

PHGY 314
INTEGRATIVE NEUROSCIENCE
Course Schedule - Fall 2023

Lecturers: Dr. Maurice Chacron (Course Coordinator), McIntyre Bldg., Room 1137, maurice.chacron@mcgill.ca
 Dr. Steve Lomber, McIntyre Bldg., Room 1223, steve.lomber@mcgill.ca
 Dr. Melissa Vollrath, McIntyre Bldg., Room 1234, melissa.vollrath@mcgill.ca
 Dr. Pouya Bashivan, McIntyre Bldg., Room 1117, pouya.bashivan@mcgill.ca
 Dr. Justine Clery, MNI, justine.clery@mcgill.ca
 Dr. Amir Shmuel, MNI, amir.shmuel@mcgill.ca
 Dr. Mark Brandon, Douglas Hospital Research Center, mark.brandon@mcgill.ca

Location: McIntyre Medical Bldg., Room 1034

Time: Mondays, Wednesdays & Fridays from 3:35pm - 4:25pm

<i>Date</i>	<i>Day</i>	<i>Lecture Title</i>	<i>Lecture</i>	<i>Lecturer</i>
Aug. 30	W	The functional organization of perception and movement chapters 15-16	1	MC
Sept. 01	F	NO CLASS		
04	M	LABOUR DAY – NO CLASS		
06	W	The representation of personal versus extrapersonal space chapters 17-18	2	MC
08	F	Learning and Memory: Lessons from Model Organisms chapters 52-55	3	MC
11	M	Learning and Memory: Lessons from Model Organisms chapters 52-55	4	MC
13	W	Learning and Memory: Lessons from Model Organisms chapters 52-55	5	MC
15	F	Learning and Memory: Lessons from Model Organisms chapters 52-55	6	MC
18	M	Learning and Memory: Lessons from Model Organisms chapters 52-55	7	MC
20	W	Learning and Memory: Lessons from Model Organisms chapters 52-55	8	MC
22	F	Deep learning as a framework for neuroscience: a philosophical discussion of how ANNs could be thought of as a framework for making progress in neuroscience	9	PB
25	M	ANNs and sensory cortices: case studies of using ANNs to describe the representations and mechanisms underlying sensory processing in the animals' brain	10	PB
27	W	ANNs and higher level cognition: extension of previous topic to brain areas underlying language and decision making	11	PB
29	F	ANNs and higher level cognition: extension of previous topic to brain areas underlying language and decision making	12	PB
Oct. 02	M	The visual system	13	JC
04	W	The visual system	14	JC
06	F	FALL BREAK – NO CLASS		
09	M	THANKSGIVING – NO CLASS		
11	W	FALL BREAK – NO CLASS		
13	F	The visual system	15	JC
16	M	The visual system	16	JC
18	W	The visual system	17	JC
20	F	The visual system	18	JC
23	M	The visual system	19	JC
25	W	Tutorial for Midterm		
27	F	Spatial Learning	20	MB
30	M	Spatial Learning	21	MB
Oct. 31	T	Mid-Term Exam from 7:00pm - 8:30pm in the Palmer Amphitheatre Room 522. Please see page 2 for details!		
Nov. 1	W	Spatial Learning	22	MB
03	F	Spatial Learning	23	MB
06	M	Auditory System: Peripheral and Central Processing chapters 30-31	24	MV
08	W	Auditory System: Peripheral and Central Processing chapters 30-31	25	MV
10	F	Auditory System: Peripheral and Central Processing chapters 30-31	26	MV
13	M	Auditory System: Peripheral and Central Processing chapters 30-31	27	MV
15	W	No Class		
17	F	Auditory plasticity after loss of function	28	SL
20	M	Auditory plasticity after loss of function	29	SL
22	W	No Class: Pre-recorded lecture will be posted on myCourses	30	SL
24	F	Auditory plasticity after loss of function	31	SL
27	M	Resting State Networks chapter 20	32	AS
29	W	Resting State Networks chapter 20	33	AS
Dec. 01	F	Resting State Networks chapter 20	34	AS
4	M	Tutorial for Final		

EVALUATION

1. MIDTERM EXAMINATION

The midterm is scheduled for **Tuesday, October 31st, 2023** from **7:00pm - 8:30pm** in **Room 522 Palmer Amphitheatre (McIntyre Bldg)**. **The exam will cover material up to and including October 23rd, 2023.** The exam is usually, but not always, multiple choice type questions. Please note that multiple versions of exams will be administered in order to reduce any temptation for copying a more “correct” answer. You will not be permitted to take the actual exam from the exam room. Once the exams have been graded, an **Exam Viewing** will be scheduled.

Students, who for serious reasons (e.g., illness or family affliction) cannot write the **MIDTERM EXAM**, are required to submit supporting documentation to the **Physiology General Office, McIntyre Bldg., Room 1021** within **ONE WEEK** following the midterm exam date (***by Tuesday, November 7, 2023 at 4:00pm***). The note must indicate clearly the reason for being unable to write the midterm exam on **Tuesday, October 31st, 2023**. Following submission of a valid note, students will have the option to write a “Deferred” exam (*scheduled during the week of November 13, 2023*) or have the final exam count for **100%** of their grade. Students must email the course secretary at undergrad2.physiology@mcgill.ca by **Tuesday, November 7, 2023 at 4:00pm** indicating the option chosen. If no acceptable documentation is provided by the deadline indicated above, the midterm exam will count for **ZERO** and the final exam will count for **60%**.

2. FINAL EXAMINATION

The Final exam will take place during the exam period. It is usually, but not always, multiple-choice type questions. It will cover the entire course, but more questions will be given for post-midterm material so the course will have been uniformly evaluated over the entire term. You will **NOT** be permitted to take the actual exam from the exam room. Please note that multiple versions of exams will be administered in order to reduce any temptation for copying a more “correct” answer. Once the exams have been graded, an **Exam Viewing** will be scheduled.

MARKING SCHEME

The exams will total 100% of the overall final grade – the mid-term will be worth 40% and the final will be worth 60%.

SUPPLEMENTAL AND DEFERRED EXAMS

The Supplemental exam is worth 100% and the deferred exam is worth the same as the final exam. **PLEASE NOTE:** These exams will differ from the Final exam and permission to write them must be obtained from the Associate Dean of Science (please contact Service Point for more information).

USCAS

- **Clara Farhat** (clara.farhat@mail.mcgill.ca).

Drs. Clery, Brandon, Vollrath and Schmuell.

- **Julien Menes** (julien.menes@mail.mcgill.ca).

Drs. Chacron, Bashivan, Lomber.

COURSE EVALUATIONS

Course Evaluations will be made available in December 2023 through Mercury.

TEXTBOOK

Kandel, Eric R., et al. Principles of Neural Science, 6/e. New York: McGraw-Hill, 2021

TUTORIAL SERVICE

Tutorial services are available through the Dean of Students (514-398-6011)

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <http://www.mcgill.ca/srr/honest> for more information).

Every student has the right to write term papers, examinations, and theses in English or French, except in courses where knowledge of the language is one of the objectives of the course.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

© Instructor generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the code of Student Conduct and Disciplinary Procedures.