

Department of Anatomy and Cell Biology
ANAT-322 — Neuroendocrinology (3 credits)
Winter 2021

Course schedule (day & time): Wednesdays and Fridays (2:35 to 3:55 pm)

Number of credits: 3

GENERAL INFORMATION:

Course Coordinator and Instructor:

Dr Claire-Dominique Walker.

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Office hours: On appointment

Teaching Assistant:

Ms Emilie Brûlé

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Message Regarding Remote Delivery

The remote learning context presents new challenges and opportunities for both students and faculty. In order to maximize engagement, the course has been dramatically modified from previous years. Instructors will provide lecture material in both synchronous (during scheduled class time) and flexible formats (pre-recorded material). In both cases, lectures will be limited in length as much as possible to combat student fatigue. All instructors are sympathetic to the challenges created by the pandemic and are committed to providing a supportive learning environment. All students should be aware of the following resources: Student-specific Guidelines for Remote Teaching and Learning and Remote Learning Resources.

Instructional Method:

The instructional method will consist in lectures focused on the main neuroendocrine axes and their physiological regulation. The course will be taught by several lecturers who are experts in a particular aspect of neuroendocrine function.

Teaching on Zoom, presence during virtual classes, and recording of classes:

- The whole course will be taught using the Zoom web conferencing tool. It is now integrated into myCourses and students should familiarize themselves with Zoom before classes start. Resources are available at: <https://www.mcgill.ca/tls/students/remote-learning-resources/learningzoom>.

- In some instances, there will be a combination of recorded material and synchronous lectures. Students will be required to familiarize themselves with the recorded material before the synchronous lecture time. In this case the synchronous portion of class will be reduced to approximately 45min, starting at the usual class start time.

- Most lectures will be given in a fixed (synchronous) manner and in this case, it is expected that the students will attend the course in a synchronous manner (live) as much as possible, and preferably for all lectures. If for any reasons (e.g. scheduling, internet access), a regular live attendance to classes is not possible for a student, it will be possible to view the recorded lectures

as they will be posted online after they take place. Recorded lectures will be made available to all students **for a limited period of time after class**. Video recordings or any class material (including exam questions) should not be downloaded, duplicated or distributed in any instances. Students **must consent** to being recorded if they are attending a recorded lecture. Students will be notified through a 'pop-up' box in Zoom if a lecture or portion of a class is being recorded. *By remaining in sessions that are recorded, students agree to the recording and understand that their image, voice, and name may be disclosed to classmates.* They also understand that recordings will be made available in myCourses to students registered in the course. If students are not comfortable being in a class that is recorded, they may decide to not take part by logging off Zoom. Instructors will make class video recordings available in myCourses so that students who log off will be able to later watch the recording. The advantage of attending live lectures is that students will get a chance to ask questions directly through the "Chat" tool and the professor will keep some time to answer them during the last 10min of class. The "Chat" will be monitored by the TA during class.

- Students will be encouraged to turn on their videos during class. However, it is understood that various reasons might make students unwilling to turn their video on (e.g. privacy, internet bandwidth or usage). For this reason, although encouraged, it will not be required that students have video on in Zoom. Students could consider having video off during lectures, but turning it on when they ask questions.

Course material:

- Handouts of lecture slides will be available on myCourses before class.
- Suggested textbooks: Several books are available through McGill Library (McIntyre):

"Neuroendocrinology in Physiology & Medicine" edited by P.M. Conn and M.E. Freeman (1999),

"An introduction to Neuroendocrinology" by Richard Brown,(1994)

"Neuroendocrinology: an integrated approach" by D. Lovejoy (2005)

"Handbook of Neurochemistry and Molecular Neurobiology" by J.Blaustein, A. Lajtha (2006).

"Handbook of Neuroendocrinology" G. Fink, D. Pfaff, J.Levine Eds, AP (2012)

- Chapters and reviews relevant to specific lectures or block of lectures will be indicated by individual lecturers and will be posted on myCourses when appropriate.

COURSE CONTENT :

F=Friday, W=Wednesday, S=synchronous lecture, R=recorded lecture

January 8	F	Intro and Functional anatomy of the neuroendocrine system	T. Stroh	S
January 13	W	Hypothalamus, pituitary gland & neuroendocrine regulation	T. Stroh	S
January 15	F	The magnocellular system, oxytocin, vasopressin	T. Stroh	S
January 20	W	Oxytocin, pregnancy, lactation and the social brain	CD. Walker	S
January 22	F	Neuroendocrine control of reproduction I	D. Bernard	R+S
January 27	W	Neuroendocrine control of reproduction II	D. Bernard	R+S
January 29	F	Neuroendocrine control of reproduction III	D. Bernard	R+S
February 3	W	Neuroendocrine control of reproduction IV	D. Bernard	R+S
February 5	F	Q & A session	Stroh, Walker, Bernard	S
		QUIZ 1 (Jan 8-29)	15%	
February 10	W	Regulation of growth hormone secretion	T. Stroh	S

February 12	F	Somatostatin	T. Stroh	S
February 17	W	Hypothalamic control of food intake	M. Kokoeva	S
February 19	F	Reward and brain stem circuits in energy balance	M. Kokoeva	S
February 24	W	Endocrine disruptors I	T. Stroh	S
February 26	F	Genetic models in neuroendocrinology	F. Storch	S
March 1-5		BREAK		
March 10	W	Q & A session	Stroh, Storch, Kokoeva	S
		QUIZ 2 (Feb 10-Feb 26)	15%	
March 12	F	The adrenocortical axis	CD.Walker	R+S
March 17	W	Stress and glucocorticoids in the CNS	CD.Walker	R+S
March 19	F	Chronic stress and disease	CD.Walker	R+S
March 24	W	Neuroimmune-neuroendocrine and microbiome in pathology	CD.Walker	R+S
March 26	F	Circadian rhythms and neuroendocrine regulation I	N Cermakian	S
March 31	W	Circadian rhythms and neuroendocrine regulation II	N Cermakian	S
April 2		EASTER no class		
April 7	W	Homeostatic regulation of sleep	N Cermakian	S
April 9	F	Q & A session	Walker, Cermakian	S
		QUIZ 3 (March 12-April 7)	15%	
April 14	W	Neuroendocrine control of the thyroid gland I	M. Tamilya	TBA
April 16	F	Neuroendocrine control of the thyroid gland II	M. Tamilya	TBA
April 17-30		Final exam		

EVALUATION:

• Final Exam: 55%

The final exam will consist of several short answer questions on all topics covered in class and all course material. It will be held during the final exam period in April, and will be a timed exam.

• Quizzes (3x15%): 45%

Throughout the course there will be 3 quizzes, each worth 15% of the final grade. Quizzes will consist of multiple choice questions and short answer questions. Each quiz will follow a Question & Answer period scheduled with lecturers from the particular section of the course that the quiz will cover. The time of quiz availability will be announced in myCourses.

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.

Cheating, plagiarism and other regulations:

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 www.mcgill.ca/students/srr/honest/ for more information).

In accord with McGill University's Charter of Students' Rights, students have the right to submit in English or in French any written work that is to be graded (except in courses where knowledge of a 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.

Copyright:

© 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.

Student evaluation of the course:

Students will be asked to participate in the evaluation of the course at the end of the semester by filling out the evaluation form online (Mercury). This is valued feedback for the course coordinator and instructors and allows them to continue improving the course and its content.