2021-1 NFS284H1S 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 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 and recognize their strengths and limitations
c) explain the functions of essential nutrients
d) describe the relationship between diet and chronic disease

4) Course Instructor:
Debbie Gurfinkel:
e-mail: debbie.gurfinkel@utoronto.ca
Office Hours: For the duration of the COVID-19 pandemic, only virtual office hours will be possible. Please check 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
permanent downloadable etextbook 9781119577522 $125 CAD
https://www.wiley.com/en-ca/search?q=gurfinkel%7Crelevance
Loose-leaf textbook
Smolin, Grosvenor, & Gurfinkel
Nutrition: Science and Applications 3rd Canadian edition loose-leaf textbook 9781119577546
$135 CAD https://www.wiley.com/en-ca/search?p=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?p=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 suitable for some of the readings listed in item #11, but NOT all readings and contains some out-of-date information. The American edition is NOT suitable.
Disclosure: As the third author of this textbook, Dr G earns a royalty for each new textbook purchased or rented.

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 and COVID-19 restrictions will not doubt compound these feelings. 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: All times indicated are Toronto times

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPICS</th>
<th>READINGS</th>
<th>QUIZZES/TESTS/ASSIGNMENTS</th>
</tr>
</thead>
</table>
| Jan 11     | • Course overview  
             • Introduction to Nutrition  
             • DRIs                        | SD-1, T-1 |                                                                                          |
| **Week 1** |                                                                        |           | **Weekly-quiz 1** on Week 1 Topics & Readings  
             Due: Jan 18 at 9 AM (available until Feb 1)                                          |
| Jan 18     | • Canada’s Food Guide  
             • Food Labelling                                                        |           | **Weekly-quiz 2** on Week 2 Topics & Readings  
             Due: Jan 25 at 9 AM (available until Feb 1)                                          |
| **Week 2** |                                                                        |           |                                                                                          |
| Jan 25     | • Nutrition Research                                                 | SD-2, T-2, T-3 |                                                                                         |
| **Week 3** |                                                                        |           | **Weekly-quiz 3** on Week 3 Topics & Readings  
             Due: Feb 1 at 9 AM  
             **3-day food record**  
             Due: Feb 5 at 9 AM                                              |
| Feb 1      | • Special short topics: 1) Digestive System  
             2) Food Safety  
             3) Food Intake Assessment  
             4) Natural Health Products | T-4       | **Weekly-quiz 4** on Week 4 Topics & Readings  
             Due: Feb 8 at 9 AM  
             **TEST 1:** Due Feb 11 at 9 AM; available Feb 10 at 9AM: **For more details: See item # 14 below** |
| **Week 4** |                                                                        |           |                                                                                          |
| Feb 8      | • Carbohydrates and Diabetes                                          | SD-3, T-5 | **Weekly-quiz 5** on Week 5 Topics & Readings; Science Writing Quiz  
             Due: Feb 22 at 9 AM                                                                 |
| **Week 5** |                                                                        |           |                                                                                          |
| Feb 15     | • No classes/Reading Week                                             |           | **Weekly-quiz 6** on Week 6 Topics & Readings  
             Due: Mar 1 at 9 AM  
             **Essay**  
             Due Mar 5 at 9 AM                                              |
| **Week 6** |                                                                        |           |                                                                                          |
| Feb 22     | • Lipids                                                              | T-6       | **Weekly-quiz 7** on Week 7 Topics & Readings;  
             Due Monday Mar 1 at 9 AM  
             Due Monday Mar 8 at 9 AM                                          |
| **Week 7** |                                                                        |           |                                                                                          |
| Mar 1      | • Protein & Vegetarian Diets                                          | SD-4, SD-5, T-7, T-8, T-9, T-10 | **Weekly-quiz 8** on Week 8 Topics & Readings  
             Due: Mar 15 at 9 AM  
             **TEST 2** –Due Mar 18 at 9 AM; available Mar 17 at 9 AM: **For more details: See item # 14 below** |
| **Week 8** |                                                                        |           |                                                                                          |
| Mar 8      | • Weight Management Strategies  
             • Body Weight through the Lifecycle                                     | SD-6, SD-7, T-11, T-12 | **Weekly-quiz 9** on Week 9 Topics and Readings  
             Due: Mar 22 at 9 AM                                                                 |
| **Week 9** |                                                                        |           |                                                                                          |
| Mar 15     | • Water-soluble vitamins  
             • Fat-soluble vitamins                                                    | SD-8, SD-9, T-13 | **Weekly-quiz 10** on Week 10 Topics & Readings  
             Due Mar 29 at 9 AM                                                                 |
| **Week 10**|                                                                        |           |                                                                                          |
| Mar 22     | • Sodium, potassium, & hypertension  
             • Major minerals                                                      | SD-10     | **Weekly-quiz 11** on Week 11 Topics & Readings  
             Due Apr 5 at 9 AM                                                                 |
| **Week 11**|                                                                        |           |                                                                                          |
| Mar 29     | • Minor minerals                                                      |           | **Weekly-quiz 12** on Week 12 Topics & Readings  
             Due Apr 5 at 9 AM                                                                 |
| **Week 12**|                                                                        |           |                                                                                          |
| Apr 5      | • Course wrap-up                                                      |           | **Weekly-quiz 13** –scheduled during final assessment period  
             **For more details: See item # 14 below**                                                                               |
| **Week 13**|                                                                        |           |                                                                                          |
| Final      |                                                                        |           |                                                                                          |
| Assessment |                                                                        |           |                                                                                          |
| Period     |                                                                        |           |                                                                                          |
| **Final**  |                                                                        |           |                                                                                          |
### 10) Assessments: All times indicated are Toronto times

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Due Dates</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly quiz 1*</td>
<td>Jan 18 at 9 AM (available until Feb 1**)</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 2*</td>
<td>Jan 25 at 9 AM (available until Feb 1**)</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 3*</td>
<td>Feb 1 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 4*</td>
<td>Feb 8 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 5*</td>
<td>Feb 22 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 6*</td>
<td>Mar 1 at 9 AM</td>
<td>Best 9 of 11 quizzes X 1% = 9</td>
</tr>
<tr>
<td>Weekly quiz 7*</td>
<td>Mar 8 at 9 AM</td>
<td>MCQ on Quercus-open book</td>
</tr>
<tr>
<td>Weekly quiz 8*</td>
<td>Mar 15 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 9*</td>
<td>Mar 22 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 10*</td>
<td>Mar 29 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>Weekly quiz 11*</td>
<td>Apr 5 at 9 AM</td>
<td></td>
</tr>
<tr>
<td>3-day food record</td>
<td>Feb 5 at 9 AM</td>
<td>8</td>
</tr>
<tr>
<td>Essay</td>
<td>Mar 5 at 9 AM</td>
<td>24</td>
</tr>
<tr>
<td>Test 1*-timed test</td>
<td>Feb 11 at 9 AM -available Feb 10 at 9 AM</td>
<td>12</td>
</tr>
<tr>
<td>Test 2*-timed test</td>
<td>Mar 18 at 9 AM -available Mar 17 at 9 AM</td>
<td>16</td>
</tr>
<tr>
<td>Test 3*-timed test</td>
<td>Available during final assessment period</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

*Weekly quizzes for each module are available as soon as the weekly module is posted and availability ends on the due date at the stated time. There is no time limit for the weekly quizzes. All quizzes are open book.

**Available from first day of classes; availability ends on the due date.

***Quiz 1 & 2 will be available for an extended period of time to accommodate students who enroll in the course late. For all students, these two quizzes can be completed up to Feb 1 without penalty.

# Tests have a time limit and are available for 24 hours, before the due date. Once they are available, they can be started any time within that the 24-hour 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 one-hour time limit and is due at 9 AM, you must start the test no later than 8 AM to have a full hour.

### 11) Required Textbook Readings

<table>
<thead>
<tr>
<th>Number</th>
<th>Textbook Section</th>
<th>Page 3e</th>
<th>Page 2e</th>
<th>Finish Reading by:</th>
<th>First examined on test #:</th>
</tr>
</thead>
</table>
| T-1    | F4: Focus on Phytochemicals  
*This is part of the lecture: Introduction to Nutrition-Week 1* | 443-449 | 403-408 | Jan 18             | 1                        |
| T-2    | 7.10 Your Choice: Can a Weight Loss Supplement Help  
*This is part of the Natural Health Products supporting document (SD-2)-posted Week 3* | 338     | 309     | Feb 1              | 2                        |
| T-3    | 3.4: Critical Thinking: Obesity and the Microbiota  
*This is part of the Digestive System lecture-Week 4* | 111 & A45* | Not available | Feb 1 | 2 |
<p>| T-4    | 4.5: Critical Thinking Dietary Fibre, Glycemic Index, and Type-2-Diabetes | 161 &amp; A45* | 144     | Feb 8              | 2                        |</p>
<table>
<thead>
<tr>
<th>Supporting Document</th>
<th>Posted in module for:</th>
<th>Finish reading by:</th>
<th>First examined on test #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD-1: Physiology Fundamentals</td>
<td>Week 1</td>
<td>Feb 1</td>
<td>2</td>
</tr>
<tr>
<td>SD-2: Natural Health Products</td>
<td>Week 3</td>
<td>Feb 1</td>
<td>2</td>
</tr>
<tr>
<td>SD-3: Lipids: Chemistry &amp; Digestion</td>
<td>Week 5</td>
<td>Feb 22</td>
<td>2</td>
</tr>
<tr>
<td>SD-4: Energy Expenditure</td>
<td>Week 8</td>
<td>Mar 8</td>
<td>3</td>
</tr>
<tr>
<td>SD-5: Exercise</td>
<td>Week 8</td>
<td>Mar 8</td>
<td>3</td>
</tr>
<tr>
<td>SD-6: Intro to Vitamins</td>
<td>Week 9</td>
<td>Mar 15</td>
<td>3</td>
</tr>
<tr>
<td>SD-7: Vitamin C &amp; Vitamin E interactions</td>
<td>Week 9</td>
<td>Mar 15</td>
<td>3</td>
</tr>
<tr>
<td>SD-8: Water</td>
<td>Week 10</td>
<td>Mar 22</td>
<td>3</td>
</tr>
<tr>
<td>SD-9: Introduction to Minerals</td>
<td>Week 10</td>
<td>Mar 22</td>
<td>3</td>
</tr>
<tr>
<td>SD-10: Zinc-Copper-Iron</td>
<td>Week 11</td>
<td>Mar 29</td>
<td>3</td>
</tr>
</tbody>
</table>

12) Supporting Documents are posted in the weekly modules:
13) Quiz information and what to do if you miss a quiz

The quizzes and tests in this course are multiple choice format and will be conducted on Quercus.

Weekly Quizzes: All weekly quizzes and the Science Writing Quiz are open book, which means that you can refer to your course materials while completing the quiz. These quizzes have no time limits. For the weekly quizzes, the best 9 out of 11 scores will be used in the calculation of your final grade.

What to do if you miss a Weekly Quiz: Extensions will be granted for missed weekly quizzes provided an absence declaration on ACORN has been made on the quiz due date (See #24 below on how to make an absence declaration) and submitted to Dr G, and more than two quizzes have already been missed. If you require an extension, you must contact Dr, G. within a week of the quiz due date. After a week, extensions will not be granted for quizzes.

Should you miss the Science Writing quiz extensions will be granted provided you have made an absence declaration on ACORN and submitted it to Dr G within a week of the quiz due date. The Science Writing Quiz is separate from the weekly quizzes.

14) Test information and what to do if you miss a test

Tests 1, 2 & 3: All tests are timed tests (see table below for details) and are open book tests, which means that you can refer to your course materials during the test. This format often lulls students into a false sense of security. Keep in mind that you won’t have time to look up the answer to every question and/or double check all your answers. So your preparation for the tests should not be very different than any other test; you should concentrate on understanding the course content and study sufficiently to be able to recall most of the course information. During the test, the open book format will allow you to refer to course material to assist with some of the questions you find most challenging and should help improve your grade. But to exploit this advantage, you have to organize your course material in a way that will allow you to find information quickly and know your work well enough to answer most questions without having to look things up.
Test Info:

<table>
<thead>
<tr>
<th>Test</th>
<th>Dates test is available</th>
<th>% of final grade</th>
<th># of Questions</th>
<th>Time limit (min)</th>
<th>Modules: Week #</th>
<th>Textbook readings</th>
<th>Supporting Documents</th>
<th>Overall:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb 10, 9 AM to Feb 11 at 9AM</td>
<td>12%</td>
<td>20</td>
<td>50</td>
<td>1, 2, 3</td>
<td>T-1</td>
<td>-</td>
<td>As shown</td>
</tr>
<tr>
<td>2</td>
<td>Mar 17 at 9 AM to Mar 18 at 9 AM</td>
<td>16%</td>
<td>30</td>
<td>75</td>
<td>4, 5, 7, 8</td>
<td>T-2 to T-6 inclusive</td>
<td>SD-1 to SD3 inclusive</td>
<td>Test 2 = 90% test new material as shown + 10% topics covered by test 1</td>
</tr>
<tr>
<td>3-final Assessment</td>
<td>TBA</td>
<td>30%</td>
<td>50</td>
<td>120</td>
<td>9, 10, 11, 12, 13</td>
<td>T-7 to T-13 inclusive</td>
<td>SD-4 to SD-10 inclusive</td>
<td>Test 3 = 80% new material as shown + 20% topics covered by tests 1 &amp; 2</td>
</tr>
</tbody>
</table>

What to do if you miss a test:
Test 1 & 2: If you are unable to write a test on the scheduled day please complete an absence declaration on ACORN that includes the dates of the completion window for the test. (See #24 below on how to make an absence declaration). Then contact Dr G and submit your absence declaration, as soon as possible, ideally within a week of the test to arrange a make-up assignment. If you miss test 1 and/or test 2 you will be offered a make-up assignment which will be essay type questions on the same content you had to learn for the test.

Test 3 during final assessment period: If you miss test 3 during the final assessment period, a make-up opportunity will be offered. Complete an absence declaration on ACORN that includes the dates of the completion window for the test. (See #24 below on how to make an absence declaration). Then contact Dr G and submit your absence declaration, as soon as possible, ideally within a week of the test. Arrangements for a make-up will be made on a case-by-case basis.
15) What to do if you miss an assignment.

If you require an extension for an assignment, contact Dr G as soon as you realize that you will not be able to submit your assignment on time, to arrange an alternative submission date. **Complete and submit to Dr G an absence declaration on ACORN that includes the due date for the assignment.** (See #24 below on how to make an absence declaration).

**Accessibility Services:** If you are registered with Accessibility Services, extensions are provided in accordance with the terms of your letter of accommodation. (See also # 22 below).

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

17) 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 web site.”

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 G to arrange an alternate submission. Briefly, for those who do not submit to Turnitin, as an alternative you will be expected to meet (virtually) with Dr Gurfinkel 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. Gurfinkel 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.

18) 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 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.
19) Academic Integrity:
Student are expected to conduct themselves with academic integrity. The Code of Behavior 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.

20) 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 by the recommended dates.
3) Complete all 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 generous 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 #23 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, including open book tests (See #14), 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.

21) 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/

22) 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.

23) 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

24) How to declare an absence on ACORN:
For this year, the University has announced that students will not require a Verification of Illness (VOI) form. Students who are absent from class for any reason (e.g., COVID, other illness or injury, family situation) and/or cannot submit assignments on the due date, and 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. A copy of the absence declaration can be submitted to an instructor as a screenshot or print to pdf.

**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.