1.0 Degree Title
Specify the two degrees for concurrent degree programs
B.Sc.

1.1 Major (Legacy= Subject) (30-char. max.)
Neuroscience

1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

1.3 Minor (with Concentration, if applicable)
(30 char. max.)

1.4 Category
- Faculty Program (FP)
- Major
- Joint Major
- Major Concentration (CON)
- Minor
- Minor Concentration (CON)
- Honours (HON)
- Joint Honours Component (HC)
- Internship/Co-op
- Thesis (T)
- Non-Thesis (N)
- Other

Please specify

1.5 Complete Program Title
B.Sc.; Major in Neuroscience

2.0 Administering Faculty/Unit
Science

2.1 Offering Faculty/Department
Science/Psychology, Biology, Physiology

3.0 Effective Term of revision or retirement
Please give reasons in 5.0"Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409)

Term: 201709

4.0 Existing Credit Weight
65

Proposed Credit Weight
65

5.0 Rationale for revised program
Addition of relevant courses, deletion of courses no longer offered, changes to ensure that different streams have access to relevant courses available in other streams. See attachment 1D for details

6.0 Revised Program Description (Maximum 150 words)

The Major program in Neuroscience 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, as well as mathematics, physics, computer science, and immunology. To ensure that students have the appropriate foundation, they are required to take 29 credits in lower-level courses from physiology, biology, mathematics, computer science, psychology, and ethics. While flexible, 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 interest.

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 but not both.
** Students complete one of either MATH 141 OR MATH 151 but not both.
*** Students complete one of either PHYS 101 OR PHYS 131 but not both.
+++ Students complete one of either PHYS 102 OR PHYS 142 but not both.
(see final page for Old Description)
### 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 Molecular Biology (3 credits)
- CHEM 212 Introductory Organic Chemistry 1 (4 credits) *
- NSCI 200 Introduction to Neuroscience 1 (3 credits)
- NSCI 201 Introduction to Neuroscience 2 (3 credits)
- NSCI 300 Neuroethics (3 credits)
- NSCI 400D1 Neuroscience Seminar (0.5 credits)
- NSCI 400D2 Neuroscience Seminar (0.5 credits)
- PSYC 311 Human Cognition and the Brain (3 credits)

### Complementary Courses (45 credits)
9 core credits selected as follows:

3 credits from:
- BIOL 373 Biometry (3 credits)
- PSYC 305 Statistics for Experimental Design (3 credits)

3 credits completed by taking the course below or an equivalent in Computer Science.

- COMP 202 Foundations of Programming (3 credits)

3 credits from:
- BIOL 309 Mathematical Models in Biology (3 credits)
- MATH 222 Calculus 3 (3 credits) **

** 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.

### Streams
15 credits selected from one of the following streams:

#### A. Cell and Molecular Stream
15 credits selected as follows:

9 credits as follows:
- BIOC 311 Metabolic Biochemistry (3 credits)
- BIOL 202 Basic Genetics (3 credits)
- PHGY 311 Channels, Synapses & Hormones (3 credits)

(continued on attachment 1A)
### Attachment 1A – continuation of Section 7.0

<table>
<thead>
<tr>
<th>Credits</th>
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<td>BIOC 212 Molecular Mechanisms of Cell Function (3 credits)</td>
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<td>BIOL 201 Cell Biology and Metabolism (3 credits)</td>
<td>BIOL 201 Cell Biology and Metabolism (3 credits)</td>
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<td><strong>3 credits from:</strong></td>
<td><strong>3 credits from:</strong></td>
</tr>
<tr>
<td>MIMM 214 Introductory Immunology: Elements of Immunity (3 credits)</td>
<td>MIMM 214 Introductory Immunology: Elements of Immunity (3 credits)</td>
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<td>PHAR 300 Drug Action (3 credits)</td>
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**B. Neurophysiology/Neural Computation Stream**

15 credits selected as follows:

<table>
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<tr>
<th>Credits</th>
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<tr>
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<td><strong>6 credits as follows:</strong></td>
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<tr>
<td>ANAT 321 Circuitry of the Human Brain (3 credits)</td>
<td>ANAT 321 Circuitry of the Human Brain (3 credits)</td>
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<tr>
<td>PHGY 311 Channels, Synapses &amp; Hormones (3 credits)</td>
<td>PHGY 311 Channels, Synapses &amp; Hormones (3 credits)</td>
</tr>
<tr>
<td><strong>3 credits from:</strong></td>
<td><strong>3 credits from:</strong></td>
</tr>
<tr>
<td>BIOC 212 Molecular Mechanisms of Cell Function (3 credits)</td>
<td>BIOC 212 Molecular Mechanisms of Cell Function (3 credits)</td>
</tr>
<tr>
<td>BIOL 201 Cell Biology and Metabolism (3 credits)</td>
<td>BIOL 201 Cell Biology and Metabolism (3 credits)</td>
</tr>
<tr>
<td><strong>3 credits from:</strong></td>
<td><strong>3 credits from:</strong></td>
</tr>
<tr>
<td>BIOL 306 Neural Basis of Behaviour (3 credits)</td>
<td>BIOL 306 Neural Basis of Behaviour (3 credits)</td>
</tr>
<tr>
<td>PHGY 314 Integrative Neuroscience (3 credits)</td>
<td>PHGY 314 Integrative Neuroscience (3 credits)</td>
</tr>
</tbody>
</table>

**B. Neurophysiology/Neural Computation Stream**

15 credits selected as follows:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Courses</th>
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<tbody>
<tr>
<td><strong>3 credits from:</strong></td>
<td><strong>3 credits from:</strong></td>
</tr>
<tr>
<td>BIOC 212 Molecular Mechanisms of Cell Function (3 credits)</td>
<td>BIOC 212 Molecular Mechanisms of Cell Function (3 credits)</td>
</tr>
<tr>
<td>BIOL 201 Cell Biology and Metabolism (3 credits)</td>
<td>BIOL 201 Cell Biology and Metabolism (3 credits)</td>
</tr>
<tr>
<td><strong>3 credits from:</strong></td>
<td><strong>3 credits from:</strong></td>
</tr>
<tr>
<td>BIOL 306 Neural Basis of Behaviour (3 credits)</td>
<td>BIOL 306 Neural Basis of Behaviour (3 credits)</td>
</tr>
<tr>
<td>PHGY 314 Integrative Neuroscience (3 credits)</td>
<td>PHGY 314 Integrative Neuroscience (3 credits)</td>
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</tbody>
</table>

**C. Cognitive/Behavioural Stream**

15 credits selected as follows:

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<tr>
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<td>ANAT 321 Circuitry of the Human Brain (3 credits)</td>
<td>ANAT 321 Circuitry of the Human Brain (3 credits)</td>
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<td>PSYC 213 Cognition (3 credits)</td>
<td>PSYC 213 Cognition (3 credits)</td>
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<td>PSYC 318 Behavioural Neuroscience 2 (3 credits)</td>
<td>PSYC 318 Behavioural Neuroscience 2 (3 credits)</td>
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<tr>
<td><strong>3 credits from:</strong></td>
<td><strong>3 credits from:</strong></td>
</tr>
<tr>
<td>BIOL 306 Neural Basis of Behaviour (3 credits)</td>
<td>BIOL 306 Neural Basis of Behaviour (3 credits)</td>
</tr>
<tr>
<td>PHGY 314 Integrative Neuroscience (3 credits)</td>
<td>PHGY 314 Integrative Neuroscience (3 credits)</td>
</tr>
</tbody>
</table>

(continued on Attachment 1B)
3 credits from:

- LING 390 Neuroscience of Language (3 credits)
- PSYC 302 The Psychology of Pain (3 credits)
- PSYC 317 Genes and Behaviour (3 credits)
- PSYC 342 Hormones and Behaviour (3 credits)

Other Complementary Courses

(21-23 credits)

3-16 credits from:

- BIOL 301 Cell and Molecular Laboratory (4 credits)
- BIOL 389 Laboratory in Neurobiology (3 credits)
- NSCI 410 Independent Research 1 (6 credits)
- NSCI 420D1 Independent Research 2 (4.5 credits)
- NSCI 420D2 Independent Research 2 (4.5 credits)

The remainder 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 410 or NSCI 420D1/NSCI 420D2 research courses:

200- and 300-level courses:

* Students take either BIOL 201 OR BIOC 212, but not both.

- BIOC 212 Molecular Mechanisms of Cell Function (3 credits)
- BIOC 311 Metabolic Biochemistry (3 credits)
- BIOL 201 Cell Biology and Metabolism (3 credits) *
- BIOL 300 Molecular Biology of the Gene (3 credits)
- BIOL 306 Neural Basis of Behaviour (3 credits)
- BIOL 320 Evolution of Brain and Behaviour (3 credits)
- CHEM 222 Introductory Organic Chemistry 2 (4 credits)
- COMP 206 Introduction to Software Systems (3 credits)
- COMP 250 Introduction to Computer Science (3 credits)***

** Students take either either BIOL 201 OR BIOC 212, but not both.

*** Students take either COMP 206 or COMP 250, but not both.

- ANAT 321 Circuitry of the Human Brain (3 credits)
- BIOC 212 Molecular Mechanisms of Cell Function (3 credits) *
- BIOC 311 Metabolic Biochemistry (3 credits)
- BIOL 201 Cell Biology and Metabolism (3 credits) *
- BIOL 202 Basic Genetics (3 credits)
- BIOL 300 Molecular Biology of the Gene (3 credits)
- BIOL 306 Neural Basis of Behaviour (3 credits)
- BIOL 320 Evolution of Brain and Behaviour (3 credits)
- CHEM 222 Introductory Organic Chemistry 2 (4 credits)
- COMP 206 Introduction to Software Systems (3 credits)***

Other Complementary Courses

(21-23 credits)

3-16 credits from:

- BIOL 301 Cell and Molecular Laboratory (4 credits)
- BIOL 389 Laboratory in Neurobiology (3 credits)
- NSCI 410 Independent Research 1 (6 credits)
- NSCI 420D1 Independent Research 2 (4.5 credits)
- NSCI 420D2 Independent Research 2 (4.5 credits)

The remainder 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 410 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 Circuitry of the Human Brain (3 credits)
- BIOC 212 Molecular Mechanisms of Cell Function (3 credits) *
- BIOC 311 Metabolic Biochemistry (3 credits)
- BIOL 201 Cell Biology and Metabolism (3 credits) *
- BIOL 202 Basic Genetics (3 credits)
- BIOL 300 Molecular Biology of the Gene (3 credits)
- BIOL 306 Neural Basis of Behaviour (3 credits)
- BIOL 320 Evolution of Brain and Behaviour (3 credits)
- CHEM 222 Introductory Organic Chemistry 2 (4 credits)
- COMP 206 Introduction to Software Systems (3 credits)***

* Students take either either BIOL 201 OR BIOC 212, but not both.

*** Students take either COMP 206 or COMP 250, but not both.
### 400- and 500-level courses:

** Students may take either MATH 437 OR PHYS 413, but not both.

- BIOL 514 Neurobiology Learning and Memory (3 credits)
- BIOL 530 Advances in Neuroethology (3 credits)
- BIOL 532 Developmental Neurobiology Seminar (3 credits)
- BIOL 580 Genetic Approaches to Neural Systems (3 credits)
- BIOL 588 Advances in Molecular/Cellular Neurobiology (3 credits)
- BMDE 519 Biomedical Signals and Systems (3 credits)
- MATH 437 Mathematical Methods in Biology (3 credits)

** Students may take either BIOL 514 or PSYC 514, but not both.

- BIOL 514 Neurobiology Learning and Memory (3 credits)
- BIOL 530 Advances in Neuroethology (3 credits)
- BIOL 532 Developmental Neurobiology Seminar (3 credits)
- BIOL 580 Genetic Approaches to Neural Systems (3 credits)
- BIOL 588 Advances in Molecular/Cellular Neurobiology (3 credits)
- BMDE 519 Biomedical Signals and Systems (3 credits)
- COMP 546 Computational Perception (4 credits)
- MATH 437 Mathematical Methods in Biology (3 credits)
- NEUR 507 Topics in Radionuclide Imaging (3 credits)
- NEUR 550 Free Radical Biomedicine (3 credits)
- PHAR 562 Neuropharmacology (3 credits)
- PHGY 425 Analyzing Physiological Systems (3 credits)
- PHGY 451 Advanced Neurophysiology (3 credits)
- PHGY 513 Cellular Immunology (3 credits)
- PHGY 520 Ion Channels (3 credits)
- PHGY 524 Chronobiology (3 credits)
- PHGY 556 Topics in Systems Neuroscience (3 credits)
- PHYS 413 Physical Basis of Physiology (3 credits)
- PSYC 410 Special Topics in Neuropsychology (3 credits)
- PSYC 427 Sensorimotor Behaviour (3 credits)
- PSYC 470 Memory and Brain (3 credits)
- PSYC 474 Sleep Mechanisms and Behaviour (3 credits)
- PSYC 506 Cognitive Neuroscience of Attention (3 credits)
- PSYC 522 Neurochemistry and Behaviour (3 credits)
- PSYC 526 Advances in Visual Perception (3 credits)
- PSYC 532 Cognitive Science (3 credits)
- PSYT 455 Neurochemistry (3 credits)
- PSYT 500 Advances: Neurobiology of Mental Disorders (3 credits)
- PSYT 505 Neurobiology of Schizophrenia (3 credits)
- REDM 410 Writing Research Articles (3 credits)
Justification of proposed changes in the Neuroscience Major

Attachment 1A
1. Whereas COMP 206 covers syntax of different programming languages, COMP 250 covers algorithms and data structures. The latter subject matter can be useful in computational neuroscience and we therefore agree with neuroscience student feedback that COMP 250 should be included as an option in Stream B.

Attachment 1B
1. LING 390 is no longer given.
2. Students who are not following Stream B should also have the option of taking either COMP 206 or COMP 250.
3. ANAT 321 is part of Streams B and C. So students in Stream A should also have the option of taking it as an Other Complementary course.
4. BIOL 202 is part of Stream A. So students in Streams B and C should also have the option of taking it as an Other Complementary course.
5. Inclusion of COMP 250 – see above (attachment 1A, #1)
6. LING 390 - see above (#1).
7. PSYC 213 is part of Stream C. So students in Streams A and B should also have the option of taking it as an Other Complementary course.

Attachment 1C
1. PHYS 413 is no longer given.
2. BIOL 514 and PSYC 514 are the same course.
3. COMP 546 deals with computational modelling of visual perception and audition. It is therefore relevant to the field of neuroscience and especially to those students interested in the computational analysis of perception.
4. There is no longer a choice between MATH 437 and PHYS 413 (see #1), so the asterisks have been removed from MATH 437.
5. NEUR 507 deals with the acquisition and analysis of data from the brains of normal individuals as well as from individuals with neuropathological conditions. It is therefore relevant to the field of neuroscience.
6. PHYS 413 is no longer given.
7. PSYC 444 and PSYC 501 are no longer given.
8. PSYC 514 is the same course as BIOL 514 and should therefore be included in the list of 400- and 500-level courses.
9. PSYT 505 is no longer given.
10. REDM 410 is no longer given.
10. FQRSC (Research) Indicator (for GPS): Yes No

Old Course Description:
The Major program in Neuroscience 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, as well as mathematics, physics, computer science, and immunology. To ensure that students have the appropriate foundation, they are required to take 29 credits in lower-level courses from physiology, biology, mathematics, computer science, psychology, and ethics. While flexible, 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 interest.

Note that enrolment in the Neuroscience Major is limited.

Program Prerequisites
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 have completed the courses listed below or equivalent.

* Students complete one of MATH 139, MATH 140 OR MATH 150 but not both.
** Students complete one of either MATH 141 OR MATH 151 but not both.
*** Students complete one of either PHYS 101 OR PHYS 131 but not both.
+++ Students complete one of either PHYS 102 OR PHYS 142 but not both.
8.0 Consultation with Related Units

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Attach list of consultations - Please see Attachment 1E

9. Approvals

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<tr>
<td>Department</td>
<td>Monroe Cohen</td>
<td></td>
<td>Nov 10/16</td>
</tr>
<tr>
<td>Curric/Acad Committee</td>
<td></td>
<td></td>
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Submitted by

<table>
<thead>
<tr>
<th>Name</th>
<th>Monroe Cohen</th>
<th>To be completed by ARR:</th>
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<tbody>
<tr>
<td>Phone</td>
<td>X4342</td>
<td>CIP Code</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:monroe.cohen@mcgill.ca">monroe.cohen@mcgill.ca</a></td>
<td></td>
</tr>
<tr>
<td>Submission Date</td>
<td></td>
<td></td>
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</tbody>
</table>
From: Gregor Fussmann, Prof.
Sent: Saturday, October 22, 2016 9:52 AM
To: Monroe W. Cohen; John Orlowski, Dr.; John Lydon, Dr.
Subject: RE: Neuroscience program revisions – your approval required

Dear Monroe,

I approve.

Gregor Fussmann


From: Monroe W. Cohen
Sent: Friday, October 21, 2016 4:28 PM
To: Gregor Fussmann, Prof. <gregor.fussmann@mcgill.ca>; John Orlowski, Dr. <john.orlowski@mcgill.ca>; John Lydon, Dr. <john.lydon@mcgill.ca>
Subject: Neuroscience program revisions – your approval required

Dear Chairs,

I am seeking your approval of some proposed revisions to our Neuroscience Major and Honours Neuroscience programs.

As you know, these programs are an interdepartmental collaboration involving Biology, Physiology, and Psychology. Our Neuroscience Academic Committee which handles these programs includes 2 representatives from each of your departments. The committee recently met and unanimously supports revisions to both programs.

Attached are the current versions of each program with proposed additions indicated by yellow highlight and proposed deletions indicated by grey highlight and strikethroughs. Also attached are separate documents which provide justification for these changes.
All the course additions have been approved by the respective course coordinators.

The Neuroscience Major has been running since Fall 2008. It has limited enrolment - about 55 students are admitted each year. Honours Neuroscience was initiated in Fall 2013. Students enter it in U2 and up to 12 new students are admitted each year.

Please let me know whether or not you approve the revisions in both programs. For approval, simply write “I approve” in your reply.

Thanking you in advance,
Monroe

Monroe W Cohen, PhD  
Professor of Physiology  
Director, BSc Neuroscience Program  
McGill University  
Phone: 514-398-4342  
Email: monroe.cohen@mcgill.ca
Hi Monroe,

I approve the proposed changes.

Best Regards,

John

John Orlowski, 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: (514) 398-4318  | Lab Office Tel: (514) 398-8335  | Email: john.orlowski@mcgill.ca

From: Monroe W. Cohen
Sent: October-21-16 4:28 PM
To: Gregor Fussmann, Prof. <gregor.fussmann@mcgill.ca>; John Orlowski, Dr. <john.orlowski@mcgill.ca>; John Lydon, Dr. <john.lydon@mcgill.ca>
Subject: Neuroscience program revisions – your approval required

Dear Chairs,

I am seeking your approval of some proposed revisions to our Neuroscience Major and Honours Neuroscience programs.

As you know, these programs are an interdepartmental collaboration involving Biology, Physiology, and Psychology. Our Neuroscience Academic Committee which handles these programs includes 2 representatives from each of your departments. The committee recently met and unanimously supports revisions to both programs.

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The Neuroscience Major has been running since Fall 2008. It has limited enrolment - about 55 students are admitted each year. Honours Neuroscience was initiated in Fall 2013. Students enter it in U2 and up to 12 new students are admitted each year.

Please let me know whether or not you approve the revisions in both programs. For approval, simply write “I approve” in your reply.

Thanking you in advance,
Monroe
Monroe W Cohen, PhD  
*Professor of Physiology*  
*Director, BSc Neuroscience Program*  
*McGill University*  
Phone: 514-398-4342  
Email: monroe.cohen@mcgill.ca
Thanks very much Caroline.

And thanks too for explaining the staffing issues that will likely affect portions of the cognitive stream. Our committee will take this up at its next meeting.

With best wishes,
Monroe

-----Original Message-----
From: Caroline Palmer [mailto:caroline.palmer@mcgill.ca]
Sent: Monday, November 07, 2016 2:23 PM
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>
Subject: RE: Neuroscience UG program changes

Dear Monroe,

The Psychology UG program committee reviewed the changes to the Neuroscience Major and Honours program and provided comments. The Psychology program components look fine. We have provided comments on the possible staffing issues for the required courses in the cognitive stream.

Regards,
Caroline Palmer
UG Program Chair, Psychology
Thanks very much Michael.

Hopefully the subsequent steps in the approval process will also go smoothly.

Monroe

---

From: Michael Langer [mailto:langer@cim.mcgill.ca]
Sent: Tuesday, August 09, 2016 3:11 PM
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>
Subject: Re: Inclusion of COMP 250 in the Neuroscience program

Hello Monroe,

I approve.

The course web page for Fall 2016 is
http://www.cim.mcgill.ca/~langer/250.html

A link to the Course Outline is:

Thanks, and best wishes,

Mike Langer

---

On 2016-08-09 12:41 PM, Monroe W. Cohen wrote:

Dear Drs. Blanchette and Langer,

We would like to include COMP 250 (Introduction to Computer Science) as a Complementary course in our BSc Neuroscience program. Attached is the current version of the Neuroscience Major with proposed course additions highlighted in yellow on p3 and p4. Specifically, we would like students who are following Stream B (Neurophysiology/Neural Computation) to have it as an option (see p3) and we would like students in the other Streams to be able to take it as well (see p4). We would also include COMP 250 as an option in our Honours program (attached – see p2).

Students enter the Neuroscience Major in U1 and enrolment is limited to about 50 new students each year. Up to 12 of those students may then be admitted to the Neuroscience Honours program in U2. Overall we anticipate that as many as 10 of the Neuroscience students will be interested in taking COMP 250.
To comply with the required formalities, please let me know whether or not you approve having your course added to the Neuroscience program starting in the 2017-18 academic year. For approval, simply write “I approve” in your reply to me. It would also be helpful if you could attach the Course Description/Outline/Syllabus.

Thanking you in advance,
Monroe Cohen

Monroe W Cohen, PhD
Professor of Physiology
Director, BSc Neuroscience Program
McGill University

Phone: 514-398-4342
Email: monroe.cohen@mcgill.ca
From: Monroe W. Cohen  
Sent: Tuesday, August 09, 2016 5:14 PM  
To: Michael Langer  
Subject: RE: Inclusion of COMP 546 in the Neuroscience program

Thanks very much Michael.

Hopefully the subsequent steps in the approval process will also go smoothly.

Monroe

From: Michael Langer [mailto:langer@cim.mcgill.ca]  
Sent: Tuesday, August 09, 2016 3:15 PM  
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>  
Subject: Re: Inclusion of COMP 546 in the Neuroscience program

Hello Monroe,

I approve.

The course web page from Fall 2015 is

A link to the Course Outline is:
http://www.cim.mcgill.ca/~langer/546/CourseOutline.html

Thanks again. Best wishes,

Mike Langer

On 2016-08-09 12:42 PM, Monroe W. Cohen wrote:

Dear Michael,

Further to our previous correspondence, this is to indicate that we would like to include COMP 546 (Computational Perception) as a Complementary Course in our BSc Neuroscience program. Attached is the current version of the Neuroscience Major with proposed course additions highlighted in yellow. COMP 546 is listed on p4. We would also include COMP 546 as an option in our Honours program (attached – see bottom of p2).

Students enter the Neuroscience Major in U1 and enrolment is limited to about 50 new students each year. Up to 12 of those students may then be admitted the Neuroscience Honours program in U2. Overall we anticipate that as many as 10 of the Neuroscience students will be interested in taking COMP 546 in their final year.
To comply with the required formalities, please let me know whether or not you approve having your course added to the Neuroscience program starting in the 2017-18 academic year. For approval, simply write “I approve” in your reply to me. It would also be helpful if you could attach the Course Description/Outline/Syllabus.

Thanking you in advance,

Monroe

Monroe W Cohen, PhD  
Professor of Physiology  
Director, BSc Neuroscience Program  
McGill University

Phone: 514-398-4342  
Email: monroe.cohen@mcgill.ca
Thanks very much Alexey.

Hopefully the subsequent steps in the approval process will also go smoothly.

Monroe

From: Alexey Kostikov, Dr
Sent: Tuesday, August 16, 2016 10:51 AM
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>
Subject: Re: Inclusion of NEUR 507 in the Neuroscience program

Dear Monroe,

I received a confirmation from IPN and now can officially approve the inclusion of NEUR507 into BSc Neuroscience program.

Regards,

Alexey

Alexey P. Kostikov, Dr.
Assistant Professor
Department of Neurology & Neurosurgery
McGill University

From: Monroe W. Cohen
Sent: Tuesday, August 9, 2016 5:15:46 PM
To: Alexey Kostikov, Dr
Subject: RE: Inclusion of NEUR 507 in the Neuroscience program

Thanks very much Alexey – I look forward to your response.

Monroe

From: Alexey Kostikov, Dr
Sent: Tuesday, August 09, 2016 4:39 PM
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>
Subject: Re: Inclusion of NEUR 507 in the Neuroscience program

Dear Monroe,
Thank you again for your interest in including NEUR507 in the BSc Neuroscience program. I have contacted IPN administrators to make sure there is no conflict in opening this course beyond IPN. I do not think so, but I'd rather be certain. I will let you know as soon as they reply to me.

Regards,

Alexey

Alexey P. Kostikov, Dr.
Assistant Professor
Department of Neurology & Neurosurgery
McGill University

From: Monroe W. Cohen
Sent: Tuesday, August 9, 2016 12:40:34 PM
To: Alexey Kostikov, Dr
Subject: Inclusion of NEUR 507 in the Neuroscience program

Dear Alexey,

Further to our previous correspondence, thank you for your course description and related information. This is to confirm that we would like to include NEUR 507 (Topics in Radionuclide Imaging) as a Complementary Course in our BSc Neuroscience program. Attached is the current version of the Neuroscience Major with proposed course additions highlighted in yellow. NEUR 507 is listed near the bottom of p4. We would also include COMP 546 as an option in our Honours program (attached – see p3).

Enrolment in the Neuroscience Major is limited to about 50 new students each year. Up to 12 of those students may then be admitted to the Neuroscience Honours program. NEUR 507 would be of interest to some of the Neuroscience students in their final year. We are aware that you limit registration in NEUR 507 to 10 students.

To comply with the required formalities, please let me know whether or not you approve having your course added to the Neuroscience program starting in the 2017-18 academic year. For approval, simply write “I approve” in your reply to me.

Thanking you in advance,

Monroe

Monroe W Cohen, PhD
Professor of Physiology
Director, BSc Neuroscience Program
McGill University

Phone: 514-398-4342
Email: monroe.cohen@mcgill.ca
### 1.0 Degree Title
Specify the two degrees for concurrent degree programs

B.Sc.

### 1.1 Major (Legacy = Subject) (30-char. max.)
Neuroscience

### 1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

### 1.3 Minor (with Concentration, if applicable)
(30 char. max.)

### 1.4 Category
- [ ] Faculty Program (FP)
- [X] Honours (HON)
- [ ] Joint Honours Component (HC)
- [ ] Major
- [ ] Joint Major
- [ ] Major Concentration (CON)
- [ ] Internship/Co-op
- [ ] Thesis (T)
- [ ] Minor
- [ ] Non-Thesis (N)
- [ ] Other
- Please specify

### 1.5 Complete Program Title
B.Sc.; Honours in Neuroscience

### 2.0 Administering Faculty/Unit
Science

### 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
- Term: 201709

### 4.0 Existing Credit Weight
- Proposed Credit Weight
- 74

### 5.0 Rationale for revised program
Addition of relevant courses, deletion of courses no longer offered. See attachment 1C for details

### 6.0 Revised Program Description (Maximum 150 words)

**New description:** 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; cognition and behaviour). Students are admitted to the program after one year in a major. Because it is a limited-enrolment program, the entrance requirements for the Honours program are more stringent. Applicants must have taken a minimum of 27 graded credits in their U1 year, must have a CGPA of at least 3.50 and must have obtained minimum grades of B+ in both NSCI 200 and NSCI 201, as well as a minimum grade of C in BIOL 200, BIOL 212 or BIOL 201, and CHEM 212. Additional requirements for applying are provided on the Neuroscience website: [www.mcgill.ca/neuroscience](http://www.mcgill.ca/neuroscience). Meeting the minimum requirements does not guarantee admission to the Honours Neuroscience program.

To graduate from the program, students must have a CGPA of 3.30 and a minimum grade of B+ in NSCI 300, NSCI 400 and NSCI 430D1/D2. “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 430.

**Old description:** 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; cognition and behaviour). Students are admitted to the program after one year in a major. The program is composed of 74 credits: 44 credits are required, including a 0-credit independent research project, and 30 credits are complementary. Because it is a limited-enrolment program, the entrance requirements for the Honours program are more stringent. Applicants must have taken a minimum of 27 graded credits in their U1 year, must have a CGPA of at least 3.50 and have obtained minimum grades of B+ in both NSCI 200 and NSCI 201, as well as a minimum grade of C in BIOL 200, BIOL 212 or BIOL 201, and CHEM 212. Additional requirements for applying are provided on the Neuroscience website: [www.mcgill.ca/neuroscience](http://www.mcgill.ca/neuroscience). Meeting the minimum requirements does not guarantee admission to the Honours Neuroscience Program.

To graduate from the program, students must have a CGPA of 3.30 and a minimum grade of B+ in NSCI 300, NSCI 400 and NSCI 430D1/D2. “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 430.
### 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 Courses (44 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 Honours Program.

- ANAT 321 Circuitry of the Human Brain (3 credits)
- BIOC 311 Metabolic Biochemistry (3 credits)
- BIOL 200 Molecular Biology (3 credits)
- CHEM 212 Introductory Organic Chemistry 1 (4 credits)
- COMP 202 Foundations of Programming (3 credits)
- NSCI 200 Introduction to Neuroscience 1 (3 credits)
- NSCI 201 Introduction to Neuroscience 2 (3 credits)
- NSCI 300 Neuroethics (3 credits)
- NSCI 400D1 Neuroscience Seminar (0.5 credits)
- NSCI 400D2 Neuroscience Seminar (0.5 credits)
- NSCI 430D1 Honours Research Project (4.5 credits)
- NSCI 430D2 Honours Research Project (4.5 credits)
- PHGY 311 Channels, Synapses & Hormones (3 credits)
- PSYC 311 Human Cognition and the Brain (3 credits)
- PSYC 318 Behavioural Neuroscience 2 (3 credits)

**Complementary Courses (30 credits)**

3 credits from:

- BIOC 212 Molecular Mechanisms of Cell Function (3 credits)
- BIOL 201 Cell Biology and Metabolism (3 credits)

3 credits from:

- BIOL 373 Biometry (3 credits)
- PSYC 305 Statistics for Experimental Design (3 credits)

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 Mathematical Models in Biology (3 credits)
- MATH 222 Calculus 3 (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 (44 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.

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- BIOL 201 Cell Biology and Metabolism (3 credits)

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- PSYC 305 Statistics for Experimental Design (3 credits)

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 Mathematical Models in Biology (3 credits)
- MATH 222 Calculus 3 (3 credits)

(continued on attachment 1A)
The remaining 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:

- BIOL 202 Basic Genetics (3 credits)
- BIOL 300 Molecular Biology of the Gene (3 credits)
- BIOL 301 Cell and Molecular Laboratory (4 credits)
- BIOL 306 Neural Basis of Behaviour (3 credits)
- BIOL 320 Evolution of Brain and Behaviour (3 credits)
- BIOL 389 Laboratory in Neurobiology (3 credits)
- CHEM 222 Introductory Organic Chemistry 2 (4 credits)
- COMP 206 Introduction to Software Systems (3 credits)
- LING 390 Neuroscience of Language (3 credits)
- MATH 315 Ordinary Differential Equations (3 credits)
- MATH 323 Probability (3 credits)
- MATH 324 Statistics (3 credits)
- MIMM 214 Introductory Immunology: Elements of Immunity (3 credits)
- MIMM 314 Intermediate Immunology (3 credits)
- NEUR 310 Cellular Neurobiology (3 credits)
- PHAR 300 Drug Action (3 credits)
- PHGY 210 Mammalian Physiology 2 (3 credits)
- PHGY 314 Integrative Neuroscience (3 credits)
- PSYC 302 The Psychology of Pain (3 credits)
- PSYC 315 Computational Psychology (3 credits)
- PSYC 317 Genes and Behaviour (3 credits)
- PSYC 342 Hormones and Behaviour (3 credits)

400- and 500-level courses:

---

**++ Students may take either COMP 206 or COMP 250, but not both.**

**+ Students may take either BIOL 514 OR PSYC 514, but not both.**

+++ Students may take either MATH 437 OR PHYS 413, but not both.

- BIOL 514 Neurobiology Learning and Memory (3 credits)
- BIOL 530 Advances in Neuroethology (3 credits)
- BIOL 532 Developmental Neurobiology Seminar (3 credits)
- BIOL 580 Genetic Approaches to Neural Systems (3 credits)
- BIOL 588 Advances in Molecular/Cellular Neurobiology (3 credits)
- BMDE 519 Biomedical Signals and Systems (3 credits)
- MATH 437 Mathematical Methods in Biology (3 credits)
- MIMM 414 Advanced Immunology (3 credits)
- MIMM 509 Inflammatory Processes (3 credits)
- NEUR 550 Free Radical Biomedicine (3 credits)
- PHAR 562 Neuropharmacology (3 credits)
- PHGY 425 Analyzing Physiological Systems (3 credits)
- PHGY 451 Advanced Neurophysiology (3 credits)
- PHGY 513 Cellular Immunology (3 credits)
- PHGY 520 Ion Channels (3 credits)
- PHGY 524 Chronobiology (3 credits)
- PHGY 556 Topics in Systems Neuroscience (3 credits)
- PHYS 413 Physical Basis of Physiology (3 credits)

---

The remaining 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.

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- BIOL 300 Molecular Biology of the Gene (3 credits)
- BIOL 301 Cell and Molecular Laboratory (4 credits)
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- BIOL 320 Evolution of Brain and Behaviour (3 credits)
- BIOL 389 Laboratory in Neurobiology (3 credits)
- CHEM 222 Introductory Organic Chemistry 2 (4 credits)
- COMP 206 Introduction to Software Systems (3 credits)

---

++

- COMP 250 Introduction to Computer Science (3 credits)

++

- MATH 315 Ordinary Differential Equations (3 credits)
- MATH 323 Probability (3 credits)
- MATH 324 Statistics (3 credits)
- MIMM 214 Introductory Immunology: Elements of Immunity (3 credits)
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400- and 500-level courses:

---

+ Students may take either BIOL 514 OR PSYC 514, but not both.

- BIOL 514 Neurobiology Learning and Memory (3 credits)
- BIOL 530 Advances in Neuroethology (3 credits)
- BIOL 532 Developmental Neurobiology Seminar (3 credits)
- BIOL 580 Genetic Approaches to Neural Systems (3 credits)
- BIOL 588 Advances in Molecular/Cellular Neurobiology (3 credits)
- BMDE 519 Biomedical Signals and Systems (3 credits)
- COMP 546 Computational Perception (4 credits)
- MATH 437 Mathematical Methods in Biology (3 credits)
- MIMM 414 Advanced Immunology (3 credits)
- MIMM 509 Inflammatory Processes (3 credits)
- NEUR 550 Free Radical Biomedicine (3 credits)
- NEUR 507 Topics in Radionuclide Imaging (3 credits)
- PHAR 562 Neuropharmacology (3 credits)
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- PHGY 524 Chronobiology (3 credits)
- PHGY 556 Topics in Systems Neuroscience (3 credits)

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(continued on Attachment 1B)
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Justification of proposed changes
in Honours Neuroscience

Attachment 1A
1. Whereas COMP 206 covers syntax of programming languages, COMP 250 covers algorithms and data structures. The latter subject matter can be useful in computational neuroscience and we therefore agree with neuroscience student feedback that COMP 250 should be included as an option.
2. For consistency with the Major, students should have the option of taking COMP 206 or COMP 250, but not both.
3. LING 390 is no longer given.
4. COMP 546 deals with computational modelling of visual perception and audition. It is therefore relevant to the field of neuroscience and especially to those students interested in the computational analysis of perception.
5. There is no longer a choice between MATH 437 and PHYS 413 (see #7), so the asterisks have been removed from MATH 437.
6. NEUR 507 deals with the acquisition and analysis of data from the brains of normal individuals as well as from individuals with neuropathological conditions. It is therefore relevant to the field of neuroscience.
7. PHYS 413 is no longer given.

Attachment 1B
1. PSYC 444 and PSYC 501 are no longer given.
2. PSYT 505 is no longer given.
3. REDM 410 is no longer given.
8.0 Consultation with Related Units
   - Yes
   - No

   Financial Consult
   - Yes
   - No

   Attach list of consultations

9. Approvals

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Submitted by

- Name
- Phone
- Email
- Submission Date

To be completed by ARR:

- CIP Code

10. FQRSC (Research) Indicator (for GPS): Yes  No
8.0 Consultation with Related Units

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Attach list of consultations - Please see Attachment 1D

9. Approvals

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Submitted by

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<td>Phone</td>
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<tr>
<td>Email</td>
<td><a href="mailto:monroe.cohen@mcgill.ca">monroe.cohen@mcgill.ca</a></td>
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Dear Monroe,

I approve.

Gregor Fussmann

Gregor Fussmann
Professor and Chair, Department of Biology
Director, Gault Nature Reserve
McGill University
1205, ave. Docteur-Penfield
Montreal, Quebec, H3A 1B1
Canada

514-398-6401
514-398-1370
gregor.fussmann@mcgill.ca
http://www.biology.mcgill.ca/faculty/fussmann/

From: Monroe W. Cohen
Sent: Friday, October 21, 2016 4:28 PM
To: Gregor Fussmann, Prof. <gregor.fussmann@mcgill.ca>; John Orlowski, Dr. <john.orlowski@mcgill.ca>; John Lydon, Dr. <john.lydon@mcgill.ca>
Subject: Neuroscience program revisions – your approval required

Dear Chairs,

I am seeking your approval of some proposed revisions to our Neuroscience Major and Honours Neuroscience programs.

As you know, these programs are an interdepartmental collaboration involving Biology, Physiology, and Psychology. Our Neuroscience Academic Committee which handles these programs includes 2 representatives from each of your departments. The committee recently met and unanimously supports revisions to both programs.

Attached are the current versions of each program with proposed additions indicated by yellow highlight and proposed deletions indicated by grey highlight and strikethroughs. Also attached are separate documents which provide justification for these changes.
All the course additions have been approved by the respective course coordinators.

The Neuroscience Major has been running since Fall 2008. It has limited enrolment - about 55 students are admitted each year. Honours Neuroscience was initiated in Fall 2013. Students enter it in U2 and up to 12 new students are admitted each year.

Please let me know whether or not you approve the revisions in both programs. For approval, simply write “I approve” in your reply.

Thanking you in advance,
Monroe

Monroe W Cohen, PhD  
Professor of Physiology  
Director, BSc Neuroscience Program  
McGill University  
Phone: 514-398-4342  
Email: monroe.cohen@mcgill.ca
Hi Monroe,

I approve the proposed changes.

Best Regards,
John

Monroe W. Cohen
Gregor Fussmann, Prof.
John Lydon, Dr.

From: Monroe W. Cohen
Sent: October-21-16 4:28 PM
To: Gregor Fussmann, Prof. <gregor.fussmann@mcgill.ca>; John Orlowski, Dr. <john.orlowski@mcgill.ca>; John Lydon, Dr. <john.lydon@mcgill.ca>
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Please let me know whether or not you approve the revisions in both programs. For approval, simply write “I approve” in your reply.

Thanking you in advance,
Monroe
Monroe W Cohen, PhD
Professor of Physiology
Director, BSc Neuroscience Program
McGill University
Phone: 514-398-4342
Email: monroe.cohen@mcgill.ca
Thanks very much Caroline.

And thanks too for explaining the staffing issues that will likely affect portions of the cognitive stream. Our committee will take this up at its next meeting.

With best wishes,
Monroe

-----Original Message-----
From: Caroline Palmer [mailto:caroline.palmer@mcgill.ca]
Sent: Monday, November 07, 2016 2:23 PM
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>
Subject: RE: Neuroscience UG program changes

Dear Monroe,

The Psychology UG program committee reviewed the changes to the Neuroscience Major and Honours program and provided comments. The Psychology program components look fine. We have provided comments on the possible staffing issues for the required courses in the cognitive stream.

Regards,
Caroline Palmer
UG Program Chair, Psychology
From: Monroe W. Cohen
Sent: Tuesday, August 09, 2016 5:13 PM
To: Michael Langer
Subject: RE: Inclusion of COMP 250 in the Neuroscience program

Thanks very much Michael.

Hopefully the subsequent steps in the approval process will also go smoothly.

Monroe

From: Michael Langer [mailto:langer@cim.mcgill.ca]
Sent: Tuesday, August 09, 2016 3:11 PM
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>
Subject: Re: Inclusion of COMP 250 in the Neuroscience program

Hello Monroe,

I approve.

The course web page for Fall 2016 is
http://www.cim.mcgill.ca/~langer/250.html

A link to the Course Outline is:

Thanks, and best wishes,

Mike Langer

On 2016-08-09 12:41 PM, Monroe W. Cohen wrote:

Dear Drs. Blanchette and Langer,

We would like to include COMP 250 (Introduction to Computer Science) as a Complementary course in our BSc Neuroscience program. Attached is the current version of the Neuroscience Major with proposed course additions highlighted in yellow on p3 and p4. Specifically, we would like students who are following Stream B (Neurophysiology/Neural Computation) to have it as an option (see p3) and we would like students in the other Streams to be able to take it as well (see p4). We would also include COMP 250 as an option in our Honours program (attached – see p2).

Students enter the Neuroscience Major in U1 and enrolment is limited to about 50 new students each year. Up to 12 of those students may then be admitted to the Neuroscience Honours program in U2. Overall we anticipate that as many as 10 of the Neuroscience students will be interested in taking COMP 250.
To comply with the required formalities, please let me know whether or not you approve having your course added to the Neuroscience program starting in the 2017-18 academic year. For approval, simply write “I approve” in your reply to me. It would also be helpful if you could attach the Course Description/Outline/Syllabus.

Thanking you in advance,
Monroe Cohen

Monroe W Cohen, PhD
Professor of Physiology
Director, BSc Neuroscience Program
McGill University

Phone: 514-398-4342
Email: monroe.cohen@mcgill.ca
Thanks very much Michael.

Hopefully the subsequent steps in the approval process will also go smoothly.

Monroe

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Hello Monroe,

I approve.

The course web page from Fall 2015 is

A link to the Course Outline is:
http://www.cim.mcgill.ca/~langer/546/CourseOutline.html

Thanks again. Best wishes,

Mike Langer

On 2016-08-09 12:42 PM, Monroe W. Cohen wrote:

Dear Michael,

Further to our previous correspondence, this is to indicate that we would like to include COMP 546 (Computational Perception) as a Complementary Course in our BSc Neuroscience program. Attached is the current version of the Neuroscience Major with proposed course additions highlighted in yellow. COMP 546 is listed on p4. We would also include COMP 546 as an option in our Honours program (attached – see bottom of p2).

Students enter the Neuroscience Major in U1 and enrolment is limited to about 50 new students each year. Up to 12 of those students may then be admitted the Neuroscience Honours program in U2. Overall we anticipate that as many as 10 of the Neuroscience students will be interested in taking COMP 546 in their final year.
To comply with the required formalities, please let me know whether or not you approve having your course added to the Neuroscience program starting in the 2017-18 academic year. For approval, simply write “I approve” in your reply to me. It would also be helpful if you could attach the Course Description/Outline/Syllabus.

Thanking you in advance,
Monroe

Monroe W Cohen, PhD
Professor of Physiology
Director, BSc Neuroscience Program
McGill University

Phone: 514-398-4342
Email: monroe.cohen@mcgill.ca
From: Monroe W. Cohen  
Sent: Tuesday, August 16, 2016 12:55 PM  
To: Alexey Kostikov, Dr  
Subject: RE: Inclusion of NEUR 507 in the Neuroscience program

Thanks very much Alexey.

Hopefully the subsequent steps in the approval process will also go smoothly.

Monroe

From: Alexey Kostikov, Dr  
Sent: Tuesday, August 16, 2016 10:51 AM  
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>  
Subject: Re: Inclusion of NEUR 507 in the Neuroscience program

Dear Monroe,

I received a confirmation from IPN and now can officially approve the inclusion of NEUR 507 into BSc Neuroscience program.

Regards,

Alexey

Alexey P. Kostikov, Dr.  
Assistant Professor  
Department of Neurology & Neurosurgery  
McGill University

From: Monroe W. Cohen  
Sent: Tuesday, August 9, 2016 5:15:46 PM  
To: Alexey Kostikov, Dr  
Subject: RE: Inclusion of NEUR 507 in the Neuroscience program

Thanks very much Alexey – I look forward to your response.

Monroe

From: Alexey Kostikov, Dr  
Sent: Tuesday, August 09, 2016 4:39 PM  
To: Monroe W. Cohen <monroe.cohen@mcgill.ca>  
Subject: Re: Inclusion of NEUR 507 in the Neuroscience program

Dear Monroe,
Thank you again for your interest in including NEUR507 in the BSc Neuroscience program. I have contacted IPN administrators to make sure there is no conflict in opening this course beyond IPN. I do not think so, but I'd rather be certain. I will let you know as soon as they reply to me.

Regards,

Alexey

Alexey P. Kostikov, Dr.
Assistant Professor
Department of Neurology & Neurosurgery
McGill University

From: Monroe W. Cohen
Sent: Tuesday, August 9, 2016 12:40:34 PM
To: Alexey Kostikov, Dr
Subject: Inclusion of NEUR 507 in the Neuroscience program

Dear Alexey,

Further to our previous correspondence, thank you for your course description and related information. This is to confirm that we would like to include NEUR 507 (Topics in Radionuclide Imaging) as a Complementary Course in our BSc Neuroscience program. Attached is the current version of the Neuroscience Major with proposed course additions highlighted in yellow. NEUR 507 is listed near the bottom of p4. We would also include COMP 546 as an option in our Honours program (attached – see p3).

Enrolment in the Neuroscience Major is limited to about 50 new students each year. Up to 12 of those students may then be admitted to the Neuroscience Honours program. NEUR 507 would be of interest to some of the Neuroscience students in their final year. We are aware that you limit registration in NEUR 507 to 10 students.

To comply with the required formalities, please let me know whether or not you approve having your course added to the Neuroscience program starting in the 2017-18 academic year. For approval, simply write “I approve” in your reply to me.

Thanking you in advance,

Monroe

Monroe W Cohen, PhD
Professor of Physiology
Director, BSc Neuroscience Program
McGill University

Phone: 514-398-4342
Email: monroe.cohen@mcgill.ca