

Acknowledgement of Indigenous Peoples and Traditional Territories:

York University recognizes that many Indigenous nations have longstanding relationships with the territories upon which our campuses are located that precede the establishment of York University. We acknowledge our presence on the traditional territories of the Mississaugas of Credit First Nation, the Huron-Wendat, the Haudenosaunee Confederacy and the Métis Nation of Ontario.

YORK UNIVERSITY, KINESIOLOGY AND HEALTH SCIENCE HH KINE 3012 3.0 - HUMAN PHYSIOLOGY II Sections M, N WINTER 2023

COURSE INSTRUCTORS: D. PHILLIPS, A. CHENG

COURSE DIRECTOR: A. CHENG

**Lectures: Section M – M/W/F, 8:30-9:30 AM, Location: ACE 102
 Section N – M/W/F, 9:30-10:30 AM, Location: ACE 102**

**** All times in the course outline or elsewhere related to this course are in local Toronto time. ****

**** Course Notes Package: Available in eClass. Lab Manual: Available in eClass.**

Textbook (Recommended**): *Human Physiology From Cells to Systems*
4th Canadian Edition; L. Sherwood and R. Kell. Nelson Publishers (same as for KINE2011)**

PRE-REQUISITE: HH KINE 2011 3.0

COURSE OBJECTIVES:

- To understand the mechanisms by which the human body maintains appropriate function of critical organ systems and to relate this understanding to processes of disease.
- Laboratories compliment the course material and emphasize the clinical significance and the effect of disease on respiratory, cardiovascular and renal function.

COURSE LEARNING OUTCOMES:

- Integrate knowledge of cell physiology and apply it to understanding of organ systems function.
- Describe relationships between physiological parameters through words, graphs, and flow charts.
- Demonstrate computational skills to calculate physiological parameters.
- Discuss the application of physiology concepts to the understanding of health and disease

**** Please review this syllabus carefully to determine how the course content will be delivered, how office hours will be conducted and how exams will be conducted.****

Office Hours: The instructor is generally available for questions following the class. There are no formal office hours. For [administrative questions](#), you must book a time by emailing the Course Director at k3012@yorku.ca, for [lecture content-related questions](#) you must book a time by emailing the Course Instructors at KINE3012_questions@yorku.ca, or email the assigned TA to be sure to have sufficient time to review your questions. Unless otherwise stated, all meetings will be conducted remotely using Zoom.

NOTE: To respect privacy, any meetings are only to take place between the student, the Course Director (and the teaching assistant if relevant) and it is your responsibility to inform the Course Director if anyone else is in the room. Any type of recording of meetings conducted between the student, Course Director, and teaching assistant are prohibited.

Lecture recordings: Lectures will be recorded and posted after live lectures onto eClass. While we will endeavour to have lecture recordings posted within 24 hours after each live lecture, please be aware that technology sometimes fails, and there may be delays in the posting of material.

Please note that 1) the recordings should be used for educational purposes only and as a means for enhancing accessibility; 2) students do not have permission to duplicate, copy and/or distribute the recordings outside of the class (these acts can violate not only copyright laws but also **FIPPA** <https://www.ontario.ca/laws/statute/90f31> and intellectual property rights); and 3) all recordings are to be destroyed after the end of classes.

TECHNICAL REQUIREMENTS FOR TAKING THE COURSE:

Since components of the course will be delivered remotely such as postings for lecture slides/recordings, discussion forums, several platforms will be used (e.g., eClass, Zoom, Kahoot, and Slido) through which students will interact with the course materials, the course directors, Teaching Assistants, as well as one another. Therefore, a computer with internet connection is required to complete the course.

Students must make every effort to arrange adequate internet connection, especially for midterm exams conducted via eClass. If a student has any concerns about their internet connection, they should seek all available options for writing their exams/tests/quizzes in a location with a stable internet connection. In the event that a student is not confident they can access a reliable internet connection, they should communicate their concerns to the Course Directors well in advance of the test. A way to determine Internet connection and speed are online tests, such as [Speedtest](#) that can be run.

eClass course site for KINE 3012:

This is a critical online resource for this course. It will be used to access your grades, for posting questions relating to course material, and to access other course-related resources/study tools. It will also be used for your midterm examinations. Log-on to eClass regularly to check for new information, available grades and to read/respond to discussion questions.

Discussion postings should include only course-related material. Always correspond on eClass using appropriate language.

Academic Accommodations:

It is the student's responsibility to register with [Student Accessibility Services](#) (SAS) within the first 2 weeks of class and to book any in-person tests with SAS at least 3 weeks prior to the test date. Failure to make these arrangements may jeopardize your opportunity to receive academic accommodations. Requiring accommodation does not relieve students from following course policies.

CONTACT INFORMATION:

- For all course **administrative** issues, contact the Course Director, Dr. Cheng at k3012@yorku.ca
- For all course **content** questions, email KINE3012_questions@yorku.ca
- **NOTE: Please respect that all emails will be answered within 24 hours upon receipt of your email during regular workday hours between Monday to Friday from 8:30am to 4:30pm. We may choose to respond to emails outside of these hours, but we also respect your time and do not expect you to answer outside of these regular workday hours.**

(Content questions will be transferred to the eClass Discussion Board by Teaching Assistants for answers and to promote class discussion.)

COURSE EVALUATION: IMPORTANT NOTE - Students are responsible for being actively involved in the course, and for checking eClass regularly and frequently to ensure you have the latest information about the course. “I did not know because I was not online” or “because I did not check eClass” or “because I did not attend the lecture(s)” are not excuses that will be accepted under any circumstances for the course.

Mid-term Exam 1 – 25%

Mid-term Exam 2 – 25%

Lab Exam – 15%

Comprehensive Final Exam – 35%

GRADING AND EXAM POLICIES:

Grading: The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York. For a complete description of York grading system, refer to: http://calendars.registrar.yorku.ca/pdfs/ug2004cal/calug04_5_acadinfo.pdf

Missed Midterm Exams: *Students who miss any midterm will be required to write their deferred midterm at dates indicated below (Refer to Additional Exam Information). No physician’s letter is required to explain why a midterm exam was missed but students are required to email Dr. Cheng no later than 7 calendar days after the date of each midterm to be considered for writing the deferred midterm exam. Failure to do so will result in a grade of zero on that midterm exam. Furthermore, missing any deferred midterm exam will result in a grade of zero on that exam.*

Missed Final Exam: If a student misses the final exam, the student is required to email Dr. Cheng the appropriate paperwork no later than 7 calendar days after the date of the final exam to be considered for writing a makeup final exam in Summer 2023. If relevant, a physician’s letter IS REQUIRED to explain why a final exam was missed. Failure to do so will result in a grade of zero on the final exam.

York's Academic Honesty Policy and Procedures/Academic Integrity Module

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's [Academic Integrity module](#) at the beginning of the course. Breaches of academic integrity range from cheating (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.) to aiding and abetting (helping someone else to cheat). All breaches in this course will be reported to the appropriate university authorities, and can be punishable according to the [Senate Policy on Academic Honesty](#). Student Rights and Responsibilities are here: <https://oscr.students.yorku.ca/csrr>

ADDITIONAL EXAM INFORMATION

1. **Exam Content**: In the lecture part of the course, you will be responsible for and will be examined on the material presented in class and in the lab sessions. The textbook and lab manual are resources and will help you understand this material. They contain many of the visuals presented in the lectures and labs. You are **NOT** responsible for sections that are not covered in the lectures.
2. **Midterm Exams**: The content to be assessed for the midterm exams is **sequential** and **non-cumulative**. Exam questions will be in multiple choice format only. All midterm exams will be conducted online using eClass. Midterm exams will occur during your designated class times for your section (i.e., Section M 8:30-9:30am, Section N 9:30-10:30am). Midterm 1 will be held on **Monday February 6th** and Midterm 2 will be held on **Monday March 13th**.
3. **Deferred Midterm Exams**: Any students who miss their midterm will be required to write a deferred midterm exam, which is sequential and non-cumulative. Exam questions will be multiple choice format only. All deferred midterm exams will be conducted online using eClass. Deferred Midterm 1 will be held on **Saturday March 4th at 12:00-1:00pm**, and Deferred Midterm 2 will be held on **Saturday April 1st at 12:00-1:00pm**.
4. **Lab Exam**: Your lab exam will be conducted as an in-person exam at the same time as your comprehensive final exam during the April exam period (see below). Exam questions will be multiple choice format only.
5. **Comprehensive Final Exam**: Your **cumulative** final will consist of 60% of the questions from material covered since the second midterm; 40% will be based on material from the first 2/3 of the course. Exam questions will be in multiple choice format only. The final exam will be an in-person exam that will be scheduled by the University within the April exam period.
6. If you miss the final exam, the **makeup will be held in Summer 2023**. The date will be announced later in the term. **This is not automatic. You must first email the appropriate paperwork to Dr. Cheng no later than 7 calendar days after the date of the final exam. Failure to do so will result in a grade of zero on the exam.**

Under no circumstances will makeup exams be provided because of course conflicts, conflict with vacation plans or work conflicts.

GENERAL COURSE POLICIES FOR STUDENTS AT YORK UNIVERSITY

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents).

<http://secretariat-policies.info.yorku.ca/>

Topics Covered in KINE3012:

I. HOMEOSTATIC CONTROL SYSTEMS

- A. Characteristics of homeostatic control systems
- B. Feedback and feedforward
- C. The balance concept
- D. Local homeostatic control

II. RESPIRATORY PHYSIOLOGY

- A. Organization of the system
- B. Alveolar ventilation
- C. Gas exchange
- D. O₂ and CO₂ transport
- E. Regulation of respiration
- F. Hypoxia

III. CARDIOVASCULAR PHYSIOLOGY

- A. Organization of the heart and vasculature
- B. Relationships between pressure, flow and resistance
- C. Physiology of the heart
- D. Physiology of the vascular system
- E. Regulation of mean arterial pressure
- F. Cardiovascular function in health and disease

IV. RENAL PHYSIOLOGY

- A. Basic renal processes
- B. Renal regulation of sodium, potassium and water
- C. Regulation of plasma volume
- D. Calcium regulation
- E. Hydrogen ion regulation

LABORATORY INFORMATION

Laboratory Coordinator: **Marco Colavecchia**

Email: colavem@yorku.ca

1. There are a total of **four** labs in the course. Each lab runs for a period of two weeks.
2. Each section of the course (M & N) has its own dedicated room for labs. If you are enrolled in Section M, your labs will be held in room 318A Lumbers; if you are enrolled in Section N, your labs take place in room 318B Lumbers. Please make sure you go to the room assigned to your section of the course.
3. Students in lab sections M01-M15 and N01-N15 commence labs the week of Feb 6th; those enrolled in lab sections M16-M30 and N16-N30 commence the week of Feb 13th. **Please attend only the section in which you are enrolled.**
4. Your lab assessment will be in the form of a lab exam during the final exam period. Questions will focus primarily on analysis and interpretation; however, any information presented to you in labs is testable material. It is in your best interest to attend labs to gain a better understanding of the material.
5. Students looking to switch lab sections should post a message on the 'Lab switching requests' forum on eClass. If you find someone who agrees to switch with you, both you and that student must e-mail **Lab Coordinator, Marco Colavecchia (colavem@yorku.ca)** to confirm your intent to switch. In the e-mail, please include the names, lab sections (M or N) and lab numbers of both you and the other student. Upon receiving confirmation from both parties, Marco will provide instructions on how to officially transfer sections. **The deadline for switching labs is Fri, Feb 3rd, 12:00PM; after this time, the Lab switching forum will be closed, and switching will no longer be permitted.**

KINE 3012 (Winter 2023): Lecture, Lab and Exam Schedule

WEEK #	<u>Mon</u>	<u>Tues</u>	<u>Wed</u>	<u>Thurs</u>	<u>Fri</u>	<u>NOTES</u>
1	Jan. 9 First day of class		11		13	NO LABS
2	16		18		20	NO LABS
3	23		25		27	NO LABS
4	30		Feb. 1		3	NO LABS
5	6 MIDTERM #1 last day to enrol with permission		8		10	Lab #1 (lab sections 01-15)
6	13		15		17	Lab #1 (lab sections 16-30)
7	20		22		24	READING WEEK
8	27		Mar. 1		3	Lab #2 (lab sections 01-15)
9	6		8		10	Lab #2 (lab sections 16-30)
10	13 MIDTERM #2		15		17 last day to drop without a grade	Lab #3 (lab sections 01-15)
11	20		22		24	Lab #3 (lab sections 16-30)
12	27		29		31	Lab #4 (lab sections 01-15)
13	Apr. 3		5		7 University closed due to Good Friday	Lab #4 (lab sections 16-30)
14	10	Study Day last day to withdraw and receive a 'W' on transcript				NO LABS

ADDITIONAL RESOURCES

Calumet and Stong Colleges' Student Success Programming:

[Calumet](#) and [Stong](#) Colleges aim to support the success of Faculty of Health students through a variety of **free programs** throughout their university career:

- [Orientation](#) helps new students transition into university, discover campus resources, and establish social and academic networks.
- [Peer Mentoring](#) connects well-trained upper-year students with first year and transfer students to help them transition into university.
- [Course Representative Program](#) supports the academic success and resourcefulness of students in core program courses through in-class announcements.
- [Peer-Assisted Study Sessions \(PASS\)](#) involve upper-level academically successful and well-trained students who facilitate study sessions in courses that are historically challenging.
- [Peer Tutoring](#) offers one-on-one academic support by well-trained Peer Tutors.
- Please connect with your Course Director about any specific academic resources for this class.
- Calumet and Stong Colleges also support students' [Health & Wellness](#), [leadership and professional skills development](#), [student/community engagement and wellbeing](#), [Career Exploration](#), [Indigenous Circle](#), [awards and recognition](#), and [provide opportunities to students to work or volunteer](#).
- For additional resources/information about Calumet and Stong Colleges' Student Success Programs, please consult our websites ([Calumet College](#); [Stong College](#)), email scchelp@yorku.ca, and/or follow us on Instagram ([Calumet College](#); [Stong College](#)), Facebook ([Calumet College](#); [Stong College](#)) and [LinkedIn](#).
- Are you receiving our weekly email (Subject: "Calumet and Stong Colleges - Upcoming events")? If not, please check your Inbox and Junk folders, and if it's not there then please contact ccscadm@yorku.ca, and request to be added to the listserv. Also, make sure to add your 'preferred email' to your [Passport York personal profile](#) to make sure you receive important news and information.