NFS 486H1S: Obesity: Metabolic and Clinical Aspects
Course Syllabus
January 12 to April 6, 2022

Classes: Wednesdays, 09:00 to 12:00, MS 2170

Format: 9:10-10:10 Lecture, 10:20-11:20 Group Activity, 11:20-12:00 Activity Debrief. Times are approximate

Instructor: Laurie Ricciuto, PhD laurie.ricciuto@utoronto.ca
Office Hours: Mondays, 12:30 to 14:00, MS 5347

Course Description:
This course will examine the metabolic aspects of obesity and investigate its causes, consequences, prevention, and treatment.

Learning Outcomes:
By the end of this course you should be able to:

1. describe the changes in metabolism that typically occur as body weight increases
2. explain the biological mechanisms linking obesity to common co-morbidities such as type-2-diabetes, cardiovascular disease and cancer
3. explain the biological mechanisms that limit most weight loss strategies
4. describe the best practices with respect to obesity prevention and treatment

Prerequisites: NFS284H, BCH210H, PSL300, PSL301

Textbook: There is no required textbook for this course.

Course Organization:
This course will include a combination of lectures and in-class group work, following the schedule on the next page. Dr. Ricciuto will randomly assign students to groups of four. In every class, you will work in your assigned groups on a problem, case study or set of questions related to the class lecture. Five of these group activities will be submitted for grading, as indicated on the course schedule. You will also be required to write two short answer tests and one research paper.

Course Schedule:

Date	Content	Graded Assessments
Jan 12	Course Introduction and Overview Review of Carbohydrate & Lipid Metabolism	
Jan 19	Discussion of Assignments Searching and Reading the Literature (Preparation for research paper)	
Jan 26	Consequences of Obesity: Insulin Resistance and Type-2-Diabetes	**Graded Activity #1**
February 2	Consequences of Obesity: Cardiovascular Disease, Hypertension	
Feb 9	**Short Answer Test 1 – online, no class**	
Feb 16	Energy Metabolism and Food Intake Regulation	
Feb 23	Reading Week - no class	
Mar 2	Canadian Adult Obesity Clinical Practice Guidelines	**Graded Activity #2**
Mar 9	Guest Lecture: Dr. Jacqueline Beaudry Department of Nutritional Sciences	**Graded Activity #3** **Due End of Day: Research Paper Draft**
Mar 16	**Short Answer Test 2 – online, no class** **Due End of Day: Peer Review**	
Mar 23	Effective Counselling for Behaviour Change Guest Lecture: Brian W. McCrindle, MD, MPH The Hospital for Sick Children	**Graded Activity #4** **Due End of Day: Final Research Paper**
Mar 30	Weight Management: Clinical Case Study	
Apr 6	Childhood Obesity Guest Lecture: Zeyu Yang, PhD Candidate Department of Nutritional Sciences	**Graded Activity #5**

Course Assessments:

Assessment	Due Date	Weight (%)
In-Class Group Activities (Best 4 out of 5)	**End of class:** Jan 26, Mar 2, 9, 23, Apr 6	10
Short Answer Test 1	Feb 9	25
Short Answer Test 2	Mar 16	25
Research Paper – Obesity & Cancer Paper draft Peer review Final Paper	 Mar 9 Mar 16 Mar 23	 5 10 25
TOTAL:		**100**

Course Expectations:

In-class group activities: Dr. R will randomly assign students to groups of four. During class time, students will work in their assigned groups on structured activities designed to develop their knowledge and skills in interpreting research data, applying principles of metabolic regulation, and collaborating with their peers. There will be a group activity in every class; five of these activities will be submitted for grading (see course schedule), and everyone in the group will be assigned the same grade.

Group work is a very important part of this course and students are expected to attend all group work sessions. If course conflicts necessitate repeated absences from class, students are urged to seriously consider whether this course is suitable for them, as no accommodations will be made for students in this situation.

Term tests: There are two short answer tests, given as online tests, that will be similar in format to the group activities. Tests will be posted on Quercus and available to students at 9:00 am on the day of the test. Within 24 hours (*i.e.*, by 9:00 am the following day), students must submit test responses on the Quercus test template and upload a document with all their responses to Ouriginal, the University's plagiarism detection tool.

Research Paper: The major assignment in this course is a research paper on a particular topic related to obesity and cancer. Students are expected to submit a draft of their paper for peer review; each student will review one of their peer's drafts and will be graded on the quality of their peer review. Due dates for paper draft, peer review and final paper are provided on the course schedule**.**

Ouriginal: Students will be required to submit their term tests and research paper to the University's plagiarism detection tool, Ouriginal, for a review of textual similarity and detection of possible

plagiarism. In so doing, students will allow their term tests and research paper to be included as source documents in the Ouriginal reference database, where they will be used solely for the purpose of detecting plagiarism. For more information about this plagiarism detection tool, see the Student Guide.

If you have problems that prevent you from submitting to Ouriginal, please contact the instructor. All students are expected to submit to Ouriginal, which is voluntary, or provide an alternative. Failure to do so could result in a grade of **ZERO** for the term test or research paper. For those who do not submit to Ouriginal, as an alternative you will be expected to meet with the instructor for a short **oral test** during which you will be asked questions about the process of writing the term test or research paper and your knowledge of the test or paper content. Your test or research paper mark may be modified based on how well you answer those questions.

Communication:

Discussion boards: Questions about course content, such as lecture material, group activities and tests can be posted to Quercus discussion boards at any time.

Office hours: Dr. R will be available once a week for office hours. Students can sign-up in the course calendar for a time slot within the office hours, in order to secure one-on-one time to talk with Dr. R.

Students are asked to limit the use of e-mail to subjects of a more personal nature.

Quercus announcements: Announcements are posted on the course website and it is the student's responsibility to read these regularly. **It is strongly recommended that students leave their Quercus notifications on**, to be automatically advised of Quercus announcements, posting of new course content, upcoming due dates, the releasing of grades and other course website changes and additions.

Policies:

Missed tests and in-class group activities: Students who are absent from class for any reason (e.g., COVID, other illness or injury, family situation) and who require consideration for missed academic work (e.g., graded group activities, term tests) should report their absence through the online absence declaration. The declaration is available on ACORN under the Profile and Settings menu. Students should also advise Dr. R of their absence as soon as possible, ideally prior to the class date, but NO LATER than one week after the date.

Students will have to write a supplemental test/activity. Failure to write a supplemental test or class activity within a reasonable time frame will result in a mark of zero for that component. It is the student's responsibility to contact the course instructor to schedule a make-up test or class activity.

Late assignments: No late assignments will be accepted except for compelling reasons (e.g., COVID, other illness or injury, family situation). To request an extension, please contact Dr. R as soon as possible. If you are uncertain if you have compelling reasons for an extension or if you are unable to

contact Dr, R prior to the due date, then you should FIRST, hand in as much of the assignment as you possibly can on the due date and THEN, contact Dr. R.

Re-read policy: If you have substantial concerns about the grades on your tests, you may request a re-read. A link will be made available on Quercus for you to upload your request and any supporting files. Describe as specifically as possible your concerns. This can be in the form of comments, or alternatively, or in addition, an uploaded copy of your test with annotations and/or highlighting that indicate the specific areas of concern. If comments about your test are not included with your request, a re-read with not be done. As a result of the re-read, **your mark can go up, down, or stay the same.** Please note that the higher your original mark (especially marks >80%) the less likely an upward adjustment in your mark will occur. Dr. R's decision is final.

Deadlines for rereads: One week after the test is returned, unless otherwise indicated.

Copyright, intellectual property and privacy considerations: A lecture is considered the intellectual property of the instructor, and copyright guidelines and regulations apply to the recording of lectures. Furthermore, recording a lecture also requires the observation of privacy guidelines and regulations for students in the class whose presence or statements might also be recorded.

Academic Integrity: The University of Toronto is deeply committed to the free and open exchange of ideas, and to the values of independent inquiry. Academic integrity is fundamental to the University's intellectual life. What does it mean to act with academic integrity? It means acting in all academic matters with **honesty, trust, fairness, respect, responsibility**, and **courage**.

The University of Toronto's Code of Behaviour on Academic Matters outlines the behaviours that constitute academic misconduct. Plagiarism (the presentation or paraphrasing of another person's work as if it was one's own) is a form of academic fraud with potentially serious consequences. All university policies regarding plagiarism will be upheld in this course. Refer to http://academicintegrity.utoronto.ca/

Accessibility: The University provides support and accommodations for students with disabilities to ensure equitable access to opportunities and achievement of students' full potential. If you require accommodations for a disability, or have any accessibility concerns about the course, please contact Accessibility Services as soon as possible. Refer to http://www.studentlife.utoronto.ca/as

University Resources and Supports:

If you or someone you know is in distress and there is an immediate risk, call 911. The following includes supports available to students on all three campuses:

- U of T St. George (Downtown Toronto)
- U of T Scarborough
- U of T Mississauga

Additionally, students have access to U of T My Student Support Program (My SSP) | 1-844-451-9700 24/7. Outside of North America, call 001-416-380-6578. Culturally-competent mental health and counselling services are available in 146 languages for all U of T students**.**

Academic Success Centre: The Academic Success Centre provides workshops, peer mentoring, and other resources to help all students improve their academic skills. Check out the available services at: http://www.asc.utoronto.ca/

English Language Learning: Provides support to students for whom English is a second language. It also supports native speakers who would like to improve their language skills. Check out available services at: http://www.artsci.utoronto.ca/current/advising/ell

Writing Centres: Writing Centres provide assistance with writing assignments for all students. Check out available services at: http://www.writing.utoronto.ca/writing-centres