

CAPS 424 MAMMALIAN ENDOCRINOLOGY JANUARY-APRIL 2020

Course Coordinator: Dr. Susanne Clee
office: LSI 5352, 604-827-4271, smclee@mail.ubc.ca

The course will be delivered largely in lecture format, with some group work, a group presentation assignment, and in-class discussion of topics.

Classes: Tues & Thurs, 2:00 – 3:50 p.m. (a 10 min. break will occur in the middle)
First Day of Classes: Tues. January 7, 2020; Last Day of Classes: Tues. April 7, 2020
Location: LSC 1510

Course description: Hormonal control of homeostatic, metabolic and reproductive function. Intended for Honours students in Cellular, Anatomical and Physiological Sciences or other life sciences. [3-0-0]

Prerequisite: A cumulative average of 75% over at least 90 credits attempted in the first three years of a student's program and a minimum mark of 75% in CAPS 301.

Course Learning Objectives: Upon completion of this course, students will be able to explain, distinguish, compare and contrast, and illustrate:

- the processes by which various types of hormones are produced
- how hormonal signals are transmitted to and within cells, how the signals are carried out by cells, and how the signals are maintained or terminated
- the activities of key hormones regulating metabolism, homeostatic responses and reproduction

Course Grading: There will be one midterm and one final examination, non-cumulative. Exams will consist of a mixture of written short and long answer questions. The final exam will also include multiple choice questions based on student presentation and discussion sessions.

The final grade will be calculated as follows: 10% for student presentations (marked by faculty in attendance) and 90% for the two exams. For the exams, the one with the higher mark will count 50% and the one with the lower mark will count 40% towards the final grade.

Missed in-class work (including the midterm) may be made up at the discretion of the course coordinator. Please inform Dr. Clee as soon as possible, in advance. Supporting documentation may be requested. Deferral of the final examination will follow the policies set forth here: <https://science.ubc.ca/students/advising/exams>

Statement of values and support: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here: <https://senate.ubc.ca/policies-resources-support-student-success>.

Course Schedule:

DATE	TITLE	LECTURER
Jan. 7	Introduction	Clee
Jan. 9	Peptide hormone biosynthesis/processing	Verchere
Jan. 14	Receptors	Luciani
Jan. 16	Intracellular signalling pathways 1	Luciani
Jan. 21	Intracellular signalling pathways 2	Luciani
Jan. 23	Endocrine control of transcription and development	Hoffman
Jan. 28	Pancreas I – Entero-Insular Axis	Kieffer
Jan. 30	Pancreas II - Diabetes	Ellis
Feb. 4	Pancreas III – Regulation of Insulin and Glucagon	Kieffer
Feb. 6	Downstream effectors of signalling I: mRNA translation	Rideout
Feb. 11	Downstream effectors of signalling II: lipid metabolism	Rideout
Feb. 13	<i>Mid-term exam (material Jan 9 to Feb 11)</i>	Clee
Feb 18, 20	Mid-term Break	
Feb. 25	Adipose tissue and adipokines I	Clee
Feb. 27	Regulation of energy balance & body weight	Clee
Mar. 3	Adipokines II	Clee
Mar. 5	Adrenal and the SNS	Viau
Mar. 10	Hypothalamus/pituitary	Viau
Mar. 12	Opioid peptides	Viau
Mar. 17	Reproductive endocrinology I	Kindler
Mar. 19	Reproductive endocrinology II	Kindler
Mar. 24	Reproductive endocrinology III	Kindler
Mar. 26	In class preparation time for group assignment	Clee
Mar. 31	Endocrinology in the news	Clee
Apr. 2	<i>Student presentations</i>	All faculty
Apr. 7	<i>Student presentations & SEOT</i>	All faculty

SEOT- 20 minutes in-class time made available for on-line Student Evaluation of Teaching