ANAT 321
Circuitry of the Human Brain
Fall, 2023

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Course Content

This course examines how the organization and function of our brains enable us to perceive, move and think. The class comprises lectures and readings. The lectures are Mondays, Wednesdays, and Fridays, from 10:35 – 11:25 AM in Stewart S1/4. All lectures are recorded and posted on mycourses.

Lecture Schedule

Date	Topic
Aug 30	Introduction to Neuroanatomy
Sept 1	Introduction to Sensory Systems (Reading 1)
Sept 5	Labor Day, no class
Sept 6	Sensory systems
Sept 8	Spinal cord
Sept 11	Spinal cord
Sept 13	Brainstem
Sept 15	Brainstem (Reading 2)
Sept 18	Thalamus
Sept 20	Thalamus (Reading 3)
Sept 22	Cerebral cortex
Sept 25	Cerebral cortex (Reading 4, part 1)
Sept 27	Cerebral cortex
Sept 29	Cerebral cortex
Oct 2	Cerebral
Oct 4	Cerebral cortex (Reading 4, part 2)
Oct 6	Reading Week starts, no class
Oct 9	Thanksgiving (no class)
Oct 11	Reading week (no class)
Oct 12	Midterm review (Thursday class)
Oct 16	Visual System
Oct 18	Visual system
Oct 20	Visual system
Oct 23	Visual system (Reading 5)
Oct 25	Motor systems

Oct 27	Motor systems
Oct 30	Motor systems
Nov 1	Basal ganglia
Nov 3	Basal ganglia (Reading 6)
Nov 6	Cerebellum
Nov 8	Cerebellum
Nov 10	Executive function, feelings, emotions, and decision-making
Nov 13	Executive function
Nov 15	Executive function
Nov 17	Executive function
Nov 18	Executive function (Reading 7)
Nov 20	Learning and memory
Nov 22	Learning and memory
Nov 24	Learning and memory
Nov 27	Blood flow and meninges
Nov 29	Video: dissecting a human brain
Dec 1	Neuroscience of consciousness and conscious will (Reading 8)
Dec 4	Final exam review

Readings

There are eight readings spread out over the course of the semester. They are available on mycourses. The readings assume that you have covered a certain amount of material in the course, so it's best to do them around the times indicated in course outline.

Evaluation

Grades will be based on a midterm and a final. Both the midterm and the final are multiple choice. Both will be in person unless there is a change in the University COVID policy.

Midterm: 40%, Oct 12, 6:30 – 8:30 PM, Leackock Rm 132
Final exam: 60%, TBA

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Language of Submission

"In accord with McGill University's Charter of Student Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives." (Approved by Senate on 21 January 2009)

« Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté, sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue. »

Academic Integrity

"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." (Approved by Senate on 29 January 2003) (See McGill's guide to academic honesty for more information.)

« L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le guide pour l'honnêteté académique de McGill.»

Departmental Grading Policy

The Department of Anatomy & Cell Biology will **NOT** revise/upgrade marks except on sound academic grounds. Once computed, the marks in this course will **NOT** be altered/increased arbitrarily. Decimal points will be "rounded off" as follows: if the final aggregate mark is computed to be 79.5%, the mark will be reported as 80% (an A-); a final aggregate mark of 79.4% will be reported as 79% (a B+). These marks are **FINAL and non-negotiable.**

Departmental Midterm Exam/In-Course Assessment Deferral Policy

A midterm exam or other in-course assessment (i.e., quiz, assignment, paper, etc.) in a course administered by the Department of Anatomy & Cell Biology may only be deferred in the case of a **justified absence** due to serious illness or significant extenuating circumstances AND when **valid documentation** is received by the Course Coordinator within FIVE working days of the original midterm exam or due date.

If the deferral request is accepted by the Course Coordinator, students may be offered one or both of the accommodations below, depending on the grading structure of the course:

a) Add the weight of the midterm exam/in-course assessment to the final exam or another course component.

b) Write a deferred midterm exam. The deferred midterm will be held on Monday, October 16. The time and location are to be determined.