PHGY 314 INTEGRATIVE NEUROSCIENCE **Course Schedule - Fall 2022**

Lecturers: Dr. Maurice Chacron (Co-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. Suresh Krishna, McIntyre Bldg., Room 1229, suresh.krishna@mcgill.ca

Dr. Christopher Pack, MNI, Room 896A, christopher.pack@mcgill.ca

Dr. Amir Shmuel, MNI, amir.shmuel@mcgill.ca

Dr. Mark Brandon, Douglas Hospital Research Center, mark.brandon@mcgill.ca

Strathcona Anatomy & Dentistry Bldg. (3640 University Street), Room 2/36 **Location:**

Aug. 31 Sept. 02 05	Day W	Lecture Title	Lecture	Lecture
Sept. 02	W			r
		The functional organization of perception and movement chapters 15-16	1	M.C.
05	F	The representation of personal versus extrapersonal space chapters 17-18	2	M.C.
	M	LABOUR DAY – NO CLASS		
07	W	Learning and Memory: Lessons from Model Organisms chapters 52-55	3	M.C.
09	F	Learning and Memory: Lessons from Model Organisms chapters 52-55	4	M.C.
12	M	Learning and Memory: Lessons from Model Organisms chapters 52-55	5	M.C.
14	W	Learning and Memory: Lessons from Model Organisms chapters 52-55	6	M.C.
16	F	Learning and Memory: Lessons from Model Organisms chapters 52-55	7	M.C.
19	M	Learning and Memory: Lessons from Model Organisms chapters 52-55	8	M.C.
21	W	Physiological Basis of Cognition chapter 17 (6 th edition) -> <i>Room Location: SADB, Room M-1</i>	9	S.K.
23	F	Physiological Basis of Cognition chapter 17 (6 th edition)	10	S.K.
		Term paper topic(s) will be posted on MyCourses. Please see page 2 for details!		
26	M	Physiological Basis of Cognition chapter 25 (6 th edition)	11	S.K.
28	W	Physiological Basis of Cognition chapter 25 (6 th edition)	12	S.K.
30	F	Physiological Basis of Cognition chapter 56 (6 th edition)	13	S.K.
Oct. 03	M	ELECTION DAY – NO CLASS		
05	W	Physiological Basis of Cognition chapters 56 (6 th edition)	14	S.K.
07	F	The Visual System General Overview chapter 25, 26	15	C.P.
10	M	THANKSGIVING – NO CLASS		
12	W	FALL BREAK – NO CLASS		
*13	TH	The Visual System chapter 26	16	C.P.
17	M	The Visual System chapter 27	17	C.P.
19	W	The Visual System chapter 27	18	C.P.
21	F	The Visual System chapter 28	19	C.P.
24	M	The Visual System chapter 28	20	C.P.
26	W	Computational Vision	21	C.P.
28	F	Spatial Learning	22	M.B.
31	M	Spatial Learning	23	M.B.
Nov. 1	T	Mid-Term Exam from 7:00pm - 8:30pm in the Palmer Amphitheatre Room 522. Please see page		
		2 for details!		
02	W	Spatial Learning	24	M.B.
04	F	Spatial Learning	25	M.B.
07	M	Spatial Learning	26	M.B.
09	W	Auditory System: Peripheral and Central Processing chapters 30-31	27	M.V.
11	F	Auditory System: Peripheral and Central Processing chapters 30-31	28	M.V.
14	M	Auditory System: Peripheral and Central Processing chapters 30-31	29	M.V.
16	W	Auditory System: Peripheral and Central Processing chapters 30-31	30	M.V.
18	F	Auditory plasticity after loss of function	31	S.L.
21	M	Auditory plasticity after loss of function	32	S.L.
23	W	Auditory plasticity after loss of function	33	S.L.
25	F	Auditory plasticity after loss of function	34	S.L.
28	M	Resting State Networks chapter 20	35	A.S.
30	W	Resting State Networks chapter 20	36	A.S.
Dec. 02	F	Resting State Networks chapter 20	37	A.S.
05	M	TBD		

EVALUATION

1. MIDTERM EXAMINATION

The midterm is scheduled for <u>Tuesday</u>, <u>November 1, 2022</u> from 7:00pm - 8:30pm in <u>Room 522</u> Palmer Amphitheatre (McIntyre Bldg). <u>The exam will cover material up to and including October 26, 2022</u> 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 <u>Tuesday</u>, <u>November 8, 2022 at 4:00pm</u>). The note must indicate clearly the reason for being unable to write the midterm exam on <u>Tuesday</u>, <u>November 1, 2022</u>. Following submission of a valid note, students will have the option to write a "Deferred" exam (scheduled during the week of November 14, 2022) or have the final exam count for 80% of their grade. Students must email the course secretary at <u>undergrad2.physiology@mcgill.ca</u> by <u>Tuesday</u>, <u>November 8, 2022 at 4:00pm</u> 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 48%.

2. TERM PAPER

Students are to submit an individual written term paper. More details will be provided in the "Introductory" lecture. Term paper topics will be assigned to students *randomly* and will be posted via MyCourses on <u>Friday</u>, <u>September 23</u>, <u>2022</u>. It is <u>VERY IMPORTANT</u> to follow all formatting requirements, as your grade will be lowered. The assignment should be <u>NO</u> more than 5 typewritten pages (excluding the cover page), 1.5 line-spaced, Times New Roman font (12 points), with 2cm page margins. Students are permitted (but not required) to include one (1) additional page containing figures. References are to be included at the end of the document (there is no page limit for references). The assignment is due by <u>Monday</u>, <u>November 28</u>, <u>2022 by 4:00pm</u> and is to be submitted via the "Assignment" tab in myCourses. <u>There will be a 5% per day mark deduction for late submissions (including weekend days)</u>. All term paper topics are of similar difficulty and grades will be normalized (up or down) so that they are fair and comparable for each topic.

3. 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 80% of the overall final grade – the mid-term will be worth 32% (0.4x80%) and the final will be worth 48% (0.6x80%). The assignment will count for 20% of the final grade.

SUPPLEMENTAL AND DEFERRED EXAMS

The Supplemental exam is worth 80% 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

- Olivia Renée Dumas (<u>olivia.dumas@mail.mcgill.ca</u>): Dr. Chacron, Dr. Vollrath, Dr. Lomber, Dr. Krishna lectures 1-3.
- Xavier Laplante (<u>xavier.laplante@mail.mcgill.ca</u>): Dr. Brandon, Dr. Pack, Dr. Schmuel, Dr. Krishna lectures 4-6.

COURSE EVALUATIONS

Course Evaluations will be made available in December 2022 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.

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