## NFS 486H1S: Obesity: Metabolic and Clinical Aspects

### **Course Syllabus**

- 1) Lectures: Wednesdays 09:00 am 12:00 pm EST
- **2) Course Description:** This course will examine the metabolic aspects of obesity and investigate its causes, consequences, prevention, and treatment.

## 3) Prerequisites:

NFS284H, BCH210H, PSL300, PSL301

# 4) Learning outcomes:

At the end of this course students will be able to:

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

### 5) Instructor contact information:

Course Instructor: Matilda Essandoh Laar

Email: matilda.laar@utoronto.ca

**Office:** Medical Sciences Building, Room 5267 (1 King's College Circle).

Office Hours: Thursdays 11:00 - 12:30 pm (Jan 6 to Apr 4, 2025), no appointment necessary. If you cannot make office hours, please book a virtual appointment at

https://calendly.com/matilda-laar-1t31/book-a-time-nfs486-virtual-office-hours

## 6) Course Delivery, Website, and Notifications:

**Course Delivery:** This is an in-person course. Supporting course materials will be posted on the course website on a weekly basis before class. The materials are a combination of lecture slides and group work activities.

Course website: The course website is aavailable on Quercus.

**Notifications:** Announcements are posted on the course website. It is the responsibility of the student to check and read the course website for new information 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 important course information.

**Course Expectations**: It is expected that students will attend lectures and actively participate in class activities, group work, and discussions.

# 7) Required materials/resources:

TEXTBOOK: There is no required textbook for this course.

# 8) Course Overview and Assessment

#### **Course Format:**

The course content has **two** equally important components:

- 1) Face-to-Face lectures
- 2) Group Work: Dr Laar will randomly assign students to groups of five or six. Your group number will be available on Quercus on **Tuesday January 14**. There are 8 group activities; each activity is a problem or set of questions that you will work on as a group, related to the day's lecture.

#### **Course Assessment:**

Assessments	Due Date	Weight (%)
Group activity #1- #8	Weekly Jan 15 to Apr 4 (except Feb 12 & Mar 19)	8 (1% x 8)
Obesity & Related Diseases:	Jan 29 <b>Online</b> submission at 9 AM	6
Annotated Bibliography		
Short Answer Test 1	Feb 12 (Based on material covered Jan 10 – Jan	12
(closed book)	31)	
Reading the Obesity Literature	Question(s) based on papers will be available on	25
Assignment: Based on readings	Feb 2 at 5 pm.	
posted on Quercus	Online submission at Feb 16 @ 9 AM	
Reflective Piece on	Mar 9: Due online at 9 AM	2
Motivational Interviewing		
Obesity & Related Diseases:	Mar 12: <b>Online</b> submission at 9 AM	35
Research Paper		
Short Answer Test 2	Mar 19 (based on material covered Feb 14 to	12
(closed book)	March 13)	
TOTAL:		100

## 9) Course Schedule:

Date	Lecture Topic
Jan 8	Course overview & Review of carbohydrate & lipid metabolism
Jan 15	Discussion of Assignments.
Jan 22	Consequences of Obesity: Insulin Resistance and Type-2-Diabetes
	Group Activity #1
Jan 29	Consequences of Obesity: Cardiovascular Disease, Hypertension
	Group Activity # 2
	Annotated bibliography due Jan 29
Feb 5	Energy Metabolism
	Group Activity #3
	Reading the Obesity Literature Assignment due Feb 16
Feb 12	Short Answer Test 1— (Based on material covered Jan 8 – Jan 31)
Feb 19	Reading Week: No class
Feb 26	GUEST LECTURER: Presenter from Hospital for Sick Children: Motivational
	Interviewing- Treatment of obesity
	Group Activity #4
Mar 5	Food intake regulation: Gut peptides
	Reflective piece on motivational interviewing due online at 9 AM
	Group Activity #5
Mar 12	Weight Management: Clinical Case Study
	Group Activity #6
	Research Paper due
Mar 19	Short Answer Test 2— (based on material covered Feb 14 to March 13)
Mar 26	Childhood Obesity
	Group activity #7
Apr 3	Other ways of looking at obesity
	Changing the Obesogenic Environment
	Group Activity #8

## 10) Policy regarding missed tests and group activity:

If you miss a test, it will be necessary to write a make-up test. If you miss a test, please contact Dr. Laar as soon as possible, but no later than 1 week after the test was written, to schedule a make-up test.

Except for compelling reasons, such as illness, personal distress or similar unforeseeable circumstance, all students will be given a grade of ZERO if they miss a test or group activity. You will be asked to provide a reason for your absence. This can be a written explanation from you or a verification of illness or injury form:

http://www.illnessverification.utoronto.ca/index.php See Dr. Laar during her office hours Thursday 11-12:30 pm (MS 5267) or book a virtual meeting time:

https://calendly.com/matilda-laar-1t31/book-a-time-nfs486-virtual-office-hours

All discussions are kept confidential. Students dealing with intense or ongoing personal distress or chronic illness, who may need special and continuing accommodation are advised to discuss their situation with their college registrar.

**IMPORTANT:** Often students don't believe their situation is compelling, when, in fact, it is, so please speak to Dr. Laar about your circumstances.

## 11) Policy regarding late submission of assignments:

Assignments (Annotated Bibliography, Literature Reading, and Obesity and Related Diseases Paper) are due online on the stated due dates and times. **An assignment will be judged late based on the digital time stamp on Quercus.** 

All late assignment will attract a 20% late penalty and an additional 10% each day late. Exceptions will apply for compelling reasons such as illness, personal distress, or similar unforeseeable circumstance. Please contact Dr. Laar by e-mail as soon as possible (matilda.laar@utoronto.ca) to request an extension. You will be asked to provide a brief explanation for the request. This can be a written explanation from you or a verification of illness or injury form: <a href="http://www.illnessverification.utoronto.ca/index.php">http://www.illnessverification.utoronto.ca/index.php</a>. If you prefer, verbal explanations will also be accepted. See Dr. Laar during her office hours Thursday 11-12:30 pm (MS 5267). All discussions are kept confidential. Students dealing with intense or ongoing personal distress or chronic illness, who may need special and continuing accommodation are advised to discuss their situation with their college registrar.

Please note that poor time management, having several assignments due at the same time, having to study for term tests, etc are generally NOT considered compelling reasons for an extension. Extensions for these reasons are only granted in very rare situations. Students are expected to complete their assignments as best they can, hand them in on time, even if incomplete, and accept that they may not get as high a grade as they would like.

If you are uncertain whether you have compelling reasons for an extension or if you are unable to contact Dr. Laar for an extension prior to the due date, then you should:

- 1. FIRST hand in as much of the assignment as you possibly can on the due date and THEN
- 2. Make an appointment to meet with Dr Laar to discuss your situation. All discussions are kept confidential.
- **12) Accessibility Services:** If you are registered with Accessibility Services, extensions are provided in accordance with the terms of your letter of accommodation.
- **13) Assignment re-reads:** If you have concerns about your grading, a re-read can be requested. Instructions on how to submit re-read requests will be provided during the term.

# 14) Plagiarism Detection Tool (Turnitin):

"Normally students will be required to submit their assignments to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their assignments to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com website."

All students are expected to either submit to Turnitin, which is voluntary, or provide an alternative. On Quercus, online submissions will automatically be submitted to Turnitin, but you will have to agree to the Turnitin license agreement. If you have issues with Turnitin, please contact Dr. Laar to arrange an alternate submission. Briefly, for those who do not submit to Turnitin, as an alternative you will be expected to meet with Dr Laar for a short **oral test** during which you will be asked questions about the writing of the assignment and its content. Your assignment grade may be changed based on how well you answer these questions.

Dr. Laar reviews the Turnitin submissions and will e-mail students if there are any concerns about their writing. Often this is no more than a discussion of how to properly paraphrase and/or cite references, but the deduction of marks may also result. Failure to respond to such an e-mail will result in the deduction of assignment marks. If a serious case of plagiarism is suspected, the student's assignment will be forwarded to the Office of Academic Integrity for review and possible sanction.

# 15) Electronic communication with instructor:

A discussion board will be set up on Quercus where students can ask questions about the lecture material. Students are asked to limit the use of e-mail to specific questions about assignments or subjects of a more personal nature.

#### 16) Working in groups:

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 consider seriously whether this course is suitable for them **as no accommodations** will be made for students in this situation.

### 17) Academic Integrity:

Student are expected to conduct themselves with academic integrity. The Code of Behaviour clearly describes activities that are considered academic misconduct: <a href="http://www.governingcouncil.utoronto.ca/policies/behaveac.htm">http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</a>
Students are urged to regularly review the code as ignorance of the rules is not an acceptable excuse.

## 18) Accessibility Needs:

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible:

<a href="http://studentlife.utoronto.ca/accessibility">http://studentlife.utoronto.ca/accessibility</a>

# 19) Help with academic skills:

**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: <a href="http://www.artsci.utoronto.ca/current/advising/ell">http://www.artsci.utoronto.ca/current/advising/ell</a> Writing Centres: Writing Centres provide assistance with writing assignments for all students. Check out available services at: <a href="http://www.writing.utoronto.ca/writing-centres">http://www.writing.utoronto.ca/writing-centres</a>

### 20) Conduct Expectations & Equity, Diversity & Inclusion:

The University welcomes and includes students, staff, and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. All students share the responsibility of maintaining a positive environment for the academic and personal growth of all U of T community members, whether in person or online. These expectations are described in the Code of Student Conduct (https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019).

"The University of Toronto is committed to equity, human rights, and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities."

## 21) Extreme circumstances

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labor disruptions, etc.). Changes will be communicated through regular U of T communication channels, such as Quercus and/or U of T email.