

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 2024

COURSE INSTRUCTORS: D. PHILLIPS, A. CHENG

COURSE DIRECTORS: D. PHILLIPS, A. CHENG

**Lectures: Section M – M/W/F, 8:30-9:30 AM, Location: Accolate West Building 109 (ACW 109)
Section N – M/W/F, 9:30-10:30 AM, Location: Accolate West Building 109 (ACW 109)**

**** 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: Booklet available for purchase.**

**Textbook (Recommended): *Human Physiology From Cells to Systems*
5th 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.

TECHNICAL REQUIREMENTS FOR TAKING THE COURSE:

Since components of the course will be delivered remotely such as postings for lecture slides, 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.

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. 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, email k3012@yorku.ca
- For all **lecture-related content** questions, email KINE3012_questions@yorku.ca
- For **lab-related content** questions, email your designated TA
- **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.

Lab Participation – 5%

Lab Quizzes – 5%

Mid-term Exam 1 – 20%

Mid-term Exam 2 – 30%

Comprehensive Final Exam – 40%

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). A physician’s letter is NOT REQUIRED to explain why a midterm exam was missed but students are required to email the Course Directors at k3012@yorku.ca 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 the Course Directors at k3012@yorku.ca 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 2024. A physician’s

letter is NOT REQUIRED to explain why a final exam was missed. Failure to attend your missed final exam will result in a grade of zero on that 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:** All midterm exams will be conducted in-person in lecture hall ACW 109. The content to be assessed for the midterm exams is **sequential** and **non-cumulative**. **Midterm 1 will comprise of only lecture-based material, whereas Midterm 2 will comprise of both lecture-and lab-based material.** Exam questions will be in multiple choice format only. Midterm exams will occur during your designated class times for your section (i.e., Section M 8:30-9:20am, Section N 9:30-10:20am). Midterm 1 will be held on **Monday February 5th** and Midterm 2 will be held on **Monday March 11th**.
3. **Deferred Midterm Exams:** All deferred midterm exams will be conducted in-person. 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. Deferred Midterm 1 will be held on **Friday February 16th at 5:00-6:00pm** in Vari Hall A (VH A), and Deferred Midterm 2 will be held on **Friday March 22nd at 5:00-6:00pm** in Accolade West Building 109 (ACW 109).
4. **Comprehensive Final Exam:** The final exam will be conducted in-person and will be scheduled by the University within the April exam period. Your **cumulative** final will consist of 70% of the questions from material covered in all of the lectures, and 30% will entail lab-related content. Exam questions will be in multiple choice format only. **For both Section M and N, your final exam will take place on the same date and time. This date/time will be announced in the second half of the term.**
5. If you miss the final exam, the **makeup will be held in Summer 2024**. The date will be announced later in the term. **This is not automatic. You must first email the appropriate paperwork to the Course Directors at k3012@yorku.ca 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/feedforward, and the balance concept

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 ions, water, and plasma volume

LABORATORY INFORMATION

1. There are a total of **four** labs in the course. Each lab runs for a period of two weeks. Each lab will consist of a quiz (worth 1.25%/lab for 4 labs) and a participation grade (worth 1.25%/lab for 4 labs). For the in-lab quizzes, you must prepare in advance by reading the lab material. Your participation in the lab will be evaluated by your TA.
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-M13** and **N01-N13** commence labs the **week of Feb 6th**; those enrolled in lab sections **M14-M23** and **N14-N23** commence the **week of Feb 13th**. **Please attend only the section in which you are enrolled.**
4. Your lab assessment will be incorporated into the midterm 2 exam as well as the final exam. Questions will focus primarily on analysis and interpretation; however, any information presented to you in labs is testable material.
5. Students can first attempt to switch labs using the Registration and Enrolment Module (REM) for course enrolment. However, if the lab section is already full, 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 visit the KINE Undergrad Office (room 341 Bethune College) or email ugkhs@yorku.ca to confirm your intent to switch. Upon receiving confirmation from both parties, they will place an override in the system to allow you and the other student to transfer between sections in the REM. The override will be valid for 24 hours. **The deadline for switching labs is Fri., Feb. 2nd, 3:00PM; after this time, the Lab switching requests forum will be closed, and switching will no longer be permitted.**
6. Laboratory attendance is **mandatory**. If you anticipate missing one of your scheduled labs for valid reasons (ex. medical appointment), you may request permission from your TA to attend an alternate lab section on a one-time only basis. Please note that a lab may only be made up during the two-week period in which that lab is taking place (i.e. you will not be able to make up lab #1 after Feb 15th), so please reach out to your TA well in advance of your scheduled lab to request permission (two weeks' notice is recommended). Any absences that are not accompanied by a valid reason, and that have not been brought to your TA's attention within a reasonable timeframe, will result in a grade of zero for that lab.

KINE 3012 (Winter 2024): Lecture, Lab and Exam Schedule

WEEK #	Mon	Tues	Wed	Thurs	Fri	NOTES
1	Jan. 8 First day of class		10		12	NO LABS
2	15		17		19	NO LABS
3	22		24		26	NO LABS
4	29		31 last day to enrol with permission		Feb. 2	NO LABS
5	5 MIDTERM #1		7		9	Lab #1 (lab sections 01-13)
6	12		14		16	Lab #1 (lab sections 14-23)
7	19		21		23	READING WEEK
8	26		28		Mar. 1	Lab #2 (lab sections 01-13)
9	4		6		8	Lab #2 (lab sections 14-23)
10	11 MIDTERM #2 last day to drop without a grade		13		15	Lab #3 (lab sections 01-13)
11	18		20		22	Lab #3 (lab sections 14-23)
12	25		27		29 Good Friday; No classes or labs	Lab #4 (lab sections 01-13)
13	Apr. 1		3		5	Lab #4 (lab sections 14-23)
14	8 last day to withdraw and receive a 'W' on transcript	9 Study Day				NO LABS

Lab sections 01-13 (first week of labs)

Lab section time	Lab #1	Lab #2	Lab #3	Lab #4
01 8:30-10:30	Tues, Feb 6th	Tues, Feb 27th	Tues, Mar 12th	Tues, Mar 26th
02 10:30-12:30	Tues, Feb 6th	Tues, Feb 27th	Tues, Mar 12th	Tues, Mar 26th
03 12:30-2:30	Tues, Feb 6th	Tues, Feb 27th	Tues, Mar 12th	Tues, Mar 26th
04 2:30-4:30	Tues, Feb 6th	Tues, Feb 27th	Tues, Mar 12th	Tues, Mar 26th
05 10:30-12:30	Wed, Feb 7th	Wed, Feb 28th	Wed, Mar 13th	Wed, Mar 27th
06 12:30-2:30	Wed, Feb 7th	Wed, Feb 28th	Wed, Mar 13th	Wed, Mar 27th
07 2:30-4:30	Wed, Feb 7th	Wed, Feb 28th	Wed, Mar 13th	Wed, Mar 27th
08 8:30-10:30	Thurs, Feb 8th	Thurs, Feb 29th	Thurs, Mar 14th	Thurs, Mar 28th
09 10:30-12:30	Thurs, Feb 8th	Thurs, Feb 29th	Thurs, Mar 14th	Thurs, Mar 28th
10 12:30-2:30	Thurs, Feb 8th	Thurs, Feb 29th	Thurs, Mar 14th	Thurs, Mar 28th
11 2:30-4:30	Thurs, Feb 8th	Thurs, Feb 29th	Thurs, Mar 14th	Thurs, Mar 28th
12 10:30-12:30	Fri, Feb 9th	Fri, Mar 1st	Fri, Mar 15th	*Fri, Apr 5th
13 12:30-2:30	Fri, Feb 9th	Fri, Mar 1st	Fri, Mar 15th	*Fri, Apr 5th

*** Lab #4 for sections 12 and 13 (M & N) will be postponed one week due to Good Friday on March 29th**

Section M → All labs held in room **318A** Lumbers

Section N → All labs held in room **318B** Lumbers

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 8:30					
8:30 - 9:00	Course section				
9:00 - 9:30					
9:30 - 10:00		HH KINE 3012 3.0 Section M Term W Laboratory 01 [LUM.318A]			
10:00 - 10:30	Lab section				

**This student is enrolled in Sec M, Lab 01;
∴ their first lab is on Tues, Feb 6th
@ 8:30-10:30AM in room 318A Lumbers.**

CHECK YOUR TIMETABLE for the section in which you are enrolled to ensure you attend lab in the correct room and during the correct week.

Lab sections 14-23 (second week of labs)

Lab section	time	Lab #1	Lab #2	Lab #3	Lab #4
14	12:30-2:30	Mon, Feb 12th	Mon, Mar 4th	Mon, Mar 18th	Mon, Apr 1st
15	2:30-4:30	Mon, Feb 12th	Mon, Mar 4th	Mon, Mar 18th	Mon, Apr 1st
16	8:30-10:30	Tues, Feb 13th	Tues, Mar 5th	Tues, Mar 19th	Tues, Apr 2nd
17	10:30-12:30	Tues, Feb 13th	Tues, Mar 5th	Tues, Mar 19th	Tues, Apr 2nd
18	12:30-2:30	Tues, Feb 13th	Tues, Mar 5th	Tues, Mar 19th	Tues, Apr 2nd
19	2:30-4:30	Tues, Feb 13th	Tues, Mar 5th	Tues, Mar 19th	Tues, Apr 2nd
20	10:30-12:30	Wed, Feb 14th	Wed, Mar 6th	Wed, Mar 20th	Wed, Apr 3rd
21	12:30-2:30	Wed, Feb 14th	Wed, Mar 6th	Wed, Mar 20th	Wed, Apr 3rd
22	2:30-4:30	Wed, Feb 14th	Wed, Mar 6th	Wed, Mar 20th	Wed, Apr 3rd
23	8:30-10:30	Thurs, Feb 15th	Thurs, Mar 7th	Thurs, Mar 21st	Thurs, Apr 4th

Section M → All labs held in room **318A** Lumbers

Section N → All labs held in room **318B** Lumbers

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 8:30					
8:30 - 9:00			Course section		
9:00 - 9:30					
9:30 - 10:00				HH KINE 3012 3.00 Section N Term W Laboratory 23 [Keele: LUM 318]	
10:00 - 10:30			Lab section		
10:30 - 11:00					
11:00 - 11:30					

**This student is enrolled in Sec N, Lab 23;
∴ their first lab is on Thurs, Feb 15th
@ 8:30-10:30AM in room 318B Lumbers.
(room 318 is labelled 318B for clarity)**

CHECK YOUR TIMETABLE for the section in which you are enrolled to ensure you attend lab in the correct room and during the correct week.

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.