistry
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders

# 11.13.26.5 Bachelor of Science (B.Sc.) - Honours Neuroscience (74 credits)

The Honours program is intended for students who are interested in laboratory-based research and in acquiring a foundation in each of the 3 streams of the Neuroscience Major Program (cell and molecular; neurophysiology and computational; and cognition and behaviour). Students are admitted to the program after one year in a major.

Applicants must have tak

"First Class Honours" is awarded to students who obtain a minimum cumulative grade point average of 3.70, a minimum program GPA of 3.30, and a minimum grade of B+ in NSCI 300, NSCI 400, and NSCI 430D1/D2.

# **Required Courses (38 credits)**

Note: Students who have successfully completed an equivalent of CHEM 212 in CEGEP or elsewhere must replace these credits with a 3-credit elective course to satisfy the total credit requirement for Honours Neuroscience.

BIOC 311	(3)	Metabolic Biochemistry
BIOL 200	(3)	Molecular Biology
CHEM 212	(4)	Introductory Organic Chemistry 1
NSCI 200	(3)	Introduction to Neuroscience 1
NSCI 201	(3)	Introduction to Neuroscience 2
NSCI 300	(3)	Neuroethics
NSCI 400D1	(.5)	Neuroscience Seminar
NSCI 400D2	(.5)	Neuroscience Seminar
NSCI 430D1	(4.5)	Honours Research Project
NSCI 430D2	(4.5)	Honours Research Project
PHGY 311	(3)	Channels, Synapses and Hormones
PSYC 311	(3)	Human Cognition and the Brain
PSYC 318	(3)	Behavioural Neuroscience 2

# Complementary Courses (36 credits)

BIOC 212	(3)	Molecular Mechanisms of Cell Function
BIOL 201	(3)	Cell Biology and Metabolism

#### 3 credits from:

COMP 202	(3)	Foundations of Programming
COMP 204	(3)	Computer Programming for Life Sciences

#### 3 credits from:

BIOL 373	(3)	Biometry
MATH 324	(3)	Statistics
PSYC 305	(3)	Statistics for Experimental Design

#### 3 credits from:

Note: Students who have successfully completed an equivalent to MATH 222 at CEGEP or elsewhere, must replace these credits with a 3-credit elective course to satisfy the total credit requirement for Honours Neuroscience.

BIOL 309	(3)	Mathematical Models in Biology
MATH 222	(3)	Calculus 3
3 credits from:		

ANAT 321	(3)	Circuitry of the Human Brain
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BIOL 306	(3)	Neural Basis of Behaviour	
PHGY 314	(3)	Integrative Neuroscience	

21 credits should be taken from the following lists. At least 15 of the 21 credits must be taken at the 400- or 500-level.

# 200- and 300-level courses:

\*Students may take either COMP 206 or COMP 250, but not both.

BIOL 202	(3)	Basic Genetics
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 307	(3)	Behavioural Ecology
BIOL 320	(3)	Evolution of Brain and Behaviour
BIOL 389	(3)	Laboratory in Neurobiology
CHEM 222	(4)	Introductory Organic Chemistry 2
COMP 206*	(3)	Introduction to Software Systems
COMP 250*	(3)	Introduction to Computer Science
MATH 223	(3)	Linear Algebra
MATH 315	(3)	Ordinary Differential Equations
MATH 323	(3)	Probability
MATH 324	(3)	Statistics
MIMM 214	(3)	Introductory Immunology: Elements of Immunity
MIMM 314	(3)	Intermediate Immunology
NEUR 310	(3)	Cellular Neurobiology
PHAR 300	(3)	Drug Action
PHGY 210	(3)	Mammalian Physiology 2
PHGY 314	(3)	Integrative Neuroscience
PSYC 213	(3)	Cognition
PSYC 302	(3)	The Psychology of Pain
PSYC 315	(3)	Computational Psychology
PSYC 317	(3)	Genes and Behaviour
PSYC 319	(3)	Computational Models - Cognition
		Hormones and Behaviour

COMP 546	(4)	Computational Perception
MATH 437	(3)	Mathematical Methods in Biology
MIMM 414	(3)	Advanced Immunology
MIMM 509	(3)	Inflammatory Processes
NEUR 502	(3)	Basic and Clinical Aspects of Neuroimmunology
NEUR 503	(3)	Computational Neuroscience
NEUR 507	(3)	Topics in Radionuclide Imaging
NEUR 550	(3)	Free Radical Biomedicine
PHAR 562	(3)	Neuropharmacology
PHGY 425	(3)	Analyzing Physiological Systems
PHGY 451	(3)	Advanced Neurophysiology
PHGY 513	(3)	Translational Immunology
PHGY 520	(3)	Ion Channels
PHGY 524	(3)	Chronobiology
PHGY 556	(3)	Topics in Systems Neuroscience
PSYC 410	(3)	Special Topics in Neuropsychology
PSYC 427	(3)	Sensorimotor Neuroscience
PSYC 433	(3)	Cognitive Science
PSYC 443	(3)	Affective Neuroscience
PSYC 444	(3)	Sleep Mechanisms and Behaviour
PSYC 470	(3)	Memory and Brain
PSYC 502	(3)	Psychoneuroendocrinology
PSYC 506	(3)	Cognitive Neuroscience of Attention
PSYC 513	(3)	Human Decision-Making
PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYT 455	(3)	Neurochemistry
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders

# 11.13.27 Nutrition (NUTR)

#### 11.13.27.1 Location

School of Human Nutrition Macdonald-Stewart Building, Room MS2-045 21,111 Lakeshore Road

Sainte-Anne-de-Bellevue QC H9X 3V9

Website: mcgill.ca/nutrition

### 11.13.27.2 About Nutrition

The School of Human Nutrition offers a **Minor in Human Nutrition** which can be taken by Science students; see *Faculty of Agricultural and Environmental Sciences > Undergraduate > Overview of Programs Offered > section 2.5.6: Bachelor of Science in Nutritional Sciences – B.Sc.(Nutr.Sc.) (Overview).* 

NUTR 307 is considered as a course taught by the Faculty of Science.

#### 11.13.28 Pathology (PATH)

#### 11.13.28.1 Location

Department of Pathology Duff Medical Building, B wing 3775 University Street Montreal QC H3A 2B4

Telephone: 514-398-3045 Website: mcgill.ca/pathology

#### 11.13.28.2 About Pathology

Pathology is a branch of medical science that involves the study and diagnosis of disease through the examination of surgically removed organs, tissues (biopsy samples), bodily fluids, and in some cases the whole body (autopsy). Aspects of a bodily specimen that may be considered include its gross anatomical make up, appearance of the cells using immunological markers, and chemical signatures in the cells. Pathology also includes the related scientific study of disease processes whereby the causes, mechanisms, and extent of disease are examined. Areas of study include cellular adaptation to injury, necrosis (death of living cells or tissues), inflammation, wound healing, and neoplasia (abnormal new growth of cells). Pathologists specialize in a wide range of diseases including cancer, and the vast majority of cancer diagnoses are made by pathologists. The cellular patterns of tissue samples are observed under a microscope to help determine if a sample is cancerous or non-cancerous (benign). Pathologists also employ genetic studies and gene markers in the assessment of various diseases. Investigators in a pathology department may be utilizing information and experimental techniques originally developed in almost any area of modern biology and, in return, may contribute new knowledge of benefit to many other disciplines. Research on disease may target any of the organ systems, in normal and abnormal conditions, and studies may be conducted from a structural, biochemical, or functional perspective at any level—from the intact organism1 0tC tholo

- biochemical pharmacology;
- · therapeutics.

Training in pharmacology is conducted at both the undergraduate and graduate levels. Because of its breadth, students may be attracted to the subject from a variety of viewpoints; this includes those completing a bachelor's degree in any number of basic science disciplines, such as biology, zoology, chemistry, physics, biochemistry, microbiology, anatomy, and physiology. At the undergraduate level, seven lecture courses are offered. A course involving research projects in pharmacology is also available to provide students with the opportunity to get first-hand experience in a pharmacology research laboratory. These courses provide students with knowledge concerning the actions of drugs on living systems and insight into approaches to basic pharmacological research.

#### 11.13.29.3 Pharmacology and Therapeutics (PHAR) Faculty

#### Chair

Koren K. Mann

#### **Emeritus Professors**

Radan Capek; Hans H. Zingg; Dusica Maysinger

#### Professors

Daniel Bernard; Derek Bowie; Paul B.S. Clarke; A. Claudio Cuello; Barbara Hales; Terence Hébert; Anne McKinney; Gerhard Multhaup; Alfredo Ribeiro-da-Silva; Bernard Robaire; H. Uri Saragovi; Moshe Szyf; Jacquetta Trasler; Koren K. Mann

#### **Associate Professors**

Jason Chaim Tanny; Lisa Maria Munter; Bastien Castagner; Jean-François Trempe

#### **Assistant Professors**

Maureen McKeague; Ajitha Thanabalasuriar

#### **Associate Members**

Carolyn Baglole; Nathan Luedtke; Stephane Laporte; Stanley Nattel; Cristian O'Flaherty; Simon Rousseau; Edith A. Zorychta; Mark Basik; Michael

BIOL 200	(3)	Molecular Biology
BIOL 201	(3)	Cell Biology and Metabolism
3 credits selected from the fo	llowing:	
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
12 credits selected from the f	ollowing:	
PHAR 303	(3)	Principles of Toxicology
PHAR 503*	(3)	Drug Discovery and Development 1
PHAR 504	(3)	Drug Discovery and Development 2
PHAR 505*	(3)	Structural Pharmacology
PHAR 508	(3)	Drug Discovery and Development 3
PHAR 510	(3)	New Advances in Antimicrobial
PHAR 540	(3)	Advances in Industrial Biotechnology
PHAR 562	(3)	Neuropharmacology
PHAR 563	(3)	Endocrine Pharmacology
PHAR 565	(3)	Epigenetic Drugs and Targets
PHAR 599D1**	(3)	Pharmacology Research Project
PHAR 599D2**	(3)	Pharmacology Research Project

<sup>\*</sup> Students may take either PHAR 503 or PHAR 505.

### 11.13.29.5 Bachelor of Science (B.Sc.) - Major Pharmacology (67 credits)

This program incorporates extensive studies in Pharmacology with a strong component of related biomedical sciences, providing a solid preparation for employment opportunities or for entry into graduate or professional training programs. Students must consult the Student Affairs Coordinator upon entering the program and every year thereafter to verify courses and progress.

# **Required Courses (40 credits)**

U1		
BIOL 200	(3)	Molecular Biology
BIOL 202	(3)	Basic Genetics
CHEM 212*	(4)	Introductory Organic Chemistry 1
CHEM 222*	(4)	Introductory Organic Chemistry 2
PHAR 200	(1)	Introduction to Pharmacology 1
PHAR 201	(1)	Introduction to Pharmacology 2
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PHGY 212	(1)	Introductory Physiology Laboratory 1
PHGY 213	(1)	Introductory Physiology Laboratory 2

<sup>\*</sup> Students who have taken the equivalent of CHEM 212, CHEM 222, and/or MATH 203 in CEGEP (as defined at: http://www.mcgill.ca/students/transfercredit/prospective/cegep) are exempt and may not take these courses at McGill. Students must replace these credits with appropriate complementary course credits to satisfy the total credit requirements for their degree.

<sup>\*\*</sup> PHAR 599D1 and PHAR 599D2 are taken together.

U2			
BIOC 311	(3)	Metabolic Biochemistry	
BIOL 301	(4)	Cell and Molecular Laboratory	
PHAR 300	(3)	Drug Action	
PHAR 301	(3)	Drugs and Disease	
PHAR 303	(3)	Principles of Toxicology	
Complementary Cours	es (27 credits)		
3 credits, one of (recommer	ided to be taken ir	Year 1):	
ANAT 212	(3)	Molecular Mechanisms of Cell Function	
BIOC 212	(3)	Molecular Mechanisms of Cell Function	
BIOL 201	(3)	Cell Biology and Metabolism	
3 credits, one of (usually in	Vear 2):		
CHEM 203		Survey of Dhysical Chamistry	
CHEM 203 CHEM 204	(3)	Survey of Physical Chemistry  Physical Chemistry (Piclogical Sciences 1	
CHEM 204	(3)	Physical Chemistry/Biological Sciences 1	
3 credits, one of (usually in	Year 2):		
BIOL 373	(3)	Biometry	
MATH 203*	(3)	Principles of Statistics 1	
PSYC 204	(3)	Introduction to Psychological Statistics	
9 credits selected from the f	following Pharma	cology courses:	
PHAR 503**	(3)	Drug Discovery and Development 1	
PHAR 504	(3)	Drug Discovery and Development 2	
PHAR 505**	(3)	Structural Pharmacology	
PHAR 508	(3)	Drug Discovery and Development 3	
PHAR 510	(3)	New Advances in Antimicrobial	
PHAR 540	(3)	Advances in Industrial Biotechnology	
PHAR 562	(3)	Neuropharmacology	
PHAR 563	(3)	Endocrine Pharmacology	
PHAR 565	(3)	Epigenetic Drugs and Targets	
9 credits selected from the f	ollowing courses:		
	Ü	a science course not in the list	
below.			
ANAT 321	(3)	Circuitry of the Human Brain	
ANAT 322	(3)	Neuroendocrinology	
	(-)		

ANAT 365

ANAT 381+

(3)

(3)

Cellular Trafficking

Experimental Embryology

Membranes and Cellular Signaling

PHAR 565	(3)	Epigenetic Drugs and Targets
PHAR 599D1^^	(3)	Pharmacology Research Project
PHAR 599D2^^	(3)	Pharmacology Research Project
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience
PHGY 425+	(3)	Analyzing Physiological Systems
PHGY 520	(3)	Ion Channels
PHGY 524	(3)	Chronobiology
PPHS 501	(3)	Population Health and Epidemiology
PSYC 302	(3)	The Psychology of Pain
PSYC 305***	(3)	Statistics for Experimental Design
PSYC 311	(3)	Human Cognition and the Brain
PSYC 317***	(3)	Genes and Behaviour
PSYC 318***	(3)	Behavioural Neuroscience 2
PSYT 301	(3)	Issues in Drug Dependence
PSYT 455	(3)	Neurochemistry

Advances: Neurobiology of Mental Disorders

PHAR 390	(3)	Laboratory in Pharmacology
PHAR 503**	(3)	Drug Discovery and Development 1
PHAR 504	(3)	Drug Discovery and Development 2
PHAR 505**	(3)	Structural Pharmacology
PHAR 508	(3)	Drug Discovery and Development 3
PHAR 510	(3)	New Advances in Antimicrobial
PHAR 522D1^	(3)	Fundamentals of Disease Therapy
PHAR 522D2^	(3)	Fundamentals of Disease Therapy
PHAR 524	(3)	Clinical Mentorship
PHAR 540	(3)	Advances in Industrial Biotechnology
PHAR 562	(3)	Neuropharmacology
PHAR 563	(3)	Endocrine Pharmacology
PHAR 565	(3)	Epigenetic Drugs and Targets
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience
PHGY 425+	(3)	Analyzing Physiological Systems
PHGY 520	(3)	Ion Channels
PHGY 524	(3)	Chronobiology
PPHS 501	(3)	Population Health and Epidemiology
		The Psychology of Painhology of P

Telephone: 514-398-6477

Email: chairsec.physics@mcgill.ca Website: physics.mcgill.ca

#### 11.13.30.2 About Physics

Physics is in many ways the parent of the other natural sciences and its discoveries and laws continually affect their development. Its range and scope extend in space and time from subnuclear particles to the universe itself. The subfields of physics—such as mechanics, thermodynamics, electricity, atomic physics, and quantum mechanics, to mention but a few—permeate all other scientific disciplines. People trained in physics are employed in industry, government, and educational systems where they find many challenges as teachers, researchers, administrators, and in the rapidly developing area of scientific business.

The two main undergraduate programs in physics at McGill are the Honours and the Major. The **Honours** program is highly specialized and the courses are very demanding. This program is appropriate for students who wish to make an in-depth study of the subject b

# 11.13.30.4 Science Freshman Program

Students entering McGill with a Quebec CEGEP profile in Science will normally begin their programs in Physics with courses at the 200 level.

Students without this profile should normally take courses PHYS 131 and PHYS 142 if they have previously taken physics at the high school level and should be taking differential calculus concurrently with PHYS 131 and integral calculus concurrently with PHYS 142. Those students who have not previously taken physics at the high school level and who intend to do programs in the Biological Sciences may instead take courses PHYS 101 and PHYS 102. All students are expected to have reasonable fluency in algebra, geometry, and trigonometry at the high school level. If this is not the case, then MATH 112 should be taken concurrently with PHYS 101. Those for whom this is not necessary are advised to take MATH 139 concurrently with PHYS 101.

### 11.13.30.5 Physics Faculty

#### Chair

S. Jeon

#### **Director of Graduate Studies**

N. Provatas

#### Emeritus Professots. Zuck

J. Barrette; S. Das Gupta; N.B. de Takacsy; R. Harris; C.S. Lam; D.G. Stairs; J.O. Ström-Olsen; M. Sutton; M.J. Zuck

Students in certain programs (e.g., the Major Chemistry) will find that there are courses in the Minor that are already part of their program, or that they may not take for credit because of a substantial overlap of material with a course or courses in their program. After consultation with an adviser, such students may complete the Minor by substituting an

ECSE 303	(3)	Signals and Systems 1
ECSE 330	(3)	Introduction to Electronics

## **Complementary Courses (12 credits)**

3 credits from the following and 9 credits of ECSE courses at the 200, 300, or 400 level subject to approval by the Department of Electrical and Computer Engineering.

ECSE 305	(3)	Probability and Random Signals 1
ECSE 334	(3)	Introduction to Microelectronics

## 11.13.30.8 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Physics (45 credits)

## **Program Prerequisites**

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.

CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics

## One of:

BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology

## MATH 133 and either MATH 140/141 or MATH 150/151.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

## **Required Courses (36 credits)**

MATH 222	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 314	(3)	Advanced Calculus
MATH 315	(3)	Ordinary Differential Equations
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 241	(3)	Signal Processing
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 333	(3)	Thermal and Statistical Physics
PHYS 340	(3)	Majors Electricity and Magnetism

# **Complementary Courses (9 credits)**

9 credits selected from:

PHYS 328	(3)	Electronics
PHYS 331	(3)	Topics in Classical Mechanics
PHYS 339	(3)	Measurements Laboratory in General Physics
PHYS 342	(3)	Majors Electromagnetic Waves
PHYS 434	(3)	Optics
PHYS 439	(3)	Majors Laboratory in Modern Physics
PHYS 447	(3)	Applications of Quantum Mechanics

# 11.13.30.9 Bachelor of Science (B.Sc.) - Major Physics (63 credits)

60-63 credits

# **Program Prerequisites**

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must hav

MATH 314	(3)	Advanced Calculus
MATH 315	(3)	Ordinary Differential Equations
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 241	(3)	Signal Processing
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 331	(3)	Topics in Classical Mechanics
PHYS 339	(3)	Measurements Laboratory in General Physics
PHYS 340	(3)	Majors Electricity and Magnetism
PHYS 342	(3)	Majors Electromagnetic Waves
PHYS 346	(3)	Majors Quantum Physics
PHYS 447	(3)	Applications of Quantum Mechanics
PHYS 449	(3)	Majors Research Project

#### Complementary Courses (12 credits)

3 credits from:		
PHYS 329	(3)	Statistical Physics with Biophysical Applications
PHYS 333	(3)	Thermal and Statistical Physics
9 credits from:		
PHYS 319	(3)	Introduction to Biophysics
PHYS 320	(3)	Introductory Astrophysics
PHYS 321	(3)	Data Science and Observational Astrophysics
PHYS 328	(3)	Electronics
PHYS 404	(3)	Climate Physics
PHYS 432	(3)	Physics of Fluids
PHYS 434	(3)	Optics
PHYS 439	(3)	Majors Laboratory in Modern Physics
PHYS 479	(3)	Physics Research Project
PHYS 512	(3)	Computational Physics with Applications
PHYS 519	(3)	Advanced Biophysics
PHYS 521	(3)	Astrophysics

Note: It is possible for students to transfer from the Major to the Honours program after U1 year if they have passed all the 200-level required courses listed above and MATH 314 and MATH 315 with a C or better, and obtained a cumulative GPA of 3.5 or better in these courses. The written permission of an adviser is required for this change of program. The missing MATH 249 and PHYS 260 from the U1 Honours year should be taken in U2.

## 11.13.30.10 Bachelor of Science (B.Sc.) - Major Physics: Biological Physics (82 credits)

The B.Sc. Major Physics: Biological Physics program keeps a strong core of foundational physics and specializes through courses in biology, mathematics, physiology, computer science, and chemistry. Complementary courses provide background in molecular and cell biology, computer science, and organic chemistry, whereas introductory and advanced biophysics courses offered by the Physics Department as integrative courses. This program provides students with the skills necessary to continue on to graduate studies in biophysics/biological physics, or for research careers in hospital, industrial, or university settings.

## Required Courses (63 credits)

## Bio-Physical Science Core (27 credits)

BIOL 219	(4)	Introduction to Physical Molecular and Cell Biology
BIOL 395	(1)	Quantitative Biology Seminar
CHEM 212*	(4)	Introductory Organic Chemistry 1
MATH 222*	(3)	Calculus 3
MATH 223	(3)	Linear Algebra
MATH 315	(3)	Ordinary Differential Equations
MATH 323	(3)	Probability
PHYS 319	(3)	Introduction to Biophysics
PHYS 329	(3)	Statistical Physics with Biophysical Applications

<sup>\*</sup> Students who have taken the equivalent of CHEM 212 or MATH 222 can make up the credits with complementary 3 or 4 credits courses in consultation wit the program adviser.

# Biology and Mathematics (6 credits)

BIOL 202	(3)	Basic Genetics	
MATH 314	(3)	Advanced Calculus	

## Physics (30 credits)

PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 241	(3)	Signal Processing
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 340	(3)	Majors Electricity and Magnetism

 $16.152~342~\mathrm{Tm}$  (еМП-) фг $\Theta$ eHI- $\Theta$ eHI-

PHYS 439	(3)	Majors Laboratory in Modern Physics
3 credits selected from:		
CHEM 514	(3)	Biophysical Chemistry
MATH 437	(3)	Mathematical Methods in Biology
PHGY 425	(3)	Analyzing Physiological Systems
PHYS 432	(3)	Physics of Fluids
PHYS 434	(3)	Optics
PHYS 447	(3)	Applications of Quantum Mechanics
6 to 7 credits selected from:		
6 to 7 credits selected from: BIOL 300	(3)	Molecular Biology of the Gene
	(3) (4)	Molecular Biology of the Gene Cell and Molecular Laboratory
BIOL 300		
BIOL 300 BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 300 BIOL 301 BIOL 303	(4) (3)	Cell and Molecular Laboratory  Developmental Biology
BIOL 300 BIOL 301 BIOL 303 BIOL 306	(4) (3) (3)	Cell and Molecular Laboratory  Developmental Biology  Neural Basis of Behaviour

Bachelor of Science (B.Sc.) - Major Ph

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.

CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics
One of:		
BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cijll 0101 1M01521598Bi480g48nd

MATH 133 and either MATH 140/141 or MATH 150/151.

MA153.001.949 527.64 T1pQE).either MA Linear Algebra and Geometry

PHYS 339	(3)	Measurements Laboratory in General Physics
PHYS 340	(3)	Majors Electricity and Magnetism
PHYS 346	(3)	Majors Quantum Physics
PHYS 489	(3)	Special Project

## 11.13.30.13 Bachelor of Science (B.Sc.) - Honours Physics (78 credits)

Students entering this program for the first time should have high standing in mathematics and physics.

To graduate with an Honours degree, a student must have, at time of graduation, a CGPA of at least 3.0 in the required and complementary courses of the program, as well as an overall CGPA of at least 3.0.

## **Program Prerequisites**

Students entering Physics programs from the Freshman program must have successfully completed the courses below or their equivalents. Quebec students must have completed the DEC with appropriate science and mathematics courses.

CHEM 110	(4)	General Chemistry 1
CHEM 120	(4)	General Chemistry 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics
One of:		
BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology

## MATH 133 and either MATH 140/MATH141 or MATH 150/MATH 151 or MATH 222.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B
MATH 222	(3)	Calculus 3

U2		
MATH 475	(3)	Honours Partial Differential Equations
PHYS 253	(3)	Thermal Physics
PHYS 350	(3)	Honours Electricity and Magnetism
PHYS 351	(3)	Honours Classical Mechanics 2
PHYS 357	(3)	Honours Quantum Physics 1
PHYS 359	(3)	Honours Laboratory in Modern Physics 1
PHYS 362	(3)	Statistical Mechanics
PHYS 457	(3)	Honours Quantum Physics 2
U3		
PHYS 352	(3)	Honours Electromagnetic Waves

# **Complementary Courses (24 credits)**

U3

6ts)

Bachelor of Science (B.Sc.) - Honours Physics: Biological Ph

3 credits selected from	n:	
PHYS 328	(3)	Electronics
PHYS 351	(3)	Honours Classical Mechanics 2
3 credits selected from	n:	
PHYS 339	(3)	Measurements Laboratory in General Physics
PHYS 359	(3)	Honours Laboratory in Modern Physics 1
3 credits selected from	n:	
CHEM 514	(3)	Biophysical Chemistry
MATH 437	(3)	Mathematical Methods in Biology
PHGY 425	(3)	Analyzing Physiological Systems
PHYS 432	(3)	Physics of Fluids
PHYS 434	(3)	Optics
PHYS 447	(3)	Applications of Quantum Mechanics
6 to 7 credits selected	l from:	
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 301	(4)	Cell and Molecular Laboratory
BIOL 303	(3)	Developmental Biology
BIOL 306	(3)	Neural Basis of Behaviour
BIOL 313	(3)	Eukaryotic Cell Biology
BIOL 316	(3)	Biomembranes and Organelles

# 11.13.30.15 Bachelor of Science (B.Sc.) - Honours Mathematics and Physics (81 credits)

(3)

Principles of Cellular Control

BIOL 551

This is a specialized and demanding program intended for students who wish to develop a strong basis in both Mathematics and Physics in preparation for graduate work and a professional or academic career. Although the program is optimized for theoretical physics, it is broad enough and strong enough to prepare students for further study in either experimental physics or mathematics.

The minimum requirement for entry into the program is completion with high standing of the usual CEGEP courses in physics and in mathematics, or the Physics Program Prerequisites as explained below. In addition, a student who has not completed the equivalent of MATH 222 must take it in the first term without receiving credit toward the 81 credits required in the Honours program.

A student whose average in the required and complementary courses in any year falls below a GPA of 3.00, or whose grade in any individual required or complementary course falls below a C (unless the student improves the grade to a C or higher through a supplemental exam or by retaking the course), may not register in the Honours program the following year, or graduate with the Honours degree, except with the permission of both departments. The student will have two advisers, one from Mathematics and ermio

## One of:

BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology

## MATH 133 and either MATH 140/141 or MATH 150/151.

MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B

# **U1 Required Courses (27 credits)**

MATH 235	(3)	Algebra 1
MATH 248	(3)	Honours Vector Calculus
MATH 249	(3)	Honours Complex Variables
MATH 325	(3)	Honours Ordinary Differential Equations
PHYS 241	(3)	Signal Processing
PHYS 251	(3)	Honours Classical Mechanics 1
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 260	(3)	Modern Physics and Relativity

# U2 Required Courses (24 credits)

MATH 255	(3)	Honours Analysis 2
MATH 475	(3)	Honours Partial Differential Equations
PHYS 253	(3)	Thermal Physics
PHYS 350	(3)	Honours Electricity and Magnetism
PHYS 351	(3)	Honours Classical Mechanics 2
PHYS 357	(3)	Honours Quantum Physics 1
PHYS 362	(3)	Statistical Mechanics
PHYS 457	(3)	Honours Quantum Physics 2

# U3 Required Courses (12 credits)

MATH 454	(3)	Honours Analysis 3
MATH 458	(3)	Honours Differential Geometry
PHYS 352	(3)	Honours Electromagnetic Waves
PHYS 359	(3)	Honours Laboratory in Modern Physics 1

# **Complementary Cour**

MATH 247	(3)	Honours Applied Linear Algebra
MATH 251	(3)	Honours Algebra 2

# **U2 Complementary Courses (3 credits)**

CHEM 120	(4)	General Chemistry 2
PHYS 131	(4)	Mechanics and Waves
PHYS 142	(4)	Electromagnetism and Optics
One of:		
BIOL 111	(3)	Principles: Organismal Biology
BIOL 112	(3)	Cell and Molecular Biology
MATH 133 and either I	MATH 140/141 or	r MATH 150/151.
MATH 133	(3)	Linear Algebra and Geometry
MATH 140	(3)	Calculus 1
MATH 141	(4)	Calculus 2
MATH 150	(4)	Calculus A
MATH 151	(4)	Calculus B
Required Courses (	(68 credits)	
CHEM 212	(4)	Introductory Organic Chemistry 1
CHEM 213	(3)	Introductory Physical Chemistry 1: Thermodynamics
CHEM 273	(3)	Introductory Physical Chemistry 2: Kinetics and Methods
CHEM 281	(3)	Inorganic Chemistry 1
CHEM 355	(3)	Applications of Quantum Chemistry
CHEM 365	(2)	Statistical Thermodynamics
CHEM 493	(2)	Advanced Physical Chemistry Laboratory
CHEM 556	(3)	Advanced Quantum Mechanics
CHEM 574	(3)	Introductory Polymer Chemistry
COMP 208	(3)	Computer Programming for Physical Sciences and Engineering
MATH 247	(3)	Honours Applied Linear Algebra
MATH 248	(3)	Honours Vector Calculus
MATH 249	(3)	Honours Complex Variables
MATH 325	(3)	Honours Ordinary Differential Equations
PHYS 241	(3)	Signal Processing
PHYS 251	(3)	Honours Classical Mechanics 1
PHYS 257	(3)	Experimental Methods 1

Experimental Methods 2

Honours Electricity and Magnetism

Honours Electromagnetic Waves

Honours Quantum Physics 1

Honours Quantum Physics 2

Solid State Physics

# **Complementary Courses (12 credits)**

(with at least 3 credits in Chemistry and 3 credits in Physics)

(3)

(3)

(3)

(3)

(3)

(3)

**PHYS 258** 

**PHYS 350** 

**PHYS 352** 

**PHYS 357** 

**PHYS 457** 

**PHYS 558** 

3 credits selected from:

CHEM 593

(3)

Statistical Mechanics

Honours Complex V

## 11.13.30.18 Physics (PHYS) Related Programs 11.13.30.181 Major in Atmospheric Science and Physics

See <u>section 11.13.3</u>: <u>Atmospheric and Oceanic Sciences (ATOC)</u>. This program provides a firm basis for graduate work in atmospheric science and related fields as well as a sound preparation for those who wish to embark on a career directly after the B.Sc. Students should consult undergraduate advisers in both departments.

### 11.1330182 Major in Physiology and Physics

See section 11.13.31: Physiology (PHGY). This program provides a firm basis for graduate work in bio-physics and other interdisciplinary fields involving the physical and biological sciences.

### 11.13.31 Physiology (PHGY)

### 11.13.31.1 Location

McIntyre Medical Sciences Building, Room 1021 3655 Promenade Sir-William-Osler Montreal QC H3G 1Y6

Telephone: 514-398-4316 Website: mcgill.ca/physiology

## 11.13.31.2 About Physiology

Physiology has its roots in many of the basic sciences including biology, chemistry, mathematics, and physics; and it overlaps with other biomedical sciences such as anatomy, biochemistry, pathology, pharmacology, psychology, and biomedical engineering. Physiology is one of the prime contributors of basic scientific knowledge to the clinical medical sciences.

Members of the Department of Physiology at McGill are engaged in studies dealing with molecules, single cells, or entire systems in a variety of vertebrates, including humans. A wide range of interest and expertise is represented, including:

- · cardiovascular;
- · respiratory;
- gastrointestinal and renal physiology;
- the physiology of exercise;
- neurophysiology;
- endocrinology;
- · immunology;
- · biophysics; and
- · biomathematics.

Some faculty members have formal or informal links with the departments of mathematics, physics, electrical engineering, and chemistry, and with clinical departments (medicine, surgery, pediatrics, neurology, obstetrics, psychiatry, anesthesia), reflecting and reinforcing the close ties between physiology and

**Returning students** are encouraged to consult with the Student Affairs Officer regularly throughout the year, in particular at the beginning of their final year, to ensure they have met all departmental requirements.



Please note: Complementary courses are not electives.

The difference between complementary courses and required courses is that complementary courses are defined as offering an element of choice, however small that choice may be. Students may choose from the two (or more) courses specified within complementary course segments of a program description, but ONLY from those. For further information, refer to *University Regulations & Resources > Undergraduate > Registration > section 1.3.2: Course Information and Regulations*.

### 11.13.31.3 Physiology Faculty

#### Chair

John White

## **Graduate Program Director**

Alvin Shrier

#### **Emeritus Professors**

Thomas M.S. Chang, Leon Glass, Kresimir Krnjevic, Wayne S. Lapp, Mortimer Levy, Michael Mackey, George Mandl, Geoffrey Melvill Jones, Joseph Milic-Emili, Canio Polosa, Douglas G.D. Watt

### Associate Professor (Post-Retirement)

Ann Wechsler

#### **Professors**

Maurice Chacron, Monroe W. Cohen, Ellis J. Cooper, Phil Gold, John Hanrahan, David Goltzman, Steve Lomber, Gergely Lukacs, Sheldon Magder, John Orlowski, Alvin Shrier, John White

## Associate Professors

Claire Brown, Gil Bub, Erik Cook, Mladen Glavinovic, Michael Guevara, Suresh Krishna, Anmar Khadra, Reza Sharif-Naeini, Ursula Stochaj

## Associate Professor (Part-Time)

Nicole Bernard

#### **Assistant Professors**

Pouya Bashivan, Arjun Krishnaswamy, Judith Mandl, Anastasia Nijnik, Masha Prager-Khoutorsky, Daniela Quail, Melissa Vollrath

#### **Associate Members**

Anaesthesia: Stev

# **Faculty Lecturer**

Céline

BMDE 505	(3)	Cell and Tissue Engineering
BMDE 519	(3)	Biomedical Signals and Systems
EXMD 502	(3)	Advanced Endocrinology 1
EXMD 503	(3)	Advanced Endocrinology 02
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology
EXMD 507	(3)	Advanced Applied Respiratory Physiology
		Advanced

PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PHGY 212	(1)	Introductory Physiology Laboratory 1
PHGY 213	(1)	Introductory Physiology Laboratory 2

# U2 and U3 Required Courses (19 credits)

BIOC 311	(3)	Metabolic Biochemistry
BIOL 301	(4)	Cell and Molecular Laboratory
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience

# **Complementary Courses (28 credits)**

12-13 credits selected as follows:

### 3 credits, one of:

BIOC 212	(3)	Molecular Mechanisms of Cell Function
BIOL 201	(3)	Cell Biology and Metabolism

## 3 credits, one of:

BIOL 309	(3)	Mathematical Models in Biology
BIOL 373	(3)	Biometry
COMP 204	(3)	Computer Programming for Life Sciences
COMP 250	(3)	Introduction to Computer Science
PSYC 305	(3)	Statistics for Experimental Design

### 3 credits, one of:

BIOC 312	(3)	Biochemistry of Macromolecules
CHEM 203	(3)	Survey of Physical Chemistry
CHEM 204	(3)	Physical Chemistry/Biological Sciences 1

## 3-4 credits, one of:

ANAT 214	(3)	Systemic Human Anatomy
ANAT 261	(4)	Introduction to Dynamic Histology
ANAT 316	(3)	Clinical Human Visceral Anatomy

# 9 credits selected from the Upper-Level Physiology (ULP) course list as follows:

BIOL 532	(3)	Developmental Neurobiology Seminar
BMDE 505	(3)	Cell and Tissue Engineering
BMDE 519	(3)	Biomedical Signals and Systems

EXMD 502	(3)	Advanced Endocrinology 1
EXMD 503	(3)	Advanced Endocrinology 02
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology
EXMD 507	(3)	Advanced Applied Respiratory Physiology
EXMD 508	(3)	Advanced Topics in Respiration
MIMM 414	(3)	Advanced Immunology
MIMM 509	(3)	Inflammatory Processes
PHGY 425	(3)	Analyzing Physiological Systems
PHGY 451	(3)	Advanced Neurophysiology
PHGY 459D1*	(3)	Physiology Seminar
PHGY 459D2*	(3)	Physiology Seminar
PHGY 461D1**	(4.5)	Experimental Physiology
PHGY 461D2**	(4.5)	Experimental Physiology
		Stem Cell Biology

ANAT 541	(3)	Cell and Molecular Biology of Aging
ANAT 542	(3)	Transmission Electron Microscopy of Biological Samples
ANAT 565	(3)	Diseases-Membrane Trafficking
BIOC 458*	(3)	Membranes and Cellular Signaling
BIOL 300	(3)	Molecular Biology of the Gene
BIOL 303	(3)	Developmental Biology
BIOL 309	(3)	Mathematical Models in Biology
BIOL 313	(3)	Eukaryotic Cell Biology
BIOL 314	(3)	Molecular Biology of Cancer
BIOL 324	(3)	Ecological Genetics
BIOL 370	(3)	Human Genetics Applied
BIOL 373	(3)	Biometry
BIOL 389	(3)	Laboratory in Neurobiology
BIOL 416	(3)	Genetics of Mammalian Development
BIOL 468	(6)	Independent Research Project 3
BIOL 518	(3)	Advanced Topics in Cell Biology
BIOL 520	(3)	Gene Activity in Development
BIOL 524	(3)	Topics in Molecular Biology
BIOL 532	(3)	Developmental Neurobiology Seminar
BIOL 544	(3)	Genetic Basis of Life Span
BIOL 546	(3)	Genetics of Model Systems
BIOL 551	(3)	Principles of Cellular Control
BIOL 575	(3)	Human Biochemical Genetics
BIOL 588	(3)	Advances in Molecular/Cellular Neurobiology
CHEM 214	(3)	Physical Chemistry/Biological Sciences 2
EXMD 401	(3)	Physiology and Biochemistry Endocrine Systems
EXMD 502	(3)	Advanced Endocrinology 1
EXMD 503	(3)	Advanced Endocrinology 02
EXMD 504	(3)	Biology of Cancer
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology
EXMD 507	(3)	Advanced Applied Respiratory Physiology
EXMD 508	(3)	Advanced Topics in Respiration
EXMD 510	(3)	Bioanalytical Separation Methods
NEUR 310	(3)	Cellular Neurobiology
PHAR 503	(3)	Drug Discovery and Development 1
PHAR 504	(3)	Drug Discovery and Development 2
PHAR 562	(3)	Neuropharmacology
PHAR 563	(3)	Endocrine Pharmacology
PPHS 501	(3)	Population Health and Epidemiology
PSYC 302	(3)	The Psychology of Pain
PSYC 311	(3)	Human Cognition and the Brain
PSYC 317	(3)	Genes and Behaviour
PSYC 318	(3)	Behavioural Neuroscience 2

PSYC 342	(3)	Hormones and Behaviour
PSYC 410	(3)	Special Topics in Neuropsychology
PSYC 427	(3)	Sensorimotor Neuroscience
PSYC 470	(3)	Memory and Brain
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders

 $<sup>\</sup>ensuremath{^{*}}$  Students may take ANAT 458 or BIOC 458 but not both.

Note: Students may opt to replace 3 credits of the 6 credits of Upper Level Science with 3 credits selected from the following list:

COMP 364	(3)	Computer Tools for Life Sciences
PHIL 341	(3)	Philosophy of Science 1
PHIL 343	(3)	Biomedical Ethics
REDM 410	(3)	Writing Research Articles

## 11.13.31.6 Bachelor of Science (B.Sc.) - Major Physiology and Mathematics (79 credits)

## Required Courses (70 credits)

# **Bio-Physical Sciences Core**

BIOL 219	(4)	Introduction to Physical Molecular and Cell Biology
BIOL 395	(1)	Quantitative Biology Seminar
MATH 222	(3)	Calculus 3
MATH 223*	(3)	Linear Algebra
MATH 247*	(3)	Honours Applied Linear Algebra
MATH 315**	(3)	Ordinary Differential Equations
MATH 323	(3)	Probability
MATH 325**	(3)	Honours Ordinary Differential Equations

<sup>\*</sup> Students may take either MATH 223 or MATH 247.

# **Physiology and Mathematics Core**

BIOL 309	(3)	Mathematical Models in Biology
BMDE 519	(3)	Biomedical Signals and Systems
MATH 242	(3)	Analysis 1
MATH 243	(3)	Analysis 2
MATH 248***	(3)	Honours Vector Calculus
MATH 314***	(3)	Advanced Calculus
MATH 317	(3)	Numerical Analysis
MATH 319	(3)	Partial Differential Equations
MATH 324	(3)	Statistics
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 437	(3)	Mathematical Methods in Biology
PHGY 209	(3)	Mammalian Physiology 1

<sup>\*\*</sup> Students may take either MATH 315 or MATH 325.

PHGY 210	(3)	Mammalian Physiology 2
PHGY 212	(1)	Introductory Physiology Laboratory 1
PHGY 213	(1)	Introductory Physiology Laboratory 2
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 461D1	(4.5)	Experimental Physiology
PHGY 461D2	(4.5)	Experimental Physiology

<sup>\*\*\*</sup> Students may take either MATH 248 or MATH 314.

# **Complementary Courses (9 credits)**

3 credits, one of:

PHYS 519

COMP 204	(3)	Computer Programming for Life Sciences
COMP 250	(3)	Introduction to Computer Science
3 credits, one of:		
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 314	(3)	Integrative Neuroscience
3 credits, one of:		
PHYS 413	(3)	Physical Basis of Physiology

# 11.13.31.7 Bachelor of Science (B.Sc.) - Major Physiology and Physics (82 credits)

Advanced Biophysics

This program provides a firm foundation in physics, mathematics, and ph

(3)

MATH 314***	(3)	Advanced Calculus
MATH 326	(3)	Nonlinear Dynamics and Chaos
MATH 437	(3)	Mathematical Methods in Biology
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PHGY 212	(1)	Introductory Physiology Laboratory 1
PHGY 213	(1)	Introductory Physiology Laboratory 2
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 461D1	(4.5)	Experimental Physiology
PHGY 461D2	(4.5)	Experimental Physiology
PHYS 230	(3)	Dynamics of Simple Systems
PHYS 232	(3)	Heat and Waves
PHYS 241	(3)	Signal Processing
PHYS 257	(3)	Experimental Methods 1
PHYS 258	(3)	Experimental Methods 2
PHYS 339	(3)	Measurements Laboratory in General Physics
PHYS 340	(3)	Majors Electricity and Magnetism
PHYS 346	(3)	Majors Quantum Physics

<sup>\*\*\*</sup> Students may take either MATH 248 or MATH 314.

# Complementary Courses (6 credits)

3 credits, one of:

PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 314	(3)	Integrative Neuroscience

3 credits, one of:

PHYS 413	(3)	Physical Basis of Physiology
PHYS 519	(3)	Advanced Biophysics

# 11.13.31.8 Bachelor of Science (B.Sc.) - Honours Physiology (75 credits)

All admissions to the Honours program will be in U2, and the student must have a U1 GPA of 3.30, with no less than a B in PHGY 209 and PHGY 210.

Admission to U3 requires a U2 CGPA of 3.20 with no less than a B in U2 Ph 32n a B in 1 67.52 218.9839 d..86taG(PHYS 413)Tj1 0 0 1 51 118.2490 1 c gy (75 credsar

BIOC 311	(3)	Metabolic Biochemistry
BIOL 200	(3)	Molecular Biology
BIOL 202	(3)	Basic Genetics
BIOL 301	(4)	Cell and Molecular Laboratory
CHEM 222	(4)	Introductory Organic Chemistry 2
PHGY 209	(3)	Mammalian Physiology 1
PHGY 210	(3)	Mammalian Physiology 2
PHGY 212	(1)	Introductory Physiology Laboratory 1
PHGY 213	(1)	Introductory Physiology Laboratory 2
PHGY 311	(3)	Channels, Synapses and Hormones
PHGY 312	(3)	Respiratory, Renal, and Cardiovascular Physiology
PHGY 313	(3)	Blood, Gastrointestinal, and Immune Systems Physiology
PHGY 314	(3)	Integrative Neuroscience
		Research T

BIOL 532	(3)	Developmental Neurobiology Seminar
BMDE 519	(3)	Biomedical Signals and Systems
EXMD 502	(3)	Advanced Endocrinology 1
EXMD 503	(3)	Advanced Endocrinology 02
EXMD 506	(3)	Advanced Applied Cardiovascular Physiology
EXMD 507	(3)	Advanced Applied Respiratory Physiology
EXMD 508	(3)	Advanced Topics in Respiration
MIMM 414	(3)	Advanced Immunology
MIMM 509	(3)	Inflammatory Processes
PHGY 425	(3)	Analyzing Physiological Systems
PHGY 451	(3)	Advanced Neurophysiology
PHGY 488	(3)	Stem Cell Biology
PHGY 502	(3)	Exercise Physiology
PHGY 508	(3)	Advanced Renal Physiology
PHGY 513	(3)	Translational Immunology
PHGY 515	(3)	Blood-Brain Barrier in Health and Disease
PHGY 516	(3)	Physiology of Blood
PHGY 518	(3)	Artificial Cells
PHGY 520	(3)	Ion Channels
PHGY 524	(3)	Chronobiology
PHGY 525	(3)	Cortical Plasticity
PHGY 531	(3)	Topics in Applied Immunology
PHGY 550	(3)	Molecular Physiology of Bone
PHGY 552	(3)	Cellular and Molecular Physiology
PHGY 556	(3)	Topics in Systems Neuroscience
PHGY 560	(3)	Light Microscopy-Life Science
PSYC 470	(3)	Memory and Brain
PSYT 500	(3)	Advances: Neurobiology of Mental Disorders

# 11.13.31.9 Physiology (PHGY) Related Programs 11.13.31.9.1 Interdepartmental Honours in Immunology

## 11.13.32 Psychiatry (PSYT)

## 11.13.32.1 Location

1033 Pine Avenue West, Room 104

Montreal QC H3A 1A1 Telephone: 514-398-4176

Website: mcgill.ca/psychiatry/education/graduate-program

# 11.13.32.2 About Psychiatry

There are no B.Sc. programs in Psychiatry, but the PSYT courses listed below are administered by the Faculty of Science and are open to Arts and Science students and to graduate students, subject to the regulations and restrictions of their home faculty.

#### Courses **PSYT** 199 FYS: Mental Illness and the Brain **PSYT 301** Issues in Drug Dependence PSYT 400D1/PSYT 400D2 Research Project in Psychiatry PSYT 455 Neurochemistry PSYT 500 Advances: Neurobiology of Mental Disorders PSYT 502 Brain Evolution and Psychiatry Mental Health Services and Policy **PSYT 503 PSYT 504** Issues in Forensic Mental Health PSYT 515 Advanced Studies in Addiction

# 11.13.33 Psychology (PSYC)

enue

# **Undergraduate Studies**

Although a number of under

\*Note: CEGEP students may not take PSYC 204 if they have completed Probability & Statistics or Statistics with a minimum grade of 75%.

## **Complementary Courses (24 credits)**

3 or 6 credits selected from the following:

PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 212	(3)	Perception
PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology

18 or 21 credits selected from Psychology courses at the 300 level or above.

### 11.13.33.7 Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Psychology (45 credits)

This Core Science Component Psychology requires the completion of 45 credits in Psychology, all of which need to be passed with a minimum grade of C. A prerequisite to the program is PSYC 100 or equivalent. Students completing a Liberal Program with a Core Science Component Psychology must also complete at least one breadth component in a second area.

## **Recommended Background**

It is expected that most students who enter the Liberal program in Psychology will have taken introductory psychology, biology, and statistics at the collegial level. Recommended CEGEP courses include Psychology 350-101 or 350-102 or equivalent; Biology CEGEP objective 00UK, 00XU or equivalent; and Statistics (Mathematics) 201-307 or 201-337 or equivalent. Students must obtain a minimum grade of 75% in their CEGEP-level statistics course to be exempt from PSYC 204. In the first year, those students who have not taken the recommended collegial-level statistics course, or those who have obtained a grade below 75%, must take Psychology PSYC 204. Those who have not taken Introductory Psychology in CEGEP must take PSYC 100.

## Required Course (3 credits)

PSYC 204	(3)	Introduction to Psychological Statistics
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# Complementary Courses (42 credits)

9 credits from:

PSYC 211	(3)	Introductory Behavioural Neuroscience
PSYC 212	(3)	Perception
PSYC 213	(3)	Cognition
PSYC 215	(3)	Social Psychology

## List A

6 credits in Psychology from List A (Behavioural Neuroscience, Cognition and Quantitive Methods).

NSCI 201	(3)	Introduction to Neuroscience 2
PSYC 301	(3)	Animal Learning and Theory
PSYC 302	(3)	The Psychology of Pain
PSYC 306	(3)	Research Methods in Psychology
		Intelligence

Introduction to Auditory Cognition

PSYC 414	(3)	Social Development
PSYC 436	(3)	Human Sexuality and Its Problems
PSYC 471	(3)	Human Motivation
PSYC 473	(3)	Social Cognition and the Self
PSYC 474	(3)	Interpersonal Relationships
PSYC 475	(3)	Neuroscience of Social Psychology
PSYC 483	(3)	Seminar in Experimental Psychopathology
PSYC 491D1	(3)	Advanced Study: Behavioural Disorders
PSYC 491D2	(3)	Advanced Study: Behavioural Disorders
PSYC 507	(3)	Emotions, Stress, and Illness
PSYC 509	(3)	Diverse Clinical Populations
PSYC 512	(3)	Advanced Personality Seminar
PSYC 528	(3)	Vulnerability to Depression and Anxiety
PSYC 530	(3)	Applied Topics in Deafness
PSYC 535	(3)	Advanced Topics in Social Psychology
PSYC 539	(3)	Advanced Topics in Social Psychology 2

15 credits in Psychology at the 300 level or above.

 $6\ credits$  in Psychology at the  $400\ or\ 500$  level.

Bac

PSYC 215 (3) Social Psychology

U1 or U2

PSYC 305\* (3) Statistics for Experimental Design

PSYC 529	(3)	Music Cognition
PSYC 531	(3)	Structural Equation Models
PSYC 537	(3)	Advanced Seminar in Psychology of Language
PSYC 538	(3)	Categorization, Communication and Consciousness
PSYC 541	(3)	Multilevel Modelling
PSYC 545	(3)	Topics in Language Acquisition
PSYC 560*	(3)	Machine Learning Tools in Psychology
PSYC 562	(3)	Measurement of Psychological Processes

## List B - (Social, Health, and Developmental Psychology)

6 credits in Psychology from List B:

PSYC 304	(3)	Child Development
PSYC 328	(3)	Health Psychology
PSYC 331	(3)	Inter-Group Relations
PSYC 332	(3)	Introduction to Personality
PSYC 333	(3)	Personality and Social Psychology
PSYC 337	(3)	Introduction to Psychopathology
PSYC 351	(3)	Research Methods in Social Psychology
PSYC 408	(3)	Principles and Applications of Psychotherapy
PSYC 409	(3)	Positive Psychology
PSYC 412	(3)	Child Development: Psychopathology
PSYC 414	(3)	Social Development
PSYC 436	(3)	Human Sexuality and Its Problems
PSYC 471	(3)	Human Motivation
PSYC 473	(3)	Social Cognition and the Self
PSYC 474	(3)	Interpersonal Relationships
PSYC 483	(3)	Seminar in Experimental Psychopathology
PSYC 491D1	(3)	Advanced Study: Behavioural Disorders
PSYC 491D2	(3)	Advanced Study: Behavioural Disorders
PSYC 507	(3)	Emotions, Stress, and Illness
PSYC 509	(3)	Diverse Clinical Populations
PSYC 512	(3)	Advanced Personality Seminar
PSYC 528	(3)	Vulnerability to Depression and Anxiety
PSYC 530	(3)	Applied Topics in Deafness
PSYC 535	(3)	Advanced Topics in Social Psychology
PSYC 539	(3)	Advanced Topics in Social Psychology 2

6 credits in Psychology at the 300 level or above.

9 credits in Psychology at the 400 or 500 level.

12 credits at the 300 level or above in any of the following disciplines: Psychology (PSYC), Anatomy and Cell Biology (ANAT), Biology (BIOL), Biochemistry (BIOC), Chemistry (CHEM), Computer Science (COMP), Mathematics (MATH), Physiology (PHGY), Psychiatry (PSYT).

# **Unclassified Courses**

Students may also select complementary courses from the research and topics courses as follows:

PSYC 395	(6)	Psychology Research Project 1
PSYC 450D1	(4.5)	Research Project and Seminar
PSYC 450D2	(4.5)	Research Project and Seminar
PSYC 488D1	(1.5)	Special Topics Seminar
PSYC 488D2	(1.5)	Special Topics Seminar
PSYC 492	(3)	Special Topics Seminar 1
PSYC 493	(3)	Special Topics Seminar 2
PSYC 494D1	(4.5)	Psychology Research Project
PSYC 494D2	(4.5)	Psychology Research Project
PSYC 495	(6)	Psychology Research Project 2
PSYC 499	(1)	Reading Project

# 11.13.33.9 Bachelor of Science (B.Sc.) - Honours Psychology (60 credits)

Honours in Psychology prepares students for gra3.041 4C3d2 495.ej1 0 0 1 707849 575.981 Tm(Psych8Cl.ej)Tj1 0 0 Thasizr gpractise prend topics coutechnique gwhich

# U2 Required Courses (9 credits)

PSYC 380D1	(4.5)	Honours Research Project Seminar
PSYC 380D2	(4.5)	Honours Research Project Seminar

# U3 Required Course (3 credits)

PSYC 482 (3) Advanced Honours Seminar

# **Complementary Courses (33 credits)**

12 credits to be selected from the list below and any Psychology course at the 500 level.

PSYC 403	(3)	Modern Psychology in Historical Perspective
PSYC 483	(3)	Seminar in Experimental Psychopathology
PSYC 495	(6)	Psychology Research Project 2

 $PSYC\ 496 Senior\ Honours\ Re (\textit{Co}) arch\ 1Se6) Seni \textit{Seri-Horn-Horn-Reschargh}\ 0\ 0\ 1\ 165.864\ 52980.34 Tm (Se4.5)) Tj 1\ 0\ 0\ 1\ 70.52\ 68980.34 Tm (SeYC\ 496) 8 Senior\ Honours\ Reschargh Tm (SeYC\ 496) 8 Senior\ Honours\ Ho$ 

PSYC 433	(3)	Cognitive Science
PSYC 443	(3)	Affective Neuroscience
PSYC 444	(3)	Sleep Mechanisms and Behaviour
PSYC 470	(3)	Memory and Brain
PSYC 502	(3)	Psychoneuroendocrinology
PSYC 506	(3)	Cognitive Neuroscience of Attention
PSYC 513	(3)	Human Decision-Making
PSYC 514	(3)	Neurobiology of Memory
PSYC 522	(3)	Neurochemistry and Behaviour
PSYC 526	(3)	Advances in Visual Perception
PSYC 529	(3)	Music Cognition
PSYC 531	(3)	Structural Equation Models
PSYC 537	(3)	Advanced Seminar in Psychology of Language
PSYC 538	(3)	Categorization, Communication and Consciousness
PSYC 541	(3)	Multilevel Modelling
PSYC 545	(3)	Topics in Language Acquisition
PSYC 560*	(3)	Machine Learning Tools in Psychology
PSYC 562	(3)	Measurement of Psychological Processes

<sup>\* 1.</sup> Students who have taken COMP 202 or COMP 204 and who have taken freshman linear algebra and calculus might instead consider taking COMP 551.

Child Development

# List B

PSYC 304

6 credits in Psychology from List B (Social, Health, and Developmental Psychology)

(3)

	* *	1
PSYC 328	(3)	Health Psychology
PSYC 331	(3)	Inter-Group Relations
PSYC 332	(3)	Introduction to Personality
PSYC 333	(3)	Personality and Social Psychology
PSYC 337	(3)	Introduction to Psychopathology
PSYC 351	(3)	Research Methods in Social Psychology
PSYC 408	(3)	Principles and Applications of Psychotherapy
PSYC 409	(3)	Positive Psychology
PSYC 412	(3)	Child Development: Psychopathology
PSYC 414	(3)	Social Development
PSYC 436	(3)	Human Sexuality and Its Problems
PSYC 471	(3)	Human Motivation
PSYC 473	(3)	Social Cognition and the Self
PSYC 474	(3)	Interpersonal Relationships
PSYC 475	(3)	Neuroscience of Social Psychology
PSYC 483	(3)	Seminar in Experimental Psychopathology
PSYC 491D1	(3)	Advanced Study: Behavioural Disorders
PSYC 491D2	(3)	Advanced Study: Behavioural Disorders
PSYC 507	(3)	Emotions, Stress, and Illness

<sup>2.</sup> Students in both psychology and computer science are strongly encouraged to take COMP 551 over PSYC 560.

## **Associate Members**

Biology: Graham A.C. Bell; Lauren Chapman

Chemistry: David N. Harpp

Earth & Planetary Sciences: Jeanne Paquette

# **Adjunct Professors**

Robert Holmes; Henry M. Reiswig; Michael Woloch

# 11.13.34.4 Bachelor of Science (B.Sc.) - Minor Natural History (24 credits)

The Minor Natural History involves the exploration of the natural world via specimen-based studies, object-oriented investigations and field studies. Museum collections are used to provide hands-menro

# List B: Botany

\* Note: BIOL 205 and BIOL 215 may be applied to either List A or List B.

AEBI 210	(3)	Organisms 1
BIOL 205*	(3)	Functional Biology of Plants and Animals
BIOL 215*	(3)	Introduction to Ecology and Evolution
BIOL 240	(3)	Monteregian Flora
BIOL 355	(3)	Trees: Ecology and Evolution
PLNT 304	(3)	Biology of Fungi
PLNT 353	(3)	Plant Structure and Function
PLNT 358	(3)	Flowering Plant Diversity
PLNT 460	(3)	Plant Ecology

## List C: Earth and Environmental Sciences

BIOL 540	(3)	<b>Ecology of Species Invasions</b>
ENVR 200	(3)	The Global Environment
ENVR 202	(3)	The Evolving Earth
EPSC 210	(3)	Introductory Mineralogy
EPSC 233	(3)	Earth and Life History
ESYS 200	(3)	Earth System Processes
ESYS 300	(3)	Investigating the Earth System
GEOG 203	(3)	Environmental Systems
GEOG 272	(3)	Earth's Changing Surface
GEOG 470	(3)	Wetlands
GEOG 550	(3)	Historical Ecology Techniques

## List D: Field Studies

Students may also take other field courses with the permission of the Program Adviser.

BIOL 331	(3)	Ecology/Behaviour Field Course
BIOL 335	(3)	Marine Mammals
BIOL 573	(3)	Vertebrate Palaeontology Field Course
ENTO 340	(3)	Field Entomology
EPSC 231	(3)	Field School 1
NRSC 405*	(3)	Natural History of East Africa
REDM 405*	(3)	Natural History of East Africa
WILD 475	(3)	Desert Ecology

## 11.13.35 Science or Mathematics for Teachers

## 11.13.35.1 Location

Dawson Hall, Room 405 853 Sherbrooke Street West

<sup>\*</sup> Note: Students may take either of the cross-listed courses NRSC 405 and REDM 405, but not both.

Montreal QC H3A 0G5

Email: pete.barry@mcgill.ca

Website: mcgill.ca/scienceforteachers

## 11.13.35.2 About Science or Mathematics for Teachers

The training and certification of school teachers has traditionally been the responsibility of the Faculty of Education and requires the completion of a Bachelor of Education, subject to regulations set by the Government of Quebec. The Faculties of Education and of Science offer the **Minor** in Education for Science Students for students in the B.Sc. who  $w20.0 \text{ Tw} 1\ 0\ 0\ 1\ 67.52\ 64nd64.8.$ netics f

## 6 credits from:

\* Note: Students select either EDES 335 or EDES 353.

EDEC 262	(3)	Media, Technology and Education
EDES 335*	(3)	Teaching Secondary Science 1
EDES 353*	(3)	Teaching Secondary Mathematics 1
EDPE 304	(3)	Measurement and Evaluation
EDPI 341	(3)	Instruction in Inclusive Schools

## 6 credits from the list below:

\* Note: Students select either EDES 335 or EDES 353.

EDEC 262	(3)	Media, Technology and Education
EDES 335*	(3)	Teaching Secondary Science 1
EDES 353*	(3)	Teaching Secondary Mathematics 1
EDPE 304	(3)	Measurement and Evaluation
EDPI 341	(3)	Instruction in Inclusive Schools

# Study Abroad and Field Studies

# 12.1 Opportunities for Field Study and Study Abroad

Besides the many academic resources McGill offers on campus, there are also unparalleled opportunities to enrich your educational experience through exchange programs, internships, field study programs, and McGill courses taught off-campus and abroad. The following sections provide information regarding opportunities in that following camegories is a first of the following camegories in that following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first of the following camegories in the following camegories is a first

- section 12.2: Field should be a complement to classroom learning.
- section 12.3: Internships and Co-op Programs Participate in partnerships offered through McGill to gain valuable on-the-job knowledge in your field.
- section 12.4: Exchange Programs Study at one of McGill's partner universities while earning credit at McGill, and paying McGill tuition.
- section 12.5: Independent Study Away Independently study away at another university while earning credit at McGill. Tuition is paid directly to the
  host university.

## 12.2 Field Study Semesters and Off-Campus Courses

McGill offers you a chance to put theory into practi of

Off-campus McGill courses are also offered to you and sometimes require separate departmental application. The courses are typically offered during the summer months and can be offered in places as varied as Italy, Mexico, or Brazil, and in disciplines in arts, engineering (including architecture), science, law, or management. See *section 12.2.3: Off-Campus Courses*.

## 12.2.1 Field Study Minor

## General Information:

Email: *ifso.science@mcgill.ca*Burnside Hall, Room 720

## Field Study Minor Adviser (Faculty of Science):

 $Science\ Office\ for\ Undergraduate\ Student\ Advising\ (SOUSA)$ 

Dawson Hall, 853 Sherbrooke Street West, Room 405

Curtis Sharman

Telephone: 514-398-5442 Email: curtis.sharman@mcgill.ca

Website: mcgill.ca/science/undergraduate/advice/sousa

For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units & Programs > Field Study > section 11.13.15.1: Field Studies - Minor Field Studies (18 credits).

## 12.2.1.1 Africa Field Study Semester

Website: mcgill.ca/africa

The Africa Field Study Semester comprises 15 credits of field study courses. Two context courses (6 credits) in the natural and social sciences provide interdisciplinary academic context for field study. The other 9 credits are taken from the complementary courses list.

Visit the Africa website, or refer to Faculty of Science > Undergraduate > Browse Academic Units & Programs > Field Study > section 11.13.15.1: Field Studies - Minor Field Studies (18 credits), for the latest program updates.

Offered: Winter term
Location: East Africa
Enrolment limit: 38 students

**Fees:** In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include airfare, local travel, all food and accommodation, special admission fees for parks and museums, as well as other field costs. Fee details for the upcoming semester are available at mcgill.ca/africa/program-fees.

**Application deadline:** May 30, 2023 for January 2024 departure (Winter term of the 2023-2024 academic year). Depending on space, there will be a second intake with a deadline date of August 15, 2023.

**Application details:** Students must submit:

- the online application (available at mcgill.ca/africa/application)
- a copy of their transcript
- a letter of intent
- one reference letter
- a CV

to the Internship and Field Studies Office in the Faculty of Science:

Internships & Field Studies Office

Burnside Hall, Room 720

Telephone: 514-398-1063; 514-398-8365

Email: ifso.science@mcgill.ca

Website: mcgill.ca/science/undergraduate/internships-field

Prerequisites: The Africa Field Study Semester is intended for students in their final two years. A CGPA of 3.00 and higher is recommended.

**Students from other universities** are eligible to apply to the Africa Field Study Semester and must also meet the criteria for admission to McGill as a Visiting Student. Please see the Africa website at *mcgill.ca/africa* for details.

For more information and course lists, see Faculty of Science

- Science Office for Undergraduate Student Advising (SOUSA)
- McGill University, Faculty of Science
- 411 Dawson Hall, 853 Sherbrooke Street West
- Montreal, Quebec, Canada H3A 0G5
- For general inquiries: *adviser*

- a CV; and
- a copy of their transcript

by email to ifso.science@mcgill.ca. Further details are available at mcgill.ca/bfss.

Prerequisites: None

For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units & Programs > Field Study > section 11.13.15.1: Field Studies - Minor Field Studies (18 credits).

#### 12.2.1.4 Barbados Interdisciplinary Tropical Studies Field Semester

Website: mcgill.ca/bits

The Barbados Interdisciplinary Tropical Studies Field Semester is administered by the Faculty of Agricultural and Environmental Sciences. Three intensive courses run consecutively with a 6-credit project course. Courses integrate class and laboratory experiences with extensive field trips.

Offered: Summer term

Location: Bellairs Research Institute in Barbados

Enrolment Limit: 20 students

Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include accommodation and most food, as well as other field costs; they do not include airfare. Fee details for the upcoming semester are available at mcgill.ca/bits/cost.

McGill students may be eligible for a Mobility Bursary; see mcgill.ca/studentaid/special-funding/mobility-exchanges for details.

Application Deadline: Please consult the website for upcoming deadlines.

Application Details: Students must submit:

- a letter of intent:
- a CV; and
- an application form (available on the website)

by email to caroline.begg@mcgill.ca. Further details are available at mcgill.ca/bits.

Prerequisites: A CGPA of 2.5 or higher is recommended.

For more information on the field studies minor and course lists, see Faculty of Science > Undergraduate > Browse Academic Units & Programs > Field Study > section 11.13.15.1: Field Studies - Minor Field Studies (18 credits).

## 12.2.1.5 Panama Field Study Semester

Website: mcgill.ca/pfss Offered: Winter term

Location: Smithsonian Tropical Research Institute (STRI) in Panama

Enrolment limit: 22 students

Fees: In addition to the regular McGill fees, students will be required to pay the additional costs associated with delivering the courses in the field. These costs include accommodation and other field costs; they do not include airfare, food, or other living expenses. Fee details for the upcoming semester are available at mcgill.ca/pfss/cost.

Students can apply for the Enriched Educational Opportunities need-based bursary (EEOs). See mcgill.ca/studentaid/special-funding/eeo for details.

Application deadline: April 30, 2023 for the January 2024 Departure (Winter term of the 2023–2024 academic year).

\*: Please note that at time of publication, the application deadline was tentative and is subject to change. Please liaise with pfss for further details.

Application details: Students must submit:

- the online application (available at mcgill.ca/pfss/application);
- a copy of their transcript;
- a letter of intent; and

to the Internship and Field Studies Office in the Faculty of Science:

Internships & Field Studies Office Burnside Hall, Room 720

Telephone: 514-398-1063; 514-398-8365

Email: ifso.science@mcgill.ca

Website: mcgill.ca/science/undergraduate/internships-field

**Prerequisites:** HISP 218 Spanish Language Intensive - Elementary or equivalent proficiency, and MATH 203 Principles of Statistics 1 or equivalent. A CGPA of 3.00 and higher is recommended. The program is aimed at undergraduate students in their final year.

For more information and course lists, see Faculty of Science > Undergraduate > Browse Academic Units & Programs > Field Study > section 11.13.15.1: Field Studies - Minor Field Studies (18 credits).

# Off-Campus Earth & Planetary Sciences CoursesEPSC 231(3)Field School 1EPSC 331(3)Field School 2

# 12.2.3.5 Geography

The Faculty of Science offers the following Geography courses off campus.

GEOG 290 (1) Local Geographical Excursion GEOG 425 (3) Southeast Asia Urban Field Studies	Off-Campus Geography Courses			
	GEOG 290	(1)	Local Geographical Excursion	
	GEOG 425	(3)	Southeast Asia Urban Field Studies	
GEOG 494 (3) Urban Field Studies	GEOG 494	(3)	Urban Field Studies	
GEOG 495 (3) Field Studies - Physical Geography	GEOG 495	(3)	Field Studies - Physical Geography	
GEOG 496 (3) Geographical Excursion	GEOG 496	(3)	Geographical Excursion	
GEOG 499 (3) Subarctic Field Studies	GEOG 499	(3)	Subarctic Field Studies	

# 12.2.3.6 History & Classical Studies

The Department of History and Classical Studies offers the following field courses.

Off-Campus History & Cla	ssical Studies Courses	
CLAS 349	(3)	Archaeology Fieldwork: Italy
HIST 262	(3)	Mediterranean and European Interconnections

# 12.3 Internships and Co-op Programs

For information on internships and co-op programs, refer to University Regulations and Resources > Undergraduate >

## 12.4.3 Exchanges Within Quebec

The BCI (Bureau de coopération interuniversitaire, previously known as CREPUQ) offers a Quebec Inter-University Transfer Agreement (IUT). Through this agreement, students registered at any Quebec university can take courses at any other of the province's universities for credit toward a degree at their home university. For more information, refer to mcgill.ca/students/iut.

## 12.4.4 Transfer of Credits from Host Institution

Grades received from the host institution do not appear on the McGill transcript nor are they calculated in the McGill CGPA. The McGill transcript includes a notation of participation in an exchange, the number of transfer credits granted by McGill, and where applicable, McGill course exemptions.

Students can begin the transfer of credits process once they have registered at the host institution and have obtained course syllabi. For more detailed information, students should consult their faculty Student Affairs Office. The transfer credits process should be completed within the shortest delay possible after the end of the exchange term.

Before leaving the host institution, students should order two (2) copies of the official transcript for their files, and ensure that the institution sends an official version of the transcript to Enrolment Services at

	financial need. Further information, as well as application information and eligibility requirements can be found on the <i>McGill Abroad website</i> or at <i>EE Bursaries</i> .	
	Bursaries.	
12.7	Further Information about Global Learning Opportunities Offered to McGill Students	
	For more details regarding the global learning opportunities offered to McGill students—as well as application procedures, deadlines, eligibility criteria, etc.—visit the <i>McGill Abroad website</i> . Students can also contact Student Exchanges through Service Point for related inquiries: <i>mcgill.ca/servicepoint/contact</i> .	

