



Department of Biology Course Outline

Fall, 2024, BIOL 4320, Vertebrate Endocrinology, 3.0

Course Instructor: Chun Peng

How to address me: Professor Peng

Personal Pronouns: she/her/hers

Email: cpeng@yorku.ca

Note: If you have a question or would like to talk with me, you can send an email, visit me during student hours (see below), or approach me after class.

Phone: (416) 736-2100 ext. 40558

Student Hours: Wednesday, 2pm-3pm

What are 'Student Hours'?

Student hours are dedicated times through the week for the course instructor and TAs to meet with YOU. Pop in to introduce yourself, ask questions about the course, or discuss content from the course.

Note: If this time doesn't work for you, email me and we can arrange an alternate time to meet.

Course Format: In-person

Prerequisites (strictly enforced): SC/BIOL 2020 3.00, SC/BIOL 2021 3.00, SC/BIOL 2030 4.00. Course credit exclusion: HH/KINE 4448 3.00

Office Location: LSB329b

[Click here for visual directions.](#)

Class Times: Monday & Wednesday, 11:30 am – 1:00 pm

Class Location: CB115

[Click here for visual directions.](#)

<https://currentstudents.yorku.ca/study-spaces>

Course TAs:

Course Outline Table of Contents:

Land Acknowledgement	p2
Course Learning Objectives	p2
Inclusive Teaching Statement	p2
Community Guidelines	p3
Learning Materials	p4
Course Assessment	p4
University Policies and Important Dates	p5
Course Schedule	p8

Land Acknowledgement

York University recognizes that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit, and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.

Course Information

Course Calendar Description: Vertebrate endocrine structure and function; synthesis and regulation of hormones; mechanisms of hormone actions and hormonal integration of physiological processes. Three lecture hours. One term. Three credits.

Course level learning objectives:

Upon successful completion of this course, students should be able to:

1. Describe basic principles and concepts of Endocrinology.
2. Determine suitable approaches and proper experimental designs for endocrine research.
3. Critically analyze original research papers in Endocrinology.
4. Illustrate mechanisms of hormone actions.
5. Summarize how hormones regulate various physiological processes.
6. Evaluate the consequence of dysfunction of hormones.

Lecture Topics

1. Introduction to Endocrinology
2. Endocrine Methodology
3. Mechanisms of Hormone Actions
4. Brain and Pituitary Hormones
5. Melatonin
6. Hormonal Regulation of Calcium Homeostasis
7. Gastrointestinal Hormones
8. Pancreatic Hormones
9. Thyroid Hormones
10. Adrenal Hormones
11. Growth Hormones
12. Reproductive Hormones

Inclusive teaching statement:

I am committed to fostering an environment for learning that is inclusive for everyone regardless of gender identity, gender expression, sex, sexual orientation, race, ethnicity, ability, age, class, etc. All students in the class, the instructor, and any guests should be treated with respect during all

interactions. Please feel free to contact me via email or in person to let me know about any experiences you have had related to this class that have made you feel uncomfortable.

Community Guidelines

The following values are fundamental to academic integrity and are adapted from the International Center for Academic Integrity². In our course, we will seek to behave with these values in mind.

	As students, you will...	As a professor, I will...
Honesty	<ul style="list-style-type: none"> Honestly demonstrate our knowledge and abilities on assignments and exams Communicate openly without using deception, including citing appropriate sources 	<ul style="list-style-type: none"> Provide honest feedback on on assignments and exams Communicate openly and honestly about the expectations and standards of the course via the syllabus, and with respect to assignments and exams
Responsibility	<ul style="list-style-type: none"> Complete assignments on time and in full preparation for class Show up to class on time, and be mentally/physically present Participate fully and contribute to class discussions 	<ul style="list-style-type: none"> Provide timely feedback on your assignments and exams Show up to class on time, and be mentally and physically present Create relevant assessments
Respect	<ul style="list-style-type: none"> Speak openly with one another, while respecting diverse viewpoints and perspectives Provide sufficient space for others to voice their ideas 	<ul style="list-style-type: none"> Respect your perspectives even while we challenge you to think more deeply and critically Help facilitate respectful exchange of ideas
Fairness	<ul style="list-style-type: none"> Not seek unfair advantage over fellow students in the course 	<ul style="list-style-type: none"> Create fair assignments and exams, and grade them in a fair, and timely manner Treat all students equitably
Trust	<ul style="list-style-type: none"> Not engage in personal affairs while on class time Not distribute course materials to others without authorization 	<ul style="list-style-type: none"> Be available to all students whenever possible Not modify the expectations or standards without communicating with everyone in the course
Courage	<ul style="list-style-type: none"> Say or do something when you see actions that undermine any of the above values Accept a lower or failing grade or other consequences of upholding and protecting the above values 	<ul style="list-style-type: none"> Say or do something when I see actions that undermine any of the above values Accept the consequences (e.g., lower teaching evaluations) of upholding and protecting the above values






² This class statement of values is adapted from Tricia Bertram Gallant, Ph.D.

Learning Materials

Textbook: Vertebrate Endocrinology/David Norris and James A. Carr, 6th Edition or Endocrinology / Mac E. Hadley, Jon E. Levine. 6th Edition (recommended).

Website (eClass): <https://eclass.yorku.ca/course/view.php?id=120487>

Technology Checklist:

 <p>An internet-enabled computer to access eClass and materials</p>	 <p>Zoom software installed on computer</p>	 <p>Access to reliable internet</p>	 <p>Webcam</p>	 <p>Microphone</p>
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Note: If you don't have access to a computer, consider borrowing a laptop from York U, financial aid from York, and single workspaces available for student use on campus at the library. (<https://www.library.yorku.ca/web/ask-services/printing-and-computing/computing/public-computers-labs/>)

Assessment in this Course

Research about learning strongly suggests that the most important factor in learning is doing the work of reading, writing, recalling, practicing, synthesizing, and analyzing. Learning happens best when people actively engage material on a consistent basis, and that is why I have high standards in this course. I am confident that, with appropriate effort, you **all** can meet those standards.

Grade Breakdown

COMPONENT	GRADE VALUE
QUIZZES	30%
ASSIGNMENTS	20%
MIDTERMS	20%
FINAL EXAM	30%

Quizzes

There are 4 quizzes total in the course. The quizzes will be multiple choice and true or false questions, and to be completed on eClass. For each quiz you have 30 minutes to complete it. The **top 3 quizzes** will be used to tabulate your total quiz mark in the course. This means that if you miss a quiz, there is no need to worry, as only the top 3 quizzes will be used for your total quiz mark.

QUIZ #	GRADE VALUE	TOPICS	DATE
1	10%	Lectures 1-5	Sep 24
2	10%	Lectures 6-8	Oct 7
3	10%	Lectures 9-13	Nov 6
4	10%	Lectures 14-18	Nov 27

Assignments

There is one assignment in this course. You will choose an original research article in the field of Endocrinology and present a summary of the paper and your critique in a recorded presentation. Full assignment descriptions and marking rubrics are in Lecture 1 slides posted on eClass. The assignment is due on the last day of the class (Dec 3).

Late policy: 5% will be deducted per day.

Midterm Exam

The midterm exam will take place online on Oct 21, 2024. It is **designed to take 60 minutes** to complete. The midterm will consist of multiple choices, true or false, fill in the blanks, short-answer and problem-solving questions.

Missed midterm policy: There is no make-up exam for midterm. If you miss the midterm due to an unpredicted reason, please email me (cpeng@yorku.ca) within 2 days of the exam. The weight of midterm will be assigned towards the final exam.

Final Exam

The final exam will be in-person. It will take place during the Final Exam period and will be scheduled by the Registrar's Office.

Missed final exam policy: If you miss the final due to an unpredicted reason, you must email me within two days of the final exam and send me a completed Deferred Standing Agreement (DSA) form.

University Policies

Important Dates

Drop Deadline: Nov 8, 2024 (last day to drop without course on transcript)

Course Withdrawal Deadline: Nov 9 to Dec 3, 2024 (course still appears on transcript with 'W')

Grading Scheme

In accordance with the York University Undergraduate Calendar Regulations, the letter grades assigned in undergraduate courses at York conform to the descriptions and grade ranges shown here:

<https://calendars.students.yorku.ca/2022-2023/grades-and-grading-schemes>

Academic Honesty and Integrity

Academic misconduct undermines the values of honesty, trust, respect, fairness, and responsibility that we expect in this class. York University provides supports such as academic integrity workshops to ensure that all students understand the norms and standards of academic integrity that we expect you to uphold.

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (<http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards. Please review and familiarize yourself with the policy.

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve your research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website:

Examples of actions that do not adhere to York's Academic Integrity Policy include:

- Plagiarism (passing off someone else's work as your own)
- Accessing unauthorized sites for assignments or tests
- Unauthorized collaboration on assignment and exams
- Uploading work to third party repository sites (e.g., Course Hero, One Class, etc.)
- Scanning, sharing, uploading, or publishing exams, tests, or scholarly work

For more information on what academic integrity is and why it is important see:

<https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/>. Information on the process of investigations into breaches of academic honesty: <https://spark.library.yorku.ca/academic-integrity-breach-of-policy-on-academic-honesty/>

Important Note from the FSc Committee on Examinations & Academic Standards (CEAS):

Numerous students in Faculty of Science courses have been charged with academic misconduct when materials they uploaded to third party repository sites (e.g., Course Hero, One Class, etc.) were taken and used by unknown students in later offerings of the course. Whenever a student submits work obtained through an external site (e.g., Course Hero, Chegg), the **submitting student will be charged with plagiarism** and the **uploading student will be charged with aiding and abetting**. To avoid this risk, students are urged not to upload their work to these sites.

Assistance for Students (Academic and Well-Being)

Academic Advising*: <https://www.yorku.ca/science/academic-advising/> * Departments also offer program-specific advising. Check with your Department's Undergraduate Office.

Centre for Human Rights, Equity, and Inclusion: <https://rights.info.yorku.ca>

Centre for Indigenous Students Services: <https://aboriginal.info.yorku.ca/>

Food Access, Funding, & Supports/Resources: <https://students.yorku.ca/food>

Good2Talk 24-hour Ontario Student Helpline: 1-866-925-5454 /Text: GOOD2TALKON to 686868

Keep.meSAFE: <https://myssp.app/keepmesafe/ca/home>

Learning Commons (general academic learning supports including library research, time management, study skills, career planning, etc.): <https://learningcommons.yorku.ca/>

Peer Assisted Study Sessions (PASS): <https://www.yorku.ca/colleges/bethune/get-help/pass/>

Peer Tutoring: <https://www.yorku.ca/colleges/bethune/get-help/peer-tutoring/>

Sexual Violence Response and Support: <https://thecentre.yorku.ca>

Student Counselling, Health & Well-being: <https://counselling.students.yorku.ca/>

Support Services for International Students: <https://yorkinternational.yorku.ca/international-student-support/>

Writing Services: <https://www.yorku.ca/colleges/bethune/get-help/writing/>

York University Student Services: <https://family.yorku.ca/student-services/#SCD>

York University Student Well-being Resources: <https://www.yorku.ca/well-being/resources/students/>

Accessibility

York University is committed to principles of respect, inclusion, and equality of all persons with accessibility needs across campus. The University provides services for students with accessibility needs (including physical, medical, learning, and psychiatric needs) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University.

If you are in need of these services, please register with accessibility services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with accessibility services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Student Accessibility Services: <https://accessibility.students.yorku.ca>

York Accessibility Hub: <http://accessibilityhub.info.yorku.ca/>

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course Director immediately. To arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete and submit an accommodation request form at least 3 weeks *before the exam period begins*.

<https://secure.students.yorku.ca/pdf/religious-accommodation-agreement-final-examinations.pdf>

Student and Instructor Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at <http://secretariat-policies.info.yorku.ca/policies/disruptive-andor-harassing-behaviour-in-academic-situations-senate-policy/>.

Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University.

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<https://calendars.students.yorku.ca/policies-and-regulations>

Course Overview

Sept 4, 9	Introduction
Sept 11	Endocrine Methodologies
Sept 16, 18	Mechanisms of Hormone Actions
Sept 23	Quiz 1
Sept 25, 30	Brain and Pituitary Hormones
Oct 2	Melatonin
Oct 7	Quiz 2
Oct 9	Hormonal Regulation of Calcium Homeostasis
Oct 14, 16	reading week, no class
Oct 21	Mid-term Exam (11:30am to 12:30pm)
Oct 23	Gastrointestinal Hormones
Oct 28	Pancreatic Hormones
Oct 30	Thyroid hormone
Nov 4	Adrenal hormones
Nov 6	Quiz 3
Nov 11	Growth hormone and body growth
Nov 13, 18, 20, 25	Reproductive hormones
Nov 27	Quiz 4
Dec 3	Review (Assignment due)