



Program/Major or Minor/Concentration Revision Form

PAC-15-3

(07/2004)

1.0 Degree Title Specify the two degrees for concurrent degree programs	2.0 Administering Faculty/Unit
1.1 Major (Legacy= Subject) (30-char. max.)	Offering Faculty/Department
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)	3.0 Effective Term of revision or retirement Please give reasons in 5.0 "Rationale" in the case of retirement (Ex. Sept. 2004 = 200409) Retirement
1.3 Minor (with Concentration, if applicable) (30 char. max.)	Term:
1.4 Category	4.0 Existing Credit Weight Proposed Credit Weight
	5.0 Rationale for revised program

- Faculty Program (FP)
- Major
- Joint Major
- Major Concentration (CON)

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

Required Course (6 credits)

COGS 444 Honours Research (6 credits)

Complementary Courses: (54 credits)

3 core credits from the following logic courses:

COMP 230 Logic and Computability (3 credits)
MATH 318 Mathematical Logic (3 credits)
PHIL 210 Introduction to Deductive Logic 1 (3 credits)

3 credits from the following capstone courses:

~~—COMP 417 Introduction Robotics and Intelligent Systems (3 credits)~~
~~—COMP 424 Artificial Intelligence (3 credits)~~
~~—LING 419 Linguistic Theory and its Foundations (3 credits)~~
~~—LING 565 Pragmatics (3 credits)~~
~~—PSYC 506 Cognitive Neuroscience of Attention (3 credits)~~
~~—PSYC 532 Cognitive Science (3 credits)~~
~~—PSYC 538 Categorization, Communication & Consciousness (3 credits)~~

(continued on Attachment 1A)

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

Required Courses (9 credits)

COGS 444 Honours Research (6 credits)
NSCI 201 Introduction to Neuroscience 2 (3 credits)

Core complementary courses (21 credits)

3 credits from the following logic courses:

COMP 230 Logic and Computability (3 credits)
MATH 318 Mathematical Logic (3 credits)
PHIL 210 Introduction to Deductive Logic 1 (3 credits)

3 credits from the follo

Attachment 1A – continuation of Section 7.0

~~48 credits are selected as follows~~

18 credits from ~~program offerings in one of the following five units:~~ Computer Science, Linguistics, Neuroscience, Philosophy, or Psychology.

~~12 credits from program offerings in one of the four remaining units.~~

~~18 credits chosen from program offerings across all five units.~~

Of the ~~48~~ Complementary Course credits, ~~12~~ credits taken must be at the 400 level or higher.

Computer Science

~~COMP 202 Foundations of Programming (3 credits)~~

COMP 206 Introduction to Software Systems (3 credits)

COMP 250 Introduction to Computer Science (3 credits)

COMP 251 Algorithms and Data Structures (3 credits)

COMP 280 History and Philosophy of Computing (3

credits)

COMP 302 Programming Languages and Paradigms (3 credits)

COMP 330 Theory of Computation (3 credits)

COMP 360 Algorithm Design (3 credits)

COMP 400 Honours Project in Computer Science (3

credits)

COMP 409 Concurrent Programming (3 credits)

COMP 417 Introduction Robotics and Intelligent Systems (3 credits)

COMP 421 Database Systems (3 credits)

COMP 424 Artificial Intelligence (3 credits)

COMP 526 Probabilistic Reasoning and AI (3 credits)

COMP 527 Logic and Computation (3 credits)

COMP 531 Advanced Theory of Computation (3 credits)

COMP 558 Fundamentals of Computer Vision (3

credits)

MATH 222 Calculus 3 (3 credits)

MATH 223 Linear Algebra (3 credits)

MATH 240 Discrete Structures 1 (3 credits)

Linguistics

LING 201 Introduction to Linguistics (3 credits)

LING 210 Introduction to Speech Science (3 credits)

~~LING 330 Phonetics (3 credits)~~

~~LING 331 Phonology 1 (3 credits)~~

~~LING 350 Linguistic Aspects of Bilingualism (3 credits)~~

Attachment 1B – continuation of Section 7.0

- ~~LING 440 Morphology (3 credits)~~
- ~~LING 450 Laboratory Linguistics (3 credits)~~
- ~~LING 451 Acquisition of Phonology (3 credits)~~
- ~~LING 455 Second Language Syntax (3 credits)~~
- ~~LING 461 Formal Methods in Linguistics (3 credits)~~
- ~~LING 530 Acoustic Phonetics (3 credits)~~
- ~~LING 531 Phonology 2 (3 credits)~~
- ~~LING 555 Language Acquisition 2 (3 credits)~~
- ~~LING 565 Pragmatics (3 credits)~~
- ~~LING 571 Syntax 2 (3 credits)~~
- ~~LING 590 Language Acquisition and Breakdown (3 credits)~~

Philosophy

- NSCI 300 Neuroethics (3 credits)
- ~~PHIL 304 Chomsky (3 credits)~~
- PHIL 306 Philosophy of Mind (3 credits)
- PHIL 310 Intermediate Logic (3 credits)
- PHIL 311 Philosophy of Mathematics (3 credits)
- PHIL 341 Philosophy of Science 1 (3 credits)
- PHIL 360 17th Century Philosophy (3 credits)
- PHIL 370 Problems in Analytic Philosophy (3 credits)
- PHIL 410 Advanced Topics in Logic 1 (3 credits)
- PHIL 411 Topics in Philosophy of Logic and Mathematics (3 credits)
- PHIL 415 Philosophy of Language (3 credits)
- PHIL 419 Epistemology (3 credits)
- PHIL 421 Metaphysics (3 credits)
- PHIL 441 Philosophy of Science 2 (3 credits)
- PHIL 470 Topics in Contemporary Analytic Philosophy (3 credits)
- PHIL 474 Phenomenology (3 credits)

Psychology

ANTH 440 Cognitive Anthropology (3 credits)

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Attachment 1C – continuation of Section 7.0

Attachment 1D – continuation of Section 7.0

* PHGY 311 Channels, Synapses & Hormones (3 credits)

PHGY 314 Integrative Neuroscience (3 credits)

PHGY 556 Topics in Systems Neuroscience (3 credits)

PSYC 211 Introductory Behavioural Neuroscience (3 credits)

PSYC 302 The Psychology of Pain (3 credits)

PSYC 311 Human Cognition and the Brain (3 credits)

PSYC 317 Genes and Behaviour (3 credits)

PSYC 318 Behavioural Neuroscience 2 (3 credits)

PSYC 342 Hormones and Behaviour (3 credits)

PSYC 410 Special Topics in Neuropsychology (3 credits)

PSYC 427 Sensorimotor Behaviour (3 credits)

PSYC 444 Sleep Mechanisms and Behaviour (3 credits)

~~PSYC 502 Psychoneuroendocrinology (3 credits)~~

PSYC 506 Cognitive Neuroscience of Attention (3 credits)

PSYC 514 Neurobiology of Learning and Memory (3 credits) **

PSYC 522 Neurochemistry and Behaviour (3 credits)

PSYC 526 Advances in Visual Perception (3 credits)

PSYC 532 Cognitive Science (3 credits)

PSYT 301 Issues in Drug Dependence (3 credits)

PSYT 500 Advances: Neurobiology of Mental Disorders (3 credits)

PSYT 502 Brain Evolution and Psychiatry (3 credits)

PSYT 515 Advanced Studies in Addiction (3 credits)

Research Course

COGS 401 Research Cognitive Science 1 (6 credits)

PHGY 311 Channels, Synapses & Hormones (3 credits)

PHGY 314 Integrative Neuroscience (3 credits)

PHGY 556 Topics in Systems Neuroscience (3 credits)

PSYC 211 Introductory Behavioural Neuroscience (3 credits)

PSYC 302 The Psychology of Pain (3 credits)

PSYC 311 Human Cognition and the Brain (3 credits)

PSYC 317 Genes and Behaviour (3 credits)

PSYC 318 Behavioural Neuroscience 2 (3 credits)

PSYC 342 Hormones and Behaviour (3 credits)

PSYC 410 Special Topics in Neuropsychology (3 credits)

PSYC 427 Sensorimotor Behaviour (3 credits)

PSYC 444 Sleep Mechanisms and Behaviour (3 credits)

PSYC 506 Cognitive Neuroscience of Attention (3 credits)

PSYC 514 Neurobiology of Learning and Memory (3 credits) **

PSYC 522 Neurochemistry and Behaviour (3 credits)

PSYC 526 Advances in Visual Perception (3 credits)

PSYC 532 Cognitive Science (3 credits)

PSYT 301 Issues in Drug Dependence (3 credits)

PSYT 500 Advances: Neurobiology of Mental Disorders (3 credits)

PSYT 502 Brain Evolution and Psychiatry (3 credits)

PSYT 515 Advanced Studies in Addiction (3 credits)

Research Course

COGS 401 Research Cognitive Science 1 (6 credits)

From:
Subject:
Date:
To:
Cc:

>Here are the most important changes affecting Linguistics (highlighted in
>yellow
>in the document):
>- Introduction of 3 credits of core complementary courses in linguistics
>(LING 201,
>LING 210 or LING 260) for all CogSci students.
>- Revision of the list of complementary courses for the PHIL list.
>
>I'm 'ccing Meghan, who as the Linguistics representative on the CogSci
>committee was part of
>the discussions on these revisions (including consultation with
>colleagues), and may
>be able to provide more context for the proposed changes.
>
>I am available if you have any questions or concerns about these changes.
>
>best,
>
>
>Joelle Pineau
>Associate Professor, School of Computer Science
>Director, Cognitive Science Program
>McGill University, Montreal, Canada
>Tel: 514-398-5432
>Fax/F3.01 Tfd/F3.01 T03

From: jpineau@cs.mcgill.ca
Subject: RE: [PMX:NOT SCANNED - B] Proposed revisions to CogSci program
Date: Tue, October 13, 2015 11:12 am
To: "David Alan Stephens, Prof." <david.stephens@mcgill.ca>

"Monroe W. Cohen" <monroe.cohen@mcgill.ca>

RE: Proposed revisions to CogSci program

Thu, October 22, 2015 2:30 pm

"jpineau@cs.mcgill.ca" <jpineau@cs.mcgill.ca>

"Graham Bell, Prof." <graham.bell@mcgill.ca>,"John Orłowski, Dr."

<john.orłowski@mcgill.ca>,"David Ragsdale, Dr." <david.ragsdale@mcgill.ca>,"Ryan Bouma"

> NSCI 201 each year (~65 total Cog Sci students)

Regarding the Biology courses, I'm checking with them also. It seems a broader question is how to prioritize access to the 400/500-level courses for the BSc Neuro students vs the CogSci students vs the Biology students.

One (drastic) option would be to remove the Neuro stream from the CogSci program (thus forcing students to choose the BSc Neuro, or not). I'm not sure we want to do that. Short of this, it seems students from Neuro and CogSci should be give equal access to the advanced biology courses. I'm open to further thoughts on this issue.

best,
Joelle

On Thu, October 15, 2015 10:24 am, Monroe W. Cohen wrote:

> Dear Joelle,

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>

> Thank you very much for consulting with me on your proposed changes to
> the Interfaculty Cognitive Science program. My understanding is that
> about 60-70 students enter the program each year and that a large
> number (? 30%-40% ?) takes the Neuroscience Stream.

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>

> I am certainly in agreement with your rationale for the proposed changes.
> However, as documented below, I do have some concerns on the impact
> some of the changes may have on the BSc Neuroscience program.

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>
>

> 1. NSCI 200 (F15) has a cap of 140 whereas the actual enrolment is
> 97. So I don't anticipate a problem with making NSCI 200 a Core
> Complementary Course, whereby all students will be required to take
> either NSCI 200 or PSYC 211.

>
>
>

> 2. I am concerned however about switching NSCI 201 from your
> Neuroscience Stream to a Required Course for all CogSci students. For
> W16 the cap is 221 whereas the actual enrolment is 179 (and remainder = 42).
> Since all 60-70 CogSci students will be required to take NSCI 201,
> this may put a strain on the course (handled by Psychology).

>
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>

> 3. BIOL 320 (W16) has a cap of 50 and an enrolment of 50. So adding
> it to the Neuroscience Stream may make it more difficult for students
> in the BSc Neuroscience program to register for this course.

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>

> 4. The lab course BIOL 389 (W16) has a cap of 32 and an enrolment
> of 32. So adding this lab course to the Neuroscience Stream may make
> it much more difficult for students in the BSc Neuroscience program to
> register for this course.

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>
> 5. BIOL 580 (F15) has a cap of 18 and an enrolment of 17. So adding
> it to the Neuroscience Stream may make it much more difficult for
> students in the BSc Neuroscience program to register for this course.
> In fact, a chronic complaint of the BSc Neuroscience students is the
> difficulty of getting into 400-/500-level courses with relatively low
> caps.

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>
> Of course, Psychology will give you its own feedback on NSCI 201, and
> Biology will give you its feedback on the 3 BIOL courses listed above.
> If their concerns are similar to those I've expressed, then I hope
> you'll be able to make the appropriate changes without undermining
> your overall rationale - viz. to ensure that the CogSci students in
> all streams can successfully move on to a graduate program.

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>
> Thanks again, and best wishes in your new role as Director of the
> Interfaculty CogSci program.

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>
>
> Monroe

> _____
> Monroe W Cohen, PhD
> Professor of Physiology
> Director, BSc Neuroscience Program
> Phone: 514-398-4342
> Email: monroe.cohen@mcgill.ca<<mailto:monroe.cohen@mcgill.ca>>

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> -----Original Message-----

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> Dear Monroe and John,

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>
> The committee in charge of the Cognitive Science program has prepared
> a major program revision. The main motivation for the changes are to
> give students broader exposure to the sub-areas of CogSci, and to
> ensure they can get enough training in any one area to move on to
> graduate studies (which was a challenge for some streams).

>
>
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>
> A document outlining the proposed changes is attached (left column =

> old program; right column = new program). The changes will be
> presented to the Program Administration Committee on October 28.
>
>
>
> I need to get confirmation from you that you support and can
> accommodate those changes that pertain to neuroscience and physiology courses.
> Please respond by **Friday October 16 ** with your comments.

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>
> Here are the most important changes affecting Neuroscience and
> Physiology (highlighted in yellow in the document):

>
>
> - Introduction of 3 credits of core complementary courses in
> neuroscience (NSCI 200 or PSYC 211) for all CogSci students.

>
>
> - Revision of the list of complementary courses for the Neuroscience
> stream.

>
>
>
> I'm 'ccing David, who as the neuroscience representative on the CogSci
> committee was part of the discussions on these revisions (including
> consultation with colleagues), and may be able to provide more context
> for the proposed changes.

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>
> I am available if you have any questions or concerns about these changes.

>
>
>
>
> best,

>
>
>
> Joelle Pineau

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>
> Associate Professor, School of Computer Science Director, Cognitive
> Science Program McGill University, Montreal, Canada

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> Tel: 514-398-5432

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>
> Fax: 514-398-3883

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>
> <http://www.cs.mcgill.ca/~jpineau>

jpineau@cs.mcgill.ca

RE: Proposed revisions to CogSci program

Tue, October 13, 2015 2:09 pm

"David Davies" <david.davies@mcgill.ca>

"Dirk Schlimm" <dirk.schlimm@mcgill.ca>,"Ryan Bouma" <ryan.bouma@mcgill.ca>

Thanks all for your quick follow-up. We'll leave it off the list.

best,
Joelle

On Tue, October 13, 2015 2:02 pm, David Davies wrote:

> Dear Dirk and Joelle,

>

>

> Thanks for the clarification. I think Dirk's reasoning here is sound, and
> am happy to proceed as he proposes.

>

> All best,

>

>

> David

>

>

>

>

> From: Dirk Schlimm

> Sent: 13 October 2015 13:59

> To: jpineau@cs.mcgill.ca; David Davies

> Cc: Ryan Bouma

> Subject: Re: Proposed revisions to CogSci program

>

>

> Dear David,

>

>

> as Joelle has noted, it was my impression that PHIL 304 (Chomsky) is not
> very likely to be offered again soon and even less likely to be offered
> on a regular basis. Thus, to avoid cluttering the list of complementary
> courses with courses that are officially on the books, but are not
> offered regularly, I suggested to delete it from the list.

>

> (For the same reason we might consider deleting it from our list of
> courses of the philosophy degree programs, once we get to overhaul
> them...).

>

> Best, Dirk

>

>

> On 15-10-12 9:47 PM, "jpineau@cs.mcgill.ca" <jpineau@cs.mcgill.ca> wrote:

>

>

>> From our discussions with Dirk, the main motivation to remove this
>> course is that it was unlikely to be offered again. If you prefer to
>> leave it in, we can do that. best, Joelle

>>

>>
>> On Mon, October 12, 2015 3:17 pm, David Davies wrote:
>>
>>> Dear Joelle,
>>>
>>>
>>> Thanks for sending me the list of proposed changes for the Cognitive
>>> Science programme. Everything looks fine to me. although I have one
>>> query that Dirk may be able to clear up. I notice that one of the
>>> changes in the complementary PHIL courses is the deletion of PHIL 304
>>> (Chomsky). I
>>> realize that this course was taught by Jim McGilvray who is now
>>> emeritus, but I thought the course was still on the books and would
>>> therefore be a suitable complementary course if anyone were to want to
>>> offer it in the future. Has it in fact been deleted, or is there
>>> another reason for its exclusion?

>>>
>>> Best,
>>>

>>>
>>>
>>> David

>>> _____
>>> From: jpineau@cs.mcgill.ca [jpineau@cs.mcgill.ca]
>>> Sent: 09 October 2015 09:56
>>> To: David Davies; Dirk Schlimm; Ryan Bouma
>>> Subject: Re: Proposed revisions to CogSci program

>>>
>>>
>>> In case the file I attached doesn't open on your machine, here is a
>>> pdf version. best, Joelle

>>>
>>> On Thu, October 8, 2015 10:22 pm, jpineau@cs.mcgill.ca wrote:

>>>
>>>> Dear David,
>>>>
>>>>
>>>> The committee in charge of the Cognitive Science program has
>>>> prepared a major program revision. The main motivation for the
>>>> changes are to give students broader exposure to the sub-areas of
>>>> CogSci, and to
>>>> ensure they can get enough training in any one area to move on to
>>>> graduate studies (which was a challenge for some streams).

>>>>
>>>>
>>>> A document outlining the proposed changes is attached (left column
>>>> =
>>>> old program; right column = new program). The changes will be
>>>> presented to the Program Administration Committee on October 28.

>>>>
>>>>
>>>> I need to get confirmation from you that your department supports

>>>> October 16
>>>> **
>>>> with your comments.
>>>>
>>>> Here are the most important changes affecting your department
>>>> (highlighted
>>>> in yellow in the document): - Introduction of 3 credits of core
>>>> complementary courses in philosophy (PHIL 200, PHIL 201 or PHIL
>>>> 221)
>>>> for all CogSci students. - Revision of the list of complementary
>>>> courses for the PHIL list.
>>>>
>>>> I'm 'ccing Dirk, who as the PHIL representative on the CogSci
>>>> committee was part of the discussions on these revisions (including
>>>> consultation with colleagues), and may be able to provide more
>>>> context for the proposed changes.
>>>>
>>>> I am available if you have any questions or concerns about these
>>>> changes.
>>>>
>>>>
>>>> best,
>>>>
>>>>
>>>> Joelle Pineau
>>>> Associate Professor, School of Computer Science
>>>> Director, Cognitive Science Program
>>>> McGill University, Montreal, Canada
>>>> Tel: 514-398-5432
>>>> Fax: 514-398-3883
>>>> <http://www.cs.mcgill.ca/~jpineau>
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>

From: "John Orłowski, Dr." <john.orłowski@mcgill.ca>
Subject: RE: Proposed revisions to CogSci program
Date: Thu, October 22, 2015 8:01 am
To: "jpineau@cs.mcgill.ca" <jpineau@cs.mcgill.ca>
Cc: "Monroe W. Cohen" <monroe.cohen@mcgill.ca>

Dear Joelle,

Yes, based on the projected modest enrollment increases, the Department of Physiology supports the proposed changes to the CogSci program.

Best Regards,
John

John Orłowski, Ph.D. | James McGill Professor and Chair | Department of Physiology
| McGill University | McIntyre Medical Sciences Bldg., Room 1001 | 3655 Promenade
Sir-William-Osler | Montreal, Quebec, H3G 1Y6, Canada | Administrative Office Tel:
