



NFS284H1 S

BASIC HUMAN NUTRITION

Dr. Alexander Schwartz

Winter 2023



**Department of Nutritional Sciences
UNIVERSITY OF TORONTO**

2023 NFS284H1 S Basic Human Nutrition

1) 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 the environment.

2) Recommended Preparation:

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

3) 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, recognize their strengths and limitations, and gain an understanding of the scientific method
- c) explain the functions of essential nutrients
- d) describe the relationship between diet and chronic disease

4) Course Instructor:

Dr. Alexander Schwartz:

e-mail: a.schwartz@utoronto.ca

Office Hours: Office hours will be virtual during designated hours. Please check the contact information on the course website for more information on how to request an appointment.

5) Course Delivery, Website, and Notifications:

Course Delivery: Online-asynchronous. Course materials will be posted online on a weekly basis. The materials are a combination of lecture recordings and independent readings assigned from the textbook and other supporting documents.

Course website: Available on Quercus

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

6) Required Textbook:

Wiley E-Text

Smolin, Grosvenor, & Gurfinkel

Nutrition: Science and Applications, 3rd Canadian Edition

permanent downloadable e-textbook **9781119577522** \$125 CAD

<https://www.wiley.com/en-ca/search?pq=gurfinkel%7Crelevance>

Book rental: MOST ECONOMICAL OPTION

Note it is also possible to rent the e-textbook: 120-day rental costs \$43. For more information:

<https://www.wiley.com/en-ca/search?pq=gurfinkel%7Crelevance>

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 no longer suitable for this course. The American edition is also NOT suitable.

Two physical copies of the textbook are available on **Course Reserves (STL) behind the STL desk under NFS284 in the Gerstein Sciences Library**. If you're on campus, they are limited to three hours on loan in STL use.

7) Course Format:

The course content has three equally important components:

- 1) Online lecture recordings – these are posted online - accompanied by self-assessment questions to help consolidate student learning
- 2) Supporting documents – additional reading materials accompanied by self-assessment questions to help consolidate student learning; these supporting documents cover more basic concepts of the course and are based on textbook material.
- 3) Textbook readings – short readings from specific sections of the textbook with instructor or textbook-provided questions to direct student learning. These readings include examples of nutrition research.

IMPORTANT: Course tests are based on the content of the lecture recordings, supporting documents and textbook readings.

8) Adapting to Online Learning:

Many students will find online learning challenging. Face-to-face classes have “built-in” opportunities for social interaction with peers and instructors that are difficult to duplicate in the online environment. It is not uncommon for students to feel isolated when taking online classes. The link below was prepared before the pandemic, but nonetheless highlights the strategies that you can employ to overcome challenges and enhance your online experience from having proper technical requirements to managing scheduling and staying motivated:

<https://onlinelearning.utoronto.ca/is-online-learning-for-me/>

9) Course schedule

DATE	MODULE	TOPICS	READINGS	QUIZZES/TESTS/ASSIGNMENTS
			<i>Supporting documents (SD)</i> <i>Textbook Readings (T)</i> See items 11 & 12 below	
Jan 12 Week 1	1	<ul style="list-style-type: none"> • Course overview • Introduction to Nutrition • DRIs 	SD-1, T-1	Science Writing Quiz Available: 9 AM Due: Thursday Feb 16 at 9 AM
Jan 19 Week 2		<ul style="list-style-type: none"> • Canada's Food Guide • Food Labelling 	SD-2, T-2	
Jan 26 Week 3		<ul style="list-style-type: none"> • Nutrition Research 	T-3	
Feb 2 Week 4		<ul style="list-style-type: none"> • Special short topics: <ul style="list-style-type: none"> ○ Digestive System ○ Food Safety ○ Food Intake Assessment ○ Natural Health Products 		Quiz 1 on Module 1 Topics & Readings Available: 9 AM. Due: Thursday Feb 9 at 9 AM
Feb 9 Week 5	2	<ul style="list-style-type: none"> • Carbohydrates and Diabetes 	T-4, SD-3	3-day food & activity record Due: Thursday Feb 9 at 9 AM
Feb 16 Week 6		<ul style="list-style-type: none"> • Lipids 	T-5, T-6	
Feb 23 Week 7		Reading Week		
Mar 2 Week 8		<ul style="list-style-type: none"> • Protein & Vegetarian Diets 	SD-4 & SD-5, T-7, T-8,	

	2	<ul style="list-style-type: none"> Consequences of Obesity 	T-9, T-10, T-11	
Mar 9 Week 9		<ul style="list-style-type: none"> Weight Management Strategies Body Weight through the Lifecycle 	SD-6 SD-7	Essay Due Thursday Mar 9 at 9 AM Quiz 2 on Module 2 Topics & Readings Available: 9 AM. Due: Thursday Mar 16 at 9 AM
Mar 16 Week 10	3	<ul style="list-style-type: none"> Water-soluble vitamins Fat-soluble vitamins 	SD-8 SD-9 T-12	TERM TEST 1 - on Module 1 & 2 Available: Thu Mar 16 at 9 AM Due: Fri Mar 17 at 11:59 PM 50 questions; 65 minutes
Mar 23 Week 11		<ul style="list-style-type: none"> Sodium, potassium, & hypertension Major minerals 	SD-10, T-13	
Mar 30 Week 12		<ul style="list-style-type: none"> Major minerals Minor minerals Course wrap-up 		Quiz 3 on Module 3 Topics & Readings Available: 9 AM Due: Thursday Apr 6 at 9 AM
Apr 6 Week 13	TERM TEST 2 –on Module 1- 3 Available: Thu April 6 at 9 AM Due: Fri April 7 at 11:59 PM 50 Questions; 65 minutes			

10) Assessments

Assessment	Due Dates	Weight (%)
Quiz 1*	Feb 9 at 9 AM	5
Quiz 2*	Mar 16 at 9 AM	5
Quiz 3*	Apr 6 at 9 AM	5
Science Writing Quiz*	Feb 16 at 9 AM	5
3-Day Food & Activity Record	Feb 9 at 9 AM	20
Essay	Mar 9 at 9 AM	20
Term Test 1	Mar 17 at 11:59 PM - available Mar 16 at 9 AM	20
Term Test 2	Apr 7 at 11:59 PM - available Apr 6 at 9 AM	20
TOTAL		100

* There is no time limit for the module quizzes and Science Writing Quiz.

Tests have a time limit and are available until 11:59 pm ET of the due date. Once they are available, they can be started any time within that time period but will be concluded automatically at the end of the time limit. Be sure to start the test at a time that allows you to have the maximum time available. For example, if a test has a sixty-five-minute limit and is due at 11:59 pm ET, you must start the test no later than 10:54 pm ET to have the full time.

11) Required Textbook Readings

Number	Textbook Section:	Page
T-1	F4: Focus on Phytochemicals This is part of the lecture: Introduction to Nutrition - Week 1	443-449
T-2	7.10 Your Choice: Can a Weight Loss Supplement Help This is part of the Natural Health Products supporting document - posted Week 3	338
T-3	3.4: Critical Thinking: Obesity and the Microbiota This is part of the Digestive System lecture - Week 4	111 & A45*
T-4	4.5: Critical Thinking Dietary Fibre, Glycemic Index, and Type-2-Diabetes This is part of the Carbohydrates lecture - Week 5	161 & A45*
T-5	5.6 Critical Thinking: Fish Consumption and Heart Disease This is part of the Lipids lecture - Week 6.	220 & A46*
T-6	6.7 Critical Thinking: Scientific Evidence for the Benefits of a Vegetarian Diet This is part of the Protein lecture - Week 8	285 & A46*
T-7	7.3 Estimating Energy needs: Measuring Energy Expenditure & Table 7.5 This is part of the supporting document on Energy Expenditure - posted Week 8.	303
T-8	7.5 Guidelines for a healthy body weight: Assessing Body Composition This is part of the supporting document on Energy Expenditure - posted Week 8.	309-310
T-9	13 Nutrition and Physical Activity This is part of the supporting document on Exercise - Week 8	582-601 & A50-51*
T-10	Chapter 15: Case Study & Case Study Outcome This is part of the lecture on Body Weight through the Lifecycle - Week 9	677 & 715
T-11	F7 Focus on Eating Disorders This is part of the lecture on Body Weight through the Lifecycle -Week 9	720-740
T-12	8.1 Your Choice: To Supplement or Not to Supplement This is part of the lecture on Fat-Soluble Vitamins - Week 10	360-361
T-13	10.3 Science Applied: A Total Dietary Approach to Reducing Blood Pressure This is part of the lecture on sodium, potassium and hypertension - Week 11	471-472

*Answers for in-text critical thinking questions are located in the appendix

12) Supporting Documents are posted in the weekly modules:

Supporting Document	Week posted:
SD-1: Physiology Fundamentals	Week 1
SD-2: Natural Health Products	Week 2
SD-3: Controversies: CVD, cholesterols, & saturated fats	Week 5
SD-4: Energy Expenditure	Week 8
SD-5: Exercise: Gain muscle, lose fat?	Week 8
SD-6: Vitamin supplements: The competitive exercise edge?	Week 9
SD-7: Antioxidant role of vitamins	Week 9
SD-8: Water	Week 10
SD-9: Introduction to Minerals	Week 10
SD-10: Osteoporosis & the female athlete triad	Week 11

13) Test Format – Open Book Quercus MCQ QUIZZES

The tests in this course are in multiple-choice format and will be conducted on Quercus. They are timed tests and are open book tests, which means that you can refer to your course materials during the test. To prepare for your tests you should concentrate on understanding the course content and study sufficiently to be able to recall most of the course information, in a way that is no different from a conventional closed-book test. The advantage of the open-book exam is that you have the ability to double-check information and you won't blow a question just because you can't recall a specific detail. But to exploit this advantage fully, you have to know your work well enough to answer most questions without having to look things up and to organize your course material in a way that will allow you to find information quickly. Don't get lulled into a false sense of security. **You won't have time to check every single question**; you still need to know the course material going into the test to a similar level as a closed-book test.

14) Late submission of assignments:

Students who require consideration for missed academic work 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.

Assignments handed in after the due date will be deducted 10% in the first 24h and 10% per day after that unless there is a compelling reason for the lateness. **Please note** that this is 10% of the total value of the assignment per day, not the final mark. This means that if an assignment has a total value of 50, there will be a deduction of 5 marks per day. After one week, students will be given a mark of 0 if no assignment is received. There will be no extensions for the due date without penalty unless students provide proper documentation from accommodation services.

Please contact Dr. Schwartz by e-mail (a.schwartz@utoronto.ca) to request an extension, prior to the due date. A very brief explanation of why you are requesting an extension is required. This can be a written explanation from you or a medical certificate: <http://www.illnessverification.utoronto.ca/index.php>. Alternatively, verbal explanations can also be provided in virtual face-to-face discussion. E-mail Dr. Schwartz to set up an appointment. 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 #23 below).

Please note that 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. 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 #24 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. Schwartz **before** the assignment 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. Schwartz 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 # 23 below).

15) Assignment re-reads: If you have concerns about the final essay grading, a re-read can be requested. Instructions on how to submit re-read requests will be provided during the term.

16) Ouriginal plagiarism detection:

“Normally, students will be required to submit their course essays to the University’s plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool’s reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University’s use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>)”

All students are expected to either submit to Ouriginal, which is voluntary, or provide an alternative. On Quercus, online submissions will automatically be submitted to Ouriginal. If you have issues with Ouriginal, please contact Dr. Schwartz to arrange an alternate submission.

Dr. Schwartz reviews the Ouriginal 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.

17) Policy regarding missed tests:

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 or the final examination.

18) Policy regarding missed final assessment:

The final exam will be available during the final assessment period. The date of the test

will be determined later in the term. If you miss the test for compelling reasons, a make-up option will be offered, otherwise, a grade of zero will be given.

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

Please note that the lecture presentations, videos, and other course documents are the intellectual property of Dr. Alexander Schwartz. 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 ONLY.

20) 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>.

All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program—is a serious offence that can result in sanctions. Speak to the instructor for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at <http://www.writing.utoronto.ca>. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see <http://www.artsci.utoronto.ca/osai> and <http://academicintegrity.utoronto.ca>.

21) How to be successful in NFS284:

- 1) Establish a regular weekly schedule for viewing the lecture recordings posted online.
- 2) Read all supporting documents and textbook readings.
- 3) Complete self-assessment questions in a timely fashion – ideally as you work through the recordings and readings.
- 4) A substantial amount of the material discussed in lectures and supporting documents is derived from the textbook so use it as a background reference to assist in your comprehension of the material.
- 5) Make use of the discussion board to post questions about course content you do not understand. Post as you work through the material.
- 6) Please note that the tests are based on the lecture content, supporting documents, and required textbook readings. You are NOT responsible for additional material in the textbook, that is not covered in these materials.

- 7) Check out the links in #24 below for ways to improve study skills.
- 8) Start working on assignments early- they take longer to complete than most students estimate.
- 9) In order to be successful on tests, you must be able to both comprehend the material and recall it. Review your notes for comprehension regularly; use the discussion board to post questions about anything you don't understand or e-mail the instructor to book a virtual meeting. In the online environment ALL your tests are open-book tests. If you have been reviewing the material during the term for comprehension, you can focus on recall in the days immediately before a test. Become aware of how long it takes you to learn new content, so you can plan realistically. The last day before a test should ideally be for review only. Finally, during the test, persevere; don't give in to the stress.

22) 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. More information about the program can be found in the Arts and Science calendar:

<https://fas.calendar.utoronto.ca/> or the departmental website:
<https://nutrisci.med.utoronto.ca/>

23) 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. 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.

24) 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: <https://studentlife.utoronto.ca/department/academic-success/>

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>

What should I do if I can't attend class (in-person or remote) and it is affecting my academic work? 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 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.

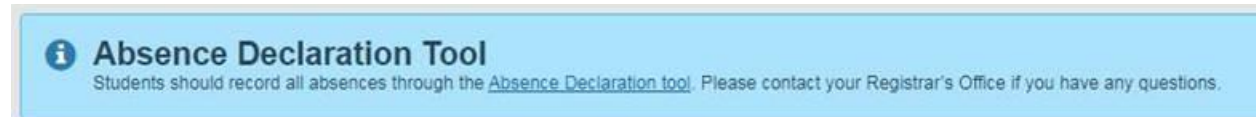
Resources & supports

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 counseling services in 146 languages for all U of T students. For reference, when students log into the Absence Declaration in [ACORN](#), the top of the screen displays:



After clicking on the Absence Declaration tool above, the following is displayed:

Absence Declaration

Declare New Absences

i You should use this system to formally declare an absence from academic participation in the University if you require consideration for missed academic work based on the procedures specific to your faculty or campus. Please note:

- In addition to this declaration, you are responsible for contacting your instructors to request the accommodations you are seeking.
- You are also responsible for familiarizing yourself with the procedures specific to your faculty or campus.

Date of Absence

You can record absences for up to 14 consecutive days, one of which must be today (if you are still absent) or yesterday (if you have returned). If you need to record an absence outside of this range, please contact your registrar's office.

1	yyyy-mm-dd	8	yyyy-mm-dd
2	yyyy-mm-dd	9	yyyy-mm-dd
3	yyyy-mm-dd	10	yyyy-mm-dd
4	yyyy-mm-dd	11	yyyy-mm-dd
5	yyyy-mm-dd	12	yyyy-mm-dd
6	yyyy-mm-dd	13	yyyy-mm-dd
7	yyyy-mm-dd	14	yyyy-mm-dd

Consent to Release COVID-19 Medical Information

The University requires information about students who are asked to self-isolate for monitoring purposes. Please complete this consent form to allow us to access this information.

Declarations

I hereby declare that it has been necessary for me to be absent from the University for the period identified above.

By making this declaration I am affirming these statements to be true and that I understand that my declaration is submitted for the purpose of receiving academic accommodation. I also understand and acknowledge that it is my responsibility to complete the requirements of the course and to confirm any necessary academic accommodation arrangements upon my return as directed by my instructor and the policies of my Campus or Faculty.

I understand and acknowledge that making a false declaration would constitute academic misconduct and could be subject to sanctions under the Code of Behaviour on Academic Matters.

I have completed the Consent to Release COVID-19 Medical Information, if applicable, and I understand the above declarations.