

# Senate Committee on Academic Standards, Curriculum & Pedagogy

## Faculty of Health School of Kinesiology and Health Sciences

**Course:** KINE 4452 & KAHS 6480. 3.0 – Autonomic function in health and disease

**Course Webpage:** eClass

**Term:** Fall 2023

**Prerequisite / Co-requisite:** KINE 3012 or equivalent (for KINE 4452)

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### Course Instructor

Heather Edgell, PhD  
355 Bethune College  
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Course consultation hours: By appointment.

### Time and Location

Lectures                      MW 2:30-4pm    R S 203 on Monday VH 1152A on Wednesday

### Expanded Course Description

**Lecture:** The lecture will focus on the anatomy and physiology of the central and peripheral autonomic nervous system, and on the methodologies used to measure autonomic function in research and clinical settings. Students will learn about autonomic reflexes that are active during exercise such as the chemoreflexes, metaboreflex, mechanoreflex and baroreflex. Further, they will learn how each of these reflexes can influence the cardiovascular system at rest and during exercise.

Online lectures will be made available for students to watch prior to the corresponding review class the following Monday. Each Monday, students will review the online lecture prior to participating in group discussions of 2 research articles each week. Research articles need to be read before Monday's class. Refer to the posted lecture schedule for specific dates of lectures/assignments/exams.

**Lab:** Labs will consist of learning the techniques necessary to collect and analyse autonomic function data consisting of a standard clinical autonomic assessment. This will include resting heart rate variability, respiratory sinus arrhythmia, and the blood pressure and heart rate responses to Valsalva and 10 minutes of head up tilt or stand. Students will also be given pre-recorded Muscle Sympathetic Nerve Activity (MSNA) data at rest and during handgrip exercise. Graduate students will attend an in-person lab and complete an assignment, undergraduate students have the option to attend an in-person lab (optional) and will have access to online videos of the data collection. The lab collections and analysis will be examined on the final exam.

**Presentation:** Students will choose a clinical condition which experiences autonomic dysfunction (e.g. Diabetes, Postural Orthostatic Tachycardia Syndrome, Heart Failure, Chronic Obstructive Pulmonary Disease, Concussion, Sleep apnea). Students will provide the class a key points summary prior to their presentation on the topic. These presentations and subsequent discussion will be examined upon for the Final Exam. Graduate students will present alone, undergraduate students will present in groups of up to 4 people. The presentation is worth 15% and the key points summary document is worth 5% of their final grade.

### Course Objectives

This course describes the autonomic nervous system including central and peripheral aspects i.e. brain regions, parasympathetic system, and sympathetic system. Students learn methodologies for measuring

parasympathetic and sympathetic activity in both experimental and clinical settings. Lastly, students discuss the role of the autonomic nervous system in various clinical conditions including postural orthostatic tachycardia syndrome (POTS), heart failure, and diabetes.

## Course Text / Readings

Readings will consist of research articles that will be provided via email, PubMed database, or the Library. Additional readings may be assigned or recommended during the course.

Attendance and participation in polls will require a mobile device (smart phone, tablet, laptop) with the iClicker Reef app or iClicker technology. If this is unavailable to you, please let the instructor know so that alternate arrangements can be made.

## Evaluation:

### Undergraduate (KINE 4452):

Midterm 35% (October 30, 2023)

Group presentation 20% (5% from key points summary document)

Participation 10% (paper discussions and presentations; must attend 10/12 in-person classes)

Final exam 35% (exam period)

### Graduate (KAHS 6480):

Midterm 20% (October 30, 2023)

Data analysis assignment 10% (due November 27, 2023)

Presentation 20% (5% from key points summary document)

Participation 10% (paper discussions and presentations; must attend 10/12 in-person classes)

Final exam 20% (exam period)

Paper on selected presentation topic 20% - (December 4, 2023)

\*Graduate students can elect to have an oral final exam

## 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](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.”

### Senate Policy on Grading Scheme and Feedback

The following two statements were approved by the Senate to include in the course outline:

“that, under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term... be received by students in all courses prior to the final withdrawal date from a course without receiving a grade, with the following exceptions

- graduate or upper level undergraduate courses where course work typically, or at the instructor's discretion, consists of a single piece of work and/or is based predominantly (or solely) on student presentations (e.g. honours theses or graduate research papers not due by the drop date, etc.);
- practicum courses;
- ungraded courses;
- courses in Faculties where the drop date occurs within the first 3 weeks of classes;
- courses which run on a compressed schedule (a course which accomplishes its academic credits of work at a rate of more than one credit hour per two calendar weeks).

Note: Under unusual and/or unforeseeable circumstances which disrupt the academic norm, instructors are expected to provide grading schemes and academic feedback in the spirit of these regulations, as soon as

possible.”

## Missed Assessments:

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. Documentation must be submitted within one week of the original exam/assignment date. Deferred exams will be completed in January 2024. Further extensions or accommodation will require students to submit a formal petition to the Faculty. Assignments or papers must be submitted by 5pm on the due date. Late assignments or papers will experience a grade loss of 25% per day.

### 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:** ANY derogatory emails are regarded as harassment and will be directed to the Office of Student Conduct. No cell phones, iPods, iPads, earphones, etc. are permitted during the exams.

### **Useful links describing computing information, resources and help for students:**

<u>Student Guide to eClass</u>	<a href="https://lthelp.yorku.ca/student-guide-to-moodle">https://lthelp.yorku.ca/student-guide-to-moodle</a>
<u>Computing for Students Website</u>	<a href="https://student.computing.yorku.ca/">https://student.computing.yorku.ca/</a>
<u>Student Guide to eLearning at York University</u>	<a href="http://elearning-guide.apps01.yorku.ca/">http://elearning-guide.apps01.yorku.ca/</a>
Learning Skills Services	<a href="https://www.yorku.ca/scll/learning-skills/">https://www.yorku.ca/scll/learning-skills/</a>
<u>Zoom@YorkU User Reference Guide</u>	<a href="http://staff.computing.yorku.ca/wp-content/uploads/sites/3/2012/02/Zoom@YorkU-User-Reference-Guide.pdf">http://staff.computing.yorku.ca/wp-content/uploads/sites/3/2012/02/Zoom@YorkU-User-Reference-Guide.pdf</a>
<u>Zoom@YorkU Best Practices</u>	<a href="https://staff.computing.yorku.ca/wp-content/uploads/sites/3/2020/03/Zoom@YorkU-Best-Practicesv2.pdf">https://staff.computing.yorku.ca/wp-content/uploads/sites/3/2020/03/Zoom@YorkU-Best-Practicesv2.pdf</a>

## **ACADEMIC HONESTY**

The following is an excerpt from York University's Senate Policy on Academic Honesty:

“Academic honesty requires that persons do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such works as their own or through impersonation. Similarly, academic honesty requires that persons do not cheat (attempt to gain an improper advantage in an academic evaluation), nor attempt or actually alter, suppress, falsify or fabricate any research data or results, official academic record, application or document.”

For more information, please access the following website:

<https://www.yorku.ca/unit/vpacad/academic-integrity/>

Academic honesty and integrity links:

- Senate Policy on Academic Honesty <https://www.yorku.ca/secretariat/policies/policies/academic-honesty-senate-policy-on/>
- Faculty of Health Academic Honesty “Do you realize you may be risking your career?” <http://health.info.yorku.ca/files/2012/10/Academic-Honesty-Presentation-FINAL-COPY-April-18-2013.pdf>
- Academic Integrity website <https://www.yorku.ca/unit/vpacad/academic-integrity/>
- SPARK Academic Integrity <https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/>
- York University Libraries Academic Integrity workshop <https://www.library.yorku.ca/web/research-learn/citing-your-work-academic-integrity/academic-integrity/>
- York University Libraries Academic Integrity workshop “Academic Integrity: How to Stop Worrying and Love Citations” <https://yorku.libcal.com/calendar/libraryworkshops?cid=7880&t=d&d=0000-00-00&cal=7880&inc=0>

### **STUDENT RIGHTS AND RESPONSIBILITIES (STUDENT CODE OF CONDUCT)**

Students are reminded that they should be polite, courteous and civil during their interactions with the course instructor, TA and other students. No abuse, aggression, harassment, intimidation, threats or assault will be tolerated, be it verbal or otherwise. This includes soliciting or “pushing” the instructor or TA for a higher grade.

The following is an excerpt from the Student Code of Conduct, specifically sections 4a and 4b:

“The following behaviours are prohibited. This list is not exhaustive but provides examples of breaches of the standard of conduct. This Code deliberately does not place violations in a hierarchy. The University views all complaints made under the provisions of this Code as serious.

- a. Breaking federal, provincial or municipal law, such as: breaking into University premises; vandalism; trespassing; unauthorized use of keys to space on campus; unauthorized possession or use of firearms, explosives, or incendiary devices; possession or consumption of, or dealing in, illegal drugs; smoking of legal substances outside designated areas; cruelty to animals; theft of University or private property including intellectual property; unauthorized copying of documents; possession of stolen property.
- b. Threats of harm, or actual harm, to a person’s physical or mental wellbeing, such as: assault; verbal and non-verbal aggression; physical abuse; verbal abuse; intimidation; sexual assault; harassment; stalking; hazing.”

For the complete details, please access the following websites:

*Student Conduct and Responsibilities:*

<https://calendars.students.yorku.ca/2022-2023/student-conduct-and-responsibilities>

*Code of Student Rights and Responsibilities (CSRR):*

<https://calendars.students.yorku.ca/2021-2022/code-of-student-rights-and-responsibilities>

*Student Rights and Responsibilities:*

<https://calendars.students.yorku.ca/2022-2023/student-conduct-and-responsibilities>

<http://oscr.students.yorku.ca/student-conduct>

### **POLICY REGARDING ACADEMIC ACCOMMODATION FOR STUDENTS WITH DISABILITIES**

The following is the Policy Statement as approved by the Senate on 1991/06 and revised 2005/02/24:

“York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses.

Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

‘Disabilities’ shall be defined as those conditions so designated under the Ontario Human Rights Code in force from time to time, and will in any event include physical, medical, learning, and psychiatric disabilities.”

For more information, please access the following website:

<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-with-disabilities-guidelines-procedures-and-definitions/>

<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-with-disabilities-policy/>

### **STATEMENT OF POLICY ON FREE SPEECH**

York University reaffirms its commitment to provide an environment conducive to freedom of enquiry and expression where all members of the community may learn, teach, work and live, free from prejudice, inequality and discrimination based on race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, religion, sex, sexual orientation, gender identity, gender expression, age, marital status, family status or disability.

For more information, please access the following website:

<https://secretariat-policies.info.yorku.ca/policies/free-speech-statement-of-policy/>

<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-with-disabilities-policy/>

### **DISRUPTIVE AND/OR HARASSING BEHAVIOUR IN ACADEMIC SITUATIONS POLICY**

York is committed to policies that support the teaching and learning of controversial subject matter. Students and instructors are, however, expected to maintain a teaching and learning environment that is physically safe and conducive to effective teaching and learning for all concerned, and to be civil and respectful at all times within the learning environment, including within classrooms, laboratories, libraries, study halls and other places where academic activities are conducted and in areas proximate to those where academic activities are taking place.

For more information, please access the following website:

<https://www.yorku.ca/secretariat/policies/policies/disruptive-andor-harassing-behaviour-in-academic-situations-senate-policy/>

### **IMPORTANT COURSE INFORMATION FOR STUDENTS**

All students are expected to familiarize themselves with the following information, available on the York University Secretariat webpage (see Policies, Procedures and Regulations) <http://secretariat-policies.info.yorku.ca/>

- Religious Observance Accommodation

<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-religious-observances-policy-guidelines-and-procedures/>

- York's Academic Honesty Policy and Procedures/Academic Integrity Website (see the hyperlinks above)
- Ethics Review Process for research involving human participants  
<https://www.yorku.ca/secretariat/policies/policies/ethics-review-process-for-research-involving-human-participants-policy/>
- 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/>

<https://www.yorku.ca/secretariat/policies/policies/academic-accommodation-for-students-with-disabilities-guidelines-procedures-and-definitions/>

- Student Conduct Standards <https://oscr.students.yorku.ca/>

### **RESOURCES FOR STUDENTS**

- Well-being <https://www.yorku.ca/well-being/>
- Student Counselling, Health and Well-being (SCHW) <https://counselling.students.yorku.ca/>
- Student Accessibility Services (SAS) <https://accessibility.students.yorku.ca/>
- Atkinson Centre for Mature and Part-time Students (ACMAPS) <https://acmaps.info.yorku.ca/>
- York University Libraries <https://www.library.yorku.ca/web/>
- York University Libraries Research Guide: Kinesiology <https://researchguides.library.yorku.ca/kinesiology>
- Academic Advising <https://www.yorku.ca/health/academic-advising/>
- Career Education and Development (CED) <https://careers.yorku.ca/>
- Current Students resources website <https://currentstudents.yorku.ca/>
- Student Financial Services (SFS) <https://sfs.yorku.ca/>