

Senate Committee on Academic Standards, Curriculum & Pedagogy

Faculty of Health School of Kinesiology and Health Sciences

Course: KINE 3349. 3.0 – Physiology of aging

Course Webpage: eClass

Term: Winter 2023

Prerequisite / Co-requisite: HH/KINE 3012

Course Instructor

Laura Fitzgibbon-Collins, PhD

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consultation hours: By appointment

Teaching Assistant

Tania Pereira, PhD Candidate

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Time and Location

Lectures

MW 11:30-1pm (Mon – SLH C; Wed – ACW 106)

Expanded Course Description

This course describes the physiology of normal aging. This includes the aging of cells, organs, bones and joints, muscle and fat, skin, circadian rhythm, nervous system and brain, cardiorespiratory system, and the gastrointestinal and renal systems. The course will introduce some pathophysiology often seen with aging (e.g. osteoporosis and coronary artery disease) but will highlight that aging does not necessitate development of disease.

Course Objectives

This course describes the aging process within many branches of physiology including those described above. While this course focuses on healthy physiology, some pathophysiology will be introduced in this course as well. However, throughout the course it will be emphasized that the process of aging does not equate to the development of chronic disease.

During this course students will be exposed to information pertaining to both fundamental knowledge of the physiology of aging and introduced to new research evidence.

Ongoing in-class and eClass Discussion groups will allow students to instigate and conduct academic discussions with their peer-group on the topics of interest. Daily iClicker questions will allow students to assess their own progress in the course.

Course Learning Outcomes

After completing this course, students will be able to:

1. Accurately describe the basic physiological function of major bodily structures, in the systems discussed.
2. Exhibit intermediate-level knowledge of physiology by utilizing correct terminology to accurately describe the physiology of healthy aging
3. Relate the healthy changes of anatomy and physiology in the context of aging.
4. Understand the introductory aspects of pathophysiological process that can (but not will) occur with aging.

5. Understand that aging does not necessitate the development of pathophysiological conditions.

Course Text / Readings

Recommended textbook - Physical Change & Aging, 7th edition - Sue V. Saxon, Mary Jean Etten, and Elizabeth A. Perkins. Springer Publishing Company 2014.

Alternate resource - Physiology of Exercise and Healthy Aging - Albert W. Taylor and Michael J. Johnson. Human Kinetics 2008.

Alternate resource - <https://www.merckmanuals.com/en-ca/home/older-people%E2%80%99s-health-issues/the-aging-body/changes-in-the-body-with-aging>

Evaluation:

Midterm 1: 25%	Monday Feb 6 th
Midterm 2: 25%	Monday March 13 th
Final Exam: 25% (cumulative)	April
Group Presentation: 10%	March 15 th – April 3 rd
Participation: 9%	
3% peer evaluation for group presentation,	March 15 th – April 3 rd
3% class discussion for group presentations,	March 15 th – April 3 rd
3% overall class participation,	Jan 11 th – April 3 rd
Reflection essays at beginning and end of course: 6% (3% each)	Due Monday Jan 16 th and Wednesday April 5 th

Group Presentations (10% final grade):

In groups of 3 people, students will present a research article to the class in a Journal club style (Introduction, Methods, Results, Discussion, Conclusion, Future Directions, Fact Sheet). Once a full group is formed, students can gain approval of their topic from the instructor. Presentation topics are based on a first come, first serve policy. Each group will meet with the instructor to discuss their chosen article before/by Monday Jan 30th. Presentations will be 15 mins in duration, followed by 5 mins of a question-and-answer period.

Peer Evaluations for Group Presentations (3% final grade):

Peer evaluations provide an opportunity for students to contribute to the learning of their classmates in a meaningful way. Each week 6-9 students will be asked to evaluate their peers; thus, each student will evaluate a group presentation once. Students will be asked to complete the peer evaluations during class time and email/hand in their peer evaluation to the instructor by the end of class. If a student is absent there will NOT be another opportunity to regain the 3%. Students are expected to provide a graded evaluation and constructive, respectful, feedback to their peers; this evaluation will be anonymously shared with the presenting group, but it will not contribute to the presenting group's mark. The peer evaluator will be graded on their ability to provide constructive feedback to the presenting group.

Class Discussion for Group Presentations (3% final grade):

To improve content retention, active learning is embedded in this course. Each week 6-9 students will be expected to provide 2 well thought out questions for a presentation. These questions are to be printed (with their full name and student ID, as well as the journal article being presented) and handed to the instructor at the beginning of class.

Overall, Class Participation (3% final grade):

To be able to participate in class you will need to complete the iclicker review questions at the beginning of each lecture. If you do not have an iclicker or mobile device, ensure you are able to submit your responses on paper at the end of class (be sure to include your name and student ID). If you only participate in 50% of lectures, you will

earn 1.5% out of 3% of your overall class participation grade. If you participate in 80% or more of lectures, you will earn the full 3% on your overall class participation grade.

Grading:

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests* will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.)

(For a full description of York grading system see the York University Undergraduate Calendar - http://calendars.registrar.yorku.ca/2012-2013/faculty_rules/AP/grading.htm)

“Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles.”

Missed Exams:

Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g. doctor's letter) may request accommodation from the Course Instructor. Further extensions or accommodation will require students to submit a formal petition to the Faculty. The weight of a missed midterm will be moved onto the final exam. The deferred final exam date is May 5th 2023.

Important Course Information:

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/>.

Search for:

1. Academic Honesty (Policy)
2. Research Involving Human Participants (Policy)
3. Academic Accommodation for Students with Disabilities (Policy)
4. Disruptive and /or Harassing Behaviour in Academic Situations (Policy and Procedures)
5. Religious Observance Accommodation
(<https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs>)

NOTE: No cell phones, iPods, iPads, earphones, etc. are permitted during the exams.

Email communication

When emailing, please INCLUDE YOUR FIRST AND LAST NAME AND STUDENT ID. Emails are a form of communication and the spelling, grammar and tone will reflect your communication skills. Emails should be written using professional language that would be acceptable in a workplace to a manager. Emails that include inappropriate form/language (i.e. “Hey”, “c u l8tr”, etc.) or without student name and ID will not be read or returned.

Student Code of Conduct

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic environment, and the responsibility of the student to cooperate in that endeavor. Students must conduct themselves in accordance with York University's Student Code of Conduct. This includes all aspects of the course, including online environments and email. A statement of the policy and procedures involving disruptive and/or harassing behaviour by students in academic situations is available at: <https://oscr.students.yorku.ca/student-conduct>.

NOTE: ANY derogatory online posts or emails are regarded as harassment and will be directed to the Office of Student Conduct.

Student Code of Rights and Responsibilities

This code is intended to be educative and promote accountability among students toward their peers and other members of the York community. This code identifies those behaviours that are disruptive to the educational

purposes of the University, make the campus less safe, diminish the dignity of individuals and groups, and the enjoyment of their rights. It applies specifically to students because the behaviours of non-student members of the University community are held to comparable standards of account by provincial laws, University policies, and their unions' collective agreements. Information about how to address a concern or a complaint regarding a faculty or staff member can be found at: <http://oscr.students.yorku.ca/>.

IMPORTANT COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents) - <https://secretariat.info.yorku.ca/files/CourseInformationForStudentsAugust2012-.pdf>

- Senate Policy on Academic Honesty (<https://www.yorku.ca/secretariat/policies/policies/academic-honesty-senate-policy-on/>) and the Academic Integrity Website (<https://www.yorku.ca/unit/vpacad/academic-integrity/>).
- Ethics Review Process for research involving human participants (<https://www.yorku.ca/research/human-participants/>)
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities (<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-with-disabilities-policy/>; **and** <https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-with-disabilities-guidelines-procedures-and-definitions/>)
- Student Conduct Standards (<https://www.yorku.ca/secretariat/policies/policies/code-of-student-rights-and-responsibilities-presidential-regulation/>)
- Religious Observance Accommodation (<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-religious-observances-policy-guidelines-and-procedures/>)

Course Withdrawal Policy

Students have an option to withdraw from a course past the drop deadline. During the time period after the last day to drop a course without receiving a grade for a term up until the last day of classes for the term, York University undergraduate students can still withdraw from a course. The course enrolment will remain in the University's records and on official transcripts, displayed with a "W" (Withdrawn from Course) notation. This policy gives an option to students who are struggling in a course and/or who have become overwhelmed by their circumstances: it lets students minimize the impact on their academic standing, reduce their course load and focus on successfully completing their other courses.

To see all important dates in different terms, please visit: <http://registrar.yorku.ca/enrol/dates>

You can withdraw from the course using the online Registration and Enrolment Module. Select the course as you normally do to drop the course and the online tool will lead you through the withdrawal process.

The option to withdraw does not apply to:

- Graduate programs
- JD program
- Practica / internships / co-op or other experiential learning placements
- Exchange / Co-registration courses taken at another institution

For more information, please visit: <http://secretariat-policies.info.yorku.ca/policies/withdrawn-from-course-w-policy-and-guidelines/>

Please note: Petitions for removal of the "W" (Withdrawn from Course) notation are not permitted.

If you have any questions, please contact the Faculty of Health, Office of Student and Academic Services at 416-736-5299.

Accessibility

York University provides services for students with accessibility concerns (including physical, medical, learning, and psychiatric), who require accommodation related to teaching and evaluation methods/materials. It is the student's responsibility to register with Student Accessibility Services as early as possible to ensure that appropriate academic

accommodation can be provided with advance notice. You are encouraged to email a copy of your accommodation letter to your instructor within 2 weeks of the beginning of the term. Failure to make these arrangements may jeopardize your opportunity to receive academic accommodations. Requiring accommodation does not relieve students from following course policies. Student Accessibility Services can be accessed here: <https://accessibility.students.yorku.ca/>.

Student 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