

NFS 284H1F: Basic Human Nutrition

Course Syllabus

- 1) Lectures:** Wednesday 1:00 – 3:00 pm EST at **Ontario Institute for Studies in Education (OISE) G162**
- 2) Thursday 2:00 - 3:00 pm EST at **Ontario Institute for Studies in Education (OISE) G162****

- 3) Course Description:** An introductory course to provide the fundamentals of human nutrition, to enable students to understand and think critically about the complex interrelationships between food, nutrition, health, and environment.

- 4) Recommended Preparation:**

BIO120H1, BIO130H1, CHM138H, CHM139H/CHM151Y/CHM135H, CHM136H

- 5) Learning objectives:**

By the end of this course, you will be able to:

- a) assess the quality of your diet and use Canada's Food Guide to plan healthy meals.
- b) describe the types of studies used in nutrition research and recognize their strengths and limitations
- c) explain the functions of essential nutrients
- d) describe the relationship between diet and chronic diseases

- 6) 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: Mondays 11:30 am - 12:30 pm (Jan 5 to April 3, 2026), no appointment necessary. If you cannot make office hours, please book a virtual appointment (Jan 5 to last Friday before final exam) at:

<https://calendly.com/matilda-laar/book-a-time-nfs284-virtual-office-hours-winter>

7) Course Delivery, Website, and Notifications:

Course Delivery: This is an in-person course (refer to course schedule). Supporting course materials will be posted on the course website on a weekly basis. The materials are a combination of lecture slides and independent readings assigned from the textbook and other documents.

Lectures will be delivered on Wednesdays and Thursdays. 1hr – Tutorial sessions (course content will be reviewed) will be hosted on Zoom (multiple links for weekly tutorial sessions with TAs will be shared on Quercus announcements). Supporting lecture materials will be posted on the course website on a weekly basis. The materials are a combination of lecture slides and independent readings assigned from the textbook and other documents.

Course website: The course website is available 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 all lectures and tutorials** and actively participate in class activities and discussions.

8) Required materials/resources:

Required Textbook:

Authors: Smolin, Grosvenor, & Gurfinkel

Title: Nutrition: Science and Applications, 3rd Canadian Edition, Wiley

Copies of the textbook can be purchased from the U of T bookstore. Please note that the text being used is the 3rd Canadian Edition; the 2nd Canadian edition is suitable for some of the readings listed in the course schedule, but NOT all readings, and contains some out-of-date information. The American edition is NOT suitable.

WileyPLUS through the bookstore only (this includes the full eTextbook, video resources, practice questions): \$65.00. Link to the bookstore [here](#).

eTextbook rental: \$57.00. Link to the bookstore [here](#)

Purchase:

Loose-leaf textbook with WileyPLUS: \$163.95. Link to the bookstore [here](#).

9) Course Overview and Assessment

Course Format:

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

- 1) Face-to-Face lectures
- 2) Tutorials (online) - Online sessions led by course TAs.
- 3) Supporting documents – additional reading materials to help consolidate student learning; these supporting documents cover more basic concepts of the course and are based on textbook material.
- 4) Textbook readings – short readings from specific sections of the textbook with textbook-provided questions to direct student learning.

IMPORTANT: Tests and the final exam are based on the content of the lectures, tutorials (review of lectures), supporting documents, and textbook readings.

Course Assessments:

Assignment/Test/Quiz	Due date	Weight (%)
Nutrition Numbers Quiz (MCQ)	Jan 25 online at 11:59 pm	2
Nutrition Assessment Assignment (3-day food record)	Feb 1 online at 11:59 pm	17
Tutorial (course content will be reviewed by TAs)	You will be assigned to join 1 session weekly (links to weekly sessions will be provided on Quercus Announcements)	0
Weekly Quizzes (MCQ)	Due: Sunday 11:59pm the next week 11 quizzes; Will ignore the 2 lowest scores	15

Video: Nutrition Concepts Assignment (Kritik)	Create stage: Feb 22 online at 11:59 PM Evaluate stage: Mar 15 online at 11:59 PM Feedback stage: Mar 29 online at 11:59 PM	8
	Instructor/TA Assessment	8
Term Test (MCQ)	Feb 11 during the scheduled class time (Venue: TBA)	20
Final Exam (MCQ)	April exam period: Cumulative: 30% on material also covered on term test; 70% lecture material not covered on term test (scheduled by Registrar)	30
Total		100

10) Course Schedule: Lectures (L), Textbook (Tx), and Supporting Document (SD) Readings

The schedule is designed to help students stay organized and read ahead, ensuring they are well-prepared for in-class review of the material. This approach supports active participation during lectures and promotes deeper understanding of key concepts. In addition, short, assigned readings and activities from the textbook will be provided during lectures and tutorials to encourage active engagement with the material.

Course Schedule: All times indicated are Toronto times

WEEK	DATE (L- Lecture)	TOPICS	READINGS (supporting documents-SD & Textbook - Tx)	QUIZZES/TESTS/ASSIGNMENTS
1	L – Jan 7	<ul style="list-style-type: none"> • Course overview • Introduction to Nutrition • DRIs 	Tx-1 & Tx-2; SD-1	
	L – Jan 8			
2	L - Jan 14	<ul style="list-style-type: none"> • Canada's Food Guide • Food Labelling 	Tx-3	

	L – Jan 15			Quiz 1 due at 11:59pm on Jan 18
3	L – Jan 21	• Nutrition Research	Tx-4; SD-2	Nutrition Numbers Quiz (MCQ): Jan 25 online at 11:59 pm
	L – Jan 22			Quiz 2 due at 11:59pm on Jan 25
4	L – Jan 28	• Special short topics: 1) Digestive System 2) Food Safety 3) Food Intake Assessment 4) Natural Health Products	Tx-4	
	L – Jan 29			Quiz 3 due at 11:59pm on Feb 1
5	L – Feb 4	• Carbohydrates and Diabetes	Tx-5; SD-3	Three-day food record: Feb 1, 2025 online at 11:59 pm
	L – Feb 5			Quiz 4 due at 11:59pm on Feb 8
6	L- Feb 11			Term test Feb 11 (MCQ): during scheduled class time
	L- Feb 12	Lipids		Quiz 5 due at 11:59pm on Feb 15
7	L- Feb 18	No Class-Reading Week		
	L - Feb 19			
8	L- Feb 25 (GUEST SPEAKER)	• Lipids	Tx-6	Video Assignment- Create Stage: Feb 22 on Kritik at 11:59 PM
	L- Feb 26 (GUEST SPEAKER)			Quiz 6 due at 11:59pm on Feb 22
9	L- Mar 4 (GUEST SPEAKER)	• Protein & Vegetarian Diets continued Consequences of Obesity	Tx-7, Tx-8, Tx-9, Tx-10, Tx-11; SD-4, SD-5	
	L- Mar 5 (GUEST SPEAKER)			Quiz 7 due at 11:59pm on Mar 1
10	L – Mar 11	• Weight Management Strategies	Tx-11, Tx-12; SD-6, SD-7	

		Body Weight through the Lifecycle		
	L – Mar 12			Quiz 8 due at 11:59pm on Mar 8
11	L – Mar 18	<ul style="list-style-type: none"> • Water-soluble vitamins • Fat-soluble vitamins 	Tx-13; SD-8, SD-9	Video Assignment- Evaluate Stage: Mar 15, on Kritik at 11:59 PM
	L – Mar 19			Quiz 9 due at 11.59pm on Mar 15
12	L – Mar 25	<ul style="list-style-type: none"> • Sodium, potassium, & hypertension • Major minerals 	SD-10	Video Assignment- Feedback Stage: Mar 29 on Kritik at 11:59 PM
	L – Mar 26	Course Review		Quiz 10 due at 11:59pm on Mar 22
13	L – April 1	<ul style="list-style-type: none"> • Minor minerals 	Tx-13	
	L – April 2			Course wrap Quiz 11 due at 11:59pm on Mar 29
14	Final Assessment Period: Apr 9 - 29			Cumulative Final Examination (scheduled by Registrar)

Note: For the Kritik Video Assignment, students cannot progress to the evaluation stage if the Create stage deadline is missed.

Textbook Readings

Number	Textbook Section:	Page
1	F4: Focus on Phytochemicals	443-449
2	3.3: Digestion and Absorption 3.4: Digestion and Health	98-108 109 - 117
3	7.10 Weight-loss Drugs and Surgery	336 - 341
4	4.6: Carbohydrates and Health - Critical Thinking Dietary Fibre, Glycemic Index, and Type-2-Diabetes F1: Focus on 1	162 - 174 183 - 190
5	Critical Thinking: Fish Consumption and Heart Disease	220

6	Critical Thinking: Choosing a Healthy Vegetarian Diet	286
7	7.3 Estimating Energy needs: Measuring Energy Expenditure & Table 7.5 Calculating your EER	302, 305
8	7.4 Body Weight and Health 7.5 Guidelines for a healthy body weight: Assessing Body Composition	306, 308
9	13.3 Critical Thinking: The Benefits of Interval Training	601
10	Chapter 15: Chapter Opener & Case Study Outcome	677 & 715
11	F7 Focus on Eating Disorders	720 - 739
12	8.1 Your Choice: To Supplement or Not to Supplement	360
13	10.3 Science Applied: A Total Dietary Approach to Reducing Blood Pressure Critical Thinking: A Diet for Health	471-472 473

Supporting document readings

Supporting Document	Posted in module for:
SD-1: Physiology Fundamentals	Week 1
SD-2: Natural Health Products	Week 3
SD-3: Lipids: Chemistry & Digestion	Week 5
SD-4: Energy Expenditure	Week 8
SD-5: Exercise	Week 8
SD-6: Intro to Vitamins	Week 9
SD-7: Vitamin C & Vitamin E interactions	Week 9
SD-8: Water	Week 10
SD-9: Introduction to Minerals	Week 10
SD-10: Zinc-Copper-Iron	Week 11

Using Kritik360 for video assignment

Kritik360

[A Student introduction to Kritik360 \(short video\)](#)

This term, we will be using Kritik360 (www.kritik.io/kritik360), a peer-to-peer learning and evaluation platform. Kritik360 puts you, the student, at the center of your learning. Kritik is focused on an important goal: to help you in developing critical thinking and communication skills, which in turn set you up for success both in and out of the classroom.

Each Kritik360 activity has 3 unique stages:

Stage 1: Create → Follow the instructions, read the provided rubric and create a submission

Stage 2: Evaluate → Anonymously score your peers based on the rubric, and provide written comments

Stage 3: Feedback → Provide your peer evaluators anonymous feedback in relation to how motivational and critical their written comments were

Grading

When you participate in Kritik360 activities, you will receive 3 scores: Creation score, Evaluation score, and Feedback score. The weighted average of these three scores will determine your Overall score for that activity. The Kritik360 [Grading Scheme](#) can be found in the course info section.

Registration/Support: \$19

An email invitation will be sent to your school email account that contains information on how to register for a Kritik360 account and enroll in the course

How to get help: If you have any questions about Kritik360 or experiencing any technical difficulties with your assignment, please use the Kritik live chat. A human agent will respond promptly within a few minutes from 9am-5pm eastern time Monday to Friday. Outside of these hours, you'll receive a reply that they will be back the next business day - but don't worry! They monitor around the clock and will still respond to urgent requests within a few hours. You can also visit <https://help.kritik.io> to view their help articles.

11) Late submission of assignments:

NO ASSIGNMENT WILL BE ACCEPTED after the due date and time for online submission except for compelling reasons such as illness, personal distress, family emergency or other unforeseen circumstance. Please book a time on <https://calendly.com/matilda-laar/book-a-time-nfs284-virtual-office-hours-winter> OR email Dr Laar @ matilda.laar@utoronto.ca (“use subject line: NFS284 Late Submission of Assignment”) to request an extension, prior to the due date, if possible. A very brief explanation of why you are requesting an extension is required. This can be a written explanation from you, an absence declaration form ([Absence Declaration - University Registrar's Office](#)) or a medical certificate: <http://www.illnessverification.utoronto.ca/index.php>. All information is treated as 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 and consider contacting Accessibility Services (See item #18 below).

Please pay attention to all assignment guidelines as revised submissions will not be accepted after grading/ feedback per rubric is provided.

Note that not being aware of the submission deadline, poor time management, having several assignments due at the same time, having to study for term tests, etc are generally **NOT** compelling reasons for an extension.

Extensions, for such reasons, are granted only in 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. The Academic Success Centre provides workshops on study skills to help students manage their time effectively (See item #19 below).

If you feel you have a compelling reason that cannot be easily documented or are uncertain if your reasons are compelling, you should ideally discuss this with Dr. Laar before the assignment's due date. If this is not possible then **FIRST** hand in as much of the assignment as you possibly can on the due date and **THEN** contact Dr Laar to discuss your situation. All discussions are kept confidential.

Accessibility Services: If you are registered with Accessibility Services, extensions are provided in accordance with the terms of your letter of accommodation. (See also # 18 below).

12) Assignment re-reads: If you have concerns about your grading, a re-read can be requested. Instructions on how and the times to submit re-read requests will be

provided during the term. Please make use of the assigned times for re-reads. Requests made at the end of the term without relevant reasons for lateness will not be granted.

13) 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.

14) Policy regarding missed term test:

Except for compelling reasons, such as illness, personal distress, or similar unforeseeable circumstances, all students will be given a grade of **ZERO** if they miss the term test. There are **NO MAKE-UP tests**. If you miss your term test (worth 20%), for compelling reasons, your final exam will be worth 50% of your final grade (20% + 30%).

You are required to provide a very brief explanation for your absence. This can be a written explanation from you, an absence declaration form ([Absence Declaration - University Registrar's Office](#)) or a explanation from you or a medical certificate

<http://www.illnessverification.utoronto.ca/index.php> . If preferred, verbal explanations will also be accepted. See Dr. Laar during her office hours on Mondays 11:30 - 12:30 pm (MS 5267) OR book a time on <https://calendly.com/matilda-laar/book-a-time-nfs284-virtual-office-hours-winter>. If you are dealing with intense or ongoing personal distress or chronic illness and may need special and continuing accommodations, students are advised to discuss their situation with your college registrar and consider contacting Accessibility Services (See item #18 below).

15) Policy regarding missed final exam:

Policy regarding missed final exam is determined by the Faculty of Arts and Science. If you have compelling reasons for missing your final exam, contact your college registrar to file a petition; do this quickly as there are deadlines. You must provide documentation to support your petition. If your petition is accepted, you will be permitted to write a deferred exam. A deferred exam fee must be paid.

16) Lecture material, audio recordings, and intellectual property:

Please note that the lecture presentations, videos, and other course documents are the intellectual property of the instructor. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, including lectures by University instructors. The distribution, transmission, reproduction or re-posting of the NFS284 course materials, including audio and video recordings, in whole or part, is not permitted without the consent of the instructor. All students enrolled in NFS284 are permitted to use the material for personal use and study. You may also make audio recordings of the lecture for personal use only.

17) Academic Integrity:

Students are expected to conduct themselves with academic integrity. The Code of Behaviour clearly describes activities that are considered academic misconduct:

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>

For more information, also see <http://www.artsci.utoronto.ca/osai> and <http://academicintegrity.utoronto.ca>.

18) After NFS284:

NFS284 is a required prerequisite for all higher level NFS courses (except NFS386: *Food Chemistry* for which you only require first year chemistry). We hope that you will enjoy NFS284, read about these other courses in the calendar, and consider majoring in Nutritional Sciences or taking additional NFS courses in the future. If you have any questions about the Nutritional Sciences program don't hesitate to contact Dr Laar.

19) Accessibility Needs:

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting <http://www.studentlife.utoronto.ca/as/new-registration>. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

20) 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:
<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>

21) Use of generative artificial intelligence (AI) tools:

Students may not use artificial intelligence tools for taking tests/quizzes, writing research papers, or completing major course assignments. However, these tools may be useful when gathering information from across sources and assimilating it for understanding.

22) 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.

23) 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.