

**NFS 484F/1484F: Advanced Nutrition
Course Syllabus
September 9 to December 2, 2021**

Classes: Thursdays, 09:00 to 12:00, in MS 2170
Format: In-person; 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: Thursdays from 14:00 to 15:00

Course Description:

This is an advanced course in nutrition which covers the analysis of the effect of food and its constituents on living organisms, with particular emphasis on humans. The objectives of the course are threefold:

1. To integrate nutrition with biochemistry and physiology. The emphasis of the course will be on metabolism, examining its regulation from a cellular to whole body perspective.
2. To develop a basis for appreciation of research and its application. This will be accomplished through a combination of lecture material and assigned readings for students.
3. To develop an ability to interpret research data. This will be accomplished through in-class group activities.

Prerequisites: BCH210H1, CSB349H1/PSL350H1/BCH311H1, NFS284H1, PSL302Y1/(PSL300H1, PSL301H1), (STA220H1, STA221H1)/JBS229H1

As this is not intended to be an introductory course, students will be expected to have a sound knowledge of biochemistry, physiology and introductory statistics.

Course Materials:

e-textbooks: Links will be provided on Quercus; students will need to access these for weekly assigned readings.

Frayn KN. 2010. Metabolic Regulation: A human perspective. 3rd edition. Wiley-Blackwell. UK.

Bender BA. 2014. Introduction to Nutrition and Metabolism. 5th edition. CRC Press. Boca Raton, Florida.

Class materials: Lecture slides, required readings and previous tests can be obtained through Quercus. This site will continue to be updated throughout the term.

Evaluation Scheme*:		484 Students (%)	1484 Students (%)
First term test	October 7	40	35
Second term test	November 18	40	35
In-class group activities	September 23 – December 2 (Best 5 out of 8)	15	15
In-class mini quizzes	October 21- December 2	5	5
Grad assignment**	Scheduled early in semester	—	10

*For students with religious observances on assignment due dates or scheduled tests, please speak with Dr. R in advance to arrange an alternate date.

**NFS 1484F students are required by the School of Graduate Studies to complete a piece of work in addition to that required by NFS 484F students. This will be a group presentation on public health applications of a selected course topic. Details provided in the 'Graduate Assignment' document.

Course Expectations:

In-class group activities: Dr. R will randomly assign students to groups of five or six. 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, which will be submitted for grading (see course schedule). The overall grade for group activities will be based on the best five out of eight activities.

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. In order to accommodate class absences that may occur on occasion (i.e., COVID, other illness or injury, family situation) the two lowest group activity marks will be dropped for each student; there will be no make-up activities for those missed classes.

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.

In-class mini quizzes: There will be five class presentations given by groups of students in the 1484 section of the course, as part of the School of Graduate Studies requirements. All students will be required to complete a mini quiz in class, based on the group presentation.

Ouriginal: Students will be required to submit their term tests 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 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 tests. 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 and your knowledge of the test content. Your test 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: Students who are absent for a term test for any reason (e.g., COVID, other illness or injury, family situation) 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 their instructor of their absence as soon as possible, ideally prior to the test date, but NO LATER than one week after the date.

Students will have to write a supplemental test. Failure to write a supplemental test 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.

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 will 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.

The unauthorised use of any form of device to audiotape, photograph, video-record or otherwise reproduce lectures, course notes or teaching materials provided by instructors is covered by the Canadian Copyright Act and is prohibited. Course videos and recordings may not be reproduced or posted or shared anywhere other than the official course Quercus site and should only be used by students currently registered in the course. Recordings may be saved to students' laptop for personal use.

Online lectures and recordings: To support access to course content by all students, recordings of online lecture sessions held within the context of this course will be archived and posted to Quercus. These resources are intended to be used as a student study aid and are not a substitute for class participation.

Video recordings will primarily capture the instructor and onscreen content. Students will not be visible on video recordings unless their webcam is enabled. Your voice, however, may be captured as an audio recording if you ask a question in class. The same would hold true for questions posted in the chat tool. If you have any concern about your voice or text being recorded, please speak to Dr. R to determine an alternative means of participating.

Because recordings will be provided for online lectures, students may not create additional audio or video recordings without written permission from the instructor. Permission for such recordings will not be withheld for students with accommodation needs.

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>

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.

Course Schedule:

This course includes a combination of lectures and group work, as follows:

Date	Content	Graded Group Activities, Mini-Quizzes, Grad Assignments
Sept. 9	Introduction to course and overview of key concepts	
16	Glucose transporters	
23	Carbohydrate quality and absorption	Activity #1
30	Dietary fibre and colonic fermentation	Activity #2
Oct. 7	First Term Test – online	
14	Dietary fats, lipoproteins and atherogenicity	Activity #3
21	Fructose	Activity #4, Mini-Quiz, Grad Presentation – Group 1
28	Role of exercise	Activity #5, Mini-Quiz Grad Presentation – Group 2
Nov. 4	Metabolic adaptation to fasting and starvation	Activity #6, Mini-Quiz Grad Presentation – Group 3
11	Reading Week – no class	
18	Second Term Test - online	
25	Energy expenditure and substrate utilization	Activity #7, Mini-Quiz Grad Presentation – Group 4
Dec. 2	Diet composition and body weight regulation	Activity #8, Mini Quiz Grad Presentation – Group 5