## NEUROENDOCRINOLOGY COURSE (ANAT-322) January-April 2018 Department of Anatomy and Cell Biology, McGill University

**Description:** This undergraduate-level course is intended as an overview of the different neuroendocrine systems participating in homeostasis. Structure, functioning and integration of neuroendocrine systems are discussed.

Time & Place: Tuesday (1.5hr) from 4:00 to 5:25 PM, SADB room 2/36

Thursday (1.5hr) from 4:00 to 5:25 PM, SADB room 2/36

**Textbooks and supplementary materials**: 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)

In addition, chapters relevant to specific lectures or block of lectures will be indicated by individual lecturers and supplemental lecture material might be provided at the time of the lecture.

Course coordinator: Dr Claire-Dominique Walker, Douglas Institute,

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Course teaching assistant: Ms Angela Guadagno. Angela.guadagno@mail.mcgill.ca

Schedule :Classes are from January 9th, 2018 to April 12th, 2018.

Spring break from March 5-9, 2018 (no class)

<u>Course evaluation</u>: <u>Midterm exam is on February 13th, 2018 (6-9PM, Adams Auditorium)</u>. The midterm is worth 40% of the final mark. There will be a deferred exam for the midterm exam. The midterm exam will include material covered from January 9<sup>th</sup>-February 8<sup>th</sup> inclusively. Students may miss the midterm exam only for medical reasons and with a Doctor's note.

The regular final exam, and any special final exams if necessary, will be scheduled during the final exam session period, between April 17-30th, 2018. The regular exam will be worth 60% of the final grade and will include material covered from February 15<sup>th</sup> to April 12<sup>th</sup>. The format of both exams will consist of a combination of multiple choice questions and short essay questions.

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/integrity/ for more information).

**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.

## Grading:

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

<u>**Reassessments and rereads:</u>** FACULTIES OF ARTS AND SCIENCE (INCLUDING B.A. & SC.) There are two recognized types of impartial reviews, i.e., reassessments or rereads:</u>

• reassessment of coursework (term papers, mid-terms, assignments, quizzes, etc.)

reread of a final exam

In both cases, rather than recorrect the work and then grade it as they would have done themselves, reviewers assess the appropriateness of the original grade based, for example, on the application of the grading key to the student's work. If a grade is deemed unfair, it is changed, whether the new grade is higher or lower than the original, i.e., the reviewer's grade takes precedence over the original grade.

Rereads of Final Examinations Deadlines to request final exam rereads:

- March 31 for courses in the Fall term
- September 30 for courses in the Winter and Summer terms

Exam reread fees apply; refer to the Student Accounts website for fee amounts and information. For students pursuing a Bachelor of Arts, Bachelor of Science, or the Bachelor of Arts & Science:

• Requests for a final exam reread must be made via the Service Point webform;

• It is strongly recommended, but not required, that you consult with the instructor of the course before requesting a reread of a final exam.

Students from outside the Faculties of Arts or Science who are taking a course administered by the Faculty of Arts or Science must submit final exam reread requests directly to the Student Affairs Office of their Faculty for approval. Reassessments and rereads in courses not in the Faculties of Arts and Science are subject to the deadlines, rules, and regulations of their relevant faculties.

Programs, Courses and University Regulations-2016-2017 (last updated Jan. 14, 2016)

## Schedule of lectures (Winter 2018): ANAT-322

January	9	Course introduction (10min) Functional anatomy of the neuroendocrine system	D. Walker T. Stroh.
	11	Hypothalamus, pituitary gland & neuroendocrine regulation	T Stroh
	16	The magnocellular system, oxytocin, vasopressin	T. Stroh
	18	Oxytocin, pregnancy, lactation and the social brain	D. Walker
	23	Regulation of growth hormone secretion	T. Stroh
	25	Somatostatin	T. Stroh
	30	Neuroendocrine control of reproduction I	D. Bernard
February	1	Neuroendocrine control of reproduction II	D. Bernard
	6	Neuroendocrine control of reproduction III	D. Bernard
	8	Neuroendocrine control of reproduction IV	D. Bernard
	13	No class MIDTERM EXAM (6-9PM) ADAMS auditorium	
	15	The adrenocortical axis	D. Walker
	20	Stress and glucocorticoids in the periphery and CNS	D. Walker
	22	Chronic stress and disease	D. Walker
	27	Immune and neuroendocrine interactions I	A. Aguilar
March	1	Immune and neuroendocrine interactions II	A. Aguilar
	5-9	Spring break (no class)	
	13	Hypothalamic control of food intake	M. Kokoeva
	15	Reward and brain stem circuits in energy balance control	M. Kokoeva
	20	Genetic models in neuroendocrinology	F. Storch
	22	Circadian rhythms and neuroendocrine regulation I	N.Cermakian
	27	Circadian rhythms and neuroendocrine regulation II	N.Cermakian
	29	Circadian rhythms and homeostatic regulation of sleep	N.Cermakian
April	3	Neuroendocrine control of the thyroid gland function I	M. Tamilia
	5	Neuroendocrine control of the thyroid gland function II	M. Tamilia
	10	Endocrine disruptors in neuroendocrinology	T. Stroh
	12	Tutorial and review session	D Walker
	17-30	FINAL EXAM (regular exam session)	