# 2016-9 NFS284 Basic Human Nutrition Course Syllabus

### 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 Staff:

#### Debbie Gurfinkel: Instructor: debbie.gurfinkel@utoronto.ca

Office hours: Fridays: 1-5 pm Fitzgerald Building FG142 150 College St from Sept 16 to Dec 9 inclusive. If the Friday time slot is not suitable please e-mail to set up an alternate appointment.

#### Thomas Wolever: Instructor: <a href="mailto:thomas.wolever@utoronto.ca">thomas.wolever@utoronto.ca</a>

By appointment.

#### 5) Course Time, Location, and Website:

Lectures: Monday 11 AM – 1 PM & Wed 12-1 PM: MS2158 Course website: available on your Portal page in Blackboard

#### 6) Textbook:

Copies of the textbook can be purchased in the bookstore and are also available in the library. Please note that we are using the **2<sup>nd</sup> Canadian Edition** of the textbook; the **1<sup>st</sup> edition** is also suitable, with some limitations. The American edition is NOT suitable.

E-book (can also be purchased on publisher's website: <a href="http://ca.wiley.com/WileyCDA/">http://ca.wiley.com/WileyCDA/</a>)

#### Wiley E-Text

Smolin, Grosvenor, & Gurfinkel Nutrition: Science and Applications, 2nd Canadian Edition ISBN : 978-1-119-04781-0 January 2015, ©2015

#### Loose-leaf

Smolin, Grosvenor, & Gurfinkel Nutrition: Science and Applications, 2nd Canadian Edition Binder Ready Version ISBN : 978-1-119-04551-9 December 2014, ©2015

#### Hardcover

Smolin, Grosvenor, & Gurfinkel Nutrition: Science and Applications, 2nd Canadian Edition ISBN : 978-1-118-87838-5 December 2014, ©2015

# 7) Blended Course Format:

The instructors of this course are currently in the process of converting the format of NFS284 from a traditional lecture course to a blended format; this is being done in stages over several terms, with the first stage beginning this fall. During the first four weeks of the term the course will be taught in blended format, as shown in the schedule below. The main characteristic of a blended course is that part of the course is presented online, for students to view on their own time. Typically this is the more straightforward and basic material in the course. For this course the online material will be in the form of narrated PowerPoint presentations accompanied by self-assessment questions, not for grades, that will help you test your knowledge on the content of the presentations. Also at the end of each week a short exercise, for grades, on the content discussed that week both in class and on the videos will be available. There are four exercises in total. Placing the more basic material online, frees up time for discussion in class of more interesting and controversial aspects of nutritional sciences and nutrition research and this change is being made in the hopes that it will enhance student learning and interest in nutrition.

Date	Topics	Videos and Exercises for blended format	
Blended format:	Dr. Gurfinkel:	Complete Exercise 1 on Week 1	
Week 1:	Course Overview	material (due date online <b>Oct 3</b> :	
Sept 12 & 14	Introduction to Nutrition (ch1)	9 AM)	
	Dietary Reference Intakes (ch2)	View videos, by Sept 19, on: Canada's Food Guide (ch2) Food Labeling (ch2)	
Blended format:	Dr. Gurfinkel:	Complete Exercise 2 on Week 2	
Week 2:	Canada's Food Guide Controversies	material (due date online Oct 3:	
Sept 19 & 21	Food Labelling – Applications (ch2)	9 AM)	
		View videos, by Sept 26, on: Nutrition Research (ch1) Physiology Fundamentals (ch3)	
Blended format:	Dr. Gurfinkel:	Complete Exercise 3 on Week 3	
Week 3:	Examples of Nutrition Research (ch1)	material (due date online Oct 3	
Sept 26 & 28	Digestive System (ch 3)	9 AM) Video videos, by Oct 5, on:	
		Natural Health Products (F5)	
Blended format:	Oct 3: Class Cancelled	Complete <b>Exercise 4</b> on week 4	
Week 4:	Dr. Gurfinkel:	material (due online <b>Oct 11</b> : 9	
Oct 3 (Class cancelled)	Oct 5: Natural Health Products	AM)	
Oct 5	Food Intake Assessment	,	
	ASSIGNMENT 1: 3-DAY FOOD		
	RECORD due online Oct 7 9 AM		
Lecture Format (remainde	er of term):		
Oct 10 & 12	Oct 10: No class – Thanksgiving		
	Oct 12: Dr Wolever: Carbohydrates (Ch	4)	
	& also Including Focus on Obesity, Metabolism, and Disease Risk (after		
	ch7): F2.1: Obesity and type-2-diabetes & Lifecycle Nutrition: Ch		
	14.1:The Physiology of Pregnancy: Complications of Pregnancy:		
	Gestational Diabetes Mellitus		
	FOOD INTAKE SURVEY: based on Assignment 1 due online Oct 14 9 AM		

Oct 17 & 19	Oct 17: TERM TEST 1 on all material covered from Sept 12 to Oct 5
	inclusive; test during scheduled class period
	Oct 19: Dr Wolever Carbohydrates
Oct 24 & 26	Oct 24: Dr. Wolever: Carbohydrates (ch4) & Lipids (ch5)
	Oct 26: Dr Gurfinkel: Blended Learning Class Survey
	Discussion of Assignment 2
	SCIENCE WRITING QUIZ: due online Oct 28 at 9 AM
Oct 31 & Nov 2	Dr. Wolever: Lipids (ch5) & Protein (ch6)
	ASSIGNMENT 2: SHORT ESSAY due online Nov 4 at 9 AM
Nov 7 & 9	Nov 7: No class November Break
	Nov 9: Dr. Wolever: Protein
Nov 14 & 16	TERM TEST 2: on all material covered by Dr. Wolever
	Dr. Gurfinkel: Nov 16: Weight Management (ch 7)
Nov 21 & 23	Dr Gurfinkel: Nutrition and Physical Activity (ch 13)
	Weight Management through the Lifecycle:
	Parts of ch 14, 15, & 16 as indicated on PowerPoint slides
	Water-soluble Vitamins (ch 8)
Nov 28 & 30	Dr Gurfinkel: Fat-soluble vitamins (ch 9)
	Water & Electrolytes (ch 10)
	Major Minerals and Bone health (ch 11)
	Food Safety Quiz due online 9 AM Dec 2
Dec 5 & 7	Dr G: Ch12: Minor Minerals
	Focus on Integrating Nutrient Function
	Results of the food intake survey
	End of term summation

# 8) Required readings

During lectures & videos required readings from various sections of the textbook will be assigned. These topics will NOT be discussed further. Instead students are expected to study the topics independently; the term tests and final exam will include questions on these readings. These readings are listed below. Pages beginning with A refer to the appendix of the textbook.

Section: Topic	Page 1e	Page 2e
F4: Focus on Phytochemicals	402-408	403-408
2.4: Critical Thinking: Should Canadians eat according to Canada's Food	62	58
Guide or the Mediterranean Diet		
2.3 Canada's Food Guide Additional Statements	57 & A44	50 & A34-35
3.3: Composition of Gastric Juices and Science Applied: Discovering what	95, 105	92-93, 102-103
causes ulcers		& A45
4.6: Critical Thinking Dietary Fibre, Glycemic Index, and Type-2-Diabetes	146 & A45	144 & A36
4.7: Table 4.3 & Label Literacy: The Scoop on Sugar	152, 153	151, 152
5.6: Critical Thinking: Lowering the Risk of Heart Disease	-	199 & A36-37
5.7 Label Literacy: Choosing Lean Meat	200	208
6.5 Label Literacy: Is it safe for you?	242	248
7.10 Your Choice: Can a Weight Loss Supplement Help	304-305	309
7.3 Estimating Energy needs: Measuring Energy Expenditure & Table 7.5	272-274	278-280
7.5 Guidelines for a healthy body weight: Assessing Body Composition	277-278	284-285
7.9 Diets, Diets Everywhere: Critical Thinking: Choosing a Weight Loss plan	299 & A39	306 & A39
that works for you	A47-48	
13.3 Critical Thinking: Benefits of Interval training	551 & A51	541 & A43
Chapter 15: Chapter Opener & Case Study Outcome	622 & 652	609 & 640

F7 Focus on Eating Disorders	658-673	644-659
8.1 Your Choice: To Supplement or Not to Supplement (2e)	394-395	329
Or 9.5 Label Literacy: Think before you Supplement (1e)		
10.3 Science Applied: A Total Dietary Approach to Reducing Blood Pressure	433-434	428-429
Correction: 2e: bar graph pg 428: blue bar = control diet; pink = DASH diet		
Chapter 17: Food Safety: Required for online quiz (1% of final grade)	704-739	688-721
Chapter 2: Section 2.2 & 2.3 May be useful for assignment: 3-day food	42-60	38-56
record		

# 9) Assessment

#### **Course Assessments**

Assignment	Due date	Weight (%)
Exercises #1,#2,#3, #4 (MCQ)*	Oct 3 online at 9 AM (#1,2,3)	4 (4 X 1%)
	Oct 11 online at 9 AM (#4)	
Assignment 1: Three-day food record	Oct 7-online at 9 AM	10
Food Intake Survey (MCQ)	Oct 14-online at 9 AM	1
Term Test 1 (MCQ)	Oct 17 - during the scheduled class -on all material	18
	covered from Sept 12 to Oct 5-inclusive	
Science Writing Quiz (MCQ)	Oct 28- online at 9 AM	1
Assignment 2: Essay	Nov 4-online at 9 AM	12
Term Test 2 (MCQ)	Nov 14- during the scheduled class -on all of Dr	18
	Wolever's material on macronutrients	
Food Safety Quiz (MCQ)	Dec 2-online at 9 AM	1
Final Exam (MCQ)	TBA-10% term test 1 material; 10% term test 2	35
	material; 80% remaining course material	
Total		100
*MCQ = multiple choice questions		

#### **10)** Important course policies

#### a) Electronic communication with instructors:

**Questions about course content and assignments:** The course has a discussion board for posting questions about the lectures, videos, and assignments.

**Questions of a more personal nature:** Please limit the use of **e-mail** to personal matters only. If you send questions about lecture content via email, you will be asked to post the questions on the discussion board. Be sure to include the course code **NFS284** in the subject line of any e-mail communication. Note also that there are instructor office hours where you can discuss both lecture, video, and assignment material and personal matters.

**Student e-mail accounts: All U of T students are required to have a valid UofT email address**. You are responsible for ensuring that your UofT e-mail address is set up and properly entered in ACORN. Otherwise you will NOT be able to receive emails from your instructor as @mail.utoronto.ca addresses are the only addresses used by Blackboard. You are also responsible for checking your U of T email account on a regular basis. Failure to do so is not an acceptable excuse for missing important messages.

**Class-wide mailings:** Occasionally instructors will send a mass mailing to all students via Blackboard. Forwarding your @mail.utoronto.ca to a hotmail, Gmail, yahoo account etc is NOT advisable. In some cases, these mailings may be interpreted as spam and be rejected or diverted to your junk mail folder. This could result in you missing an important message. Check your @mail.utoronto.ca account directly from the U of T website.

**Announcements:** Announcements are posted on the course website and it is the student's responsibility to check there regularly. These announcements include reminders of important dates that most students find helpful.

**b)** Assignments and Turnitin policy: Students are expected to independently work on their assignments and properly paraphrase and cite sources used for their assignments. The Science Writing Quiz is intended to provide all students with an understanding of how to use scientific sources in their writing and how to avoid plagiarism. Be sure that you understand what plagiarism is. It is a serious offence. In this course, Turnitin will be used as a plagiarism prevention tool as described below:

"Normally, students will be required to submit their course essays to Turnitin.com 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 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."

# For this course, students will be asked to submit two assignments: 1) three day food record and 2) essay to Turnitin. Instructions on how to access Turnitin will be posted on Blackboard.

If you have problems that prevent you from submitting to Turnitin, please contact Dr. G. All students are expected to submit to Turnitin, which is voluntary, or provide an alternative. Failure to do so could result in a grade of **ZERO** for the assignment. For those who do not submit to Turnitin, as an alternative you will be expected to meet with Dr Gurfinkel for a short **oral test** during which you will be asked questions about the process of writing of the assignment and your knowledge of the content of the assignment. Your assignment mark may be modified 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.

# c) Policy regarding late assignments:

# All assignments must be submitted online by the stated date and time.

The ESSAY ASSIGNMENT and 3-DAY FOOD RECORD will be accepted after the due date if compelling reasons for an extension are presented, such as illness, personal distress or similar unforeseeable circumstance. Please contact Dr Gurfinkel by e-mail (debbie.gurfinkel@utoronto.ca) to request an extension and for instructions on how to submit your assignment online. You will be asked to provide a reason 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/getattachment/index/Verification-of-lllness-or-Injury-form-Jan-22-2013.pdf.aspx">http://www.illnessverification.utoronto.ca/getattachment/index/Verification-of-lllness-or-Injury-form-Jan-22-2013.pdf.aspx</a>. If you prefer, verbal explanations will also be accepted. See Dr Gurfinkel during her office hours Fridays 1-5 pm (FG142-150 College St) or phone 416-978-3621. All discussions are kept confidential. Students dealing with intense or ongoing personal distress or chronic illness, who may need special and continuing accommodation, may be asked for additional documentation and 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 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.

If you are uncertain if you have compelling reasons for an extension or if you are unable to contact Dr. Gurfinkel 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 Gurfinkel (debbie.gurfinkel@utoronto.ca) to discuss your situation. **IMPORTANT:** Often students don't believe their situation is compelling, when in fact it is, so please speak to Dr. Gurfinkel, whatever your circumstances.

Please note: **NO ACCOMMODATIONS** will generally be made for the online quizzes –Exercises #1-4, Scientific Writing Quiz, Food Intake Survey, and Food Safety Quiz, each worth 1% of the final grade. Don't forget to do them!!

# d) Policy regarding assignment re-reads:

Students who have concerns about their marks can request re-reads. Instructions will be posted on Blackboard and deadlines apply.

#### e) 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-UPS**. If you miss one term test (worth 18%), for compelling reasons, your final exam will be worth 53% of your final grade (18% + 35%). If you miss both term tests your final exam will be worth 71% of your final grade (18% + 18% + 35%).

You are required to provide an explanation for your absence. This can be a written explanation from you or a medical certificate <a href="http://www.illnessverification.utoronto.ca/getattachment/index/Verification-of-Illness-or-Injury-form-Jan-22-2013.pdf.aspx">http://www.illnessverification.utoronto.ca/getattachment/index/Verification-of-Illness-or-Injury-form-Jan-22-2013.pdf.aspx</a> If you prefer, verbal explanations will also be accepted. See Dr Gurfinkel during her office hours Fri 1-5 pm (FG142-150 College St) or phone 416-978-3621. All discussions are kept confidential. Students dealing with intense or ongoing personal distress or chronic illness, who may need special and continuing accommodation, may be asked for additional documentation and are advised to discuss their situation with their college registrar.

#### f) 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 (approx \$70) must be paid. **Note**: Students do loose access to courses on Blackboard at some point after the end of term, so be sure you have downloaded all documents you need to study from the course website before then.

#### g) 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. You may also make audio recordings of the lecture for personal use only.

#### 11) 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

Students are urged to review the code periodically as ignorance of the rules is not an acceptable excuse.

#### 12) How to be successful in NFS284:

1) Powerpoint slides are posted prior to the lectures. Download and read/skim through the slides and relevant sections of the book prior to class. As little as 15 minutes spent on this "preview" will enhance your ability to follow and understand the lecture.

2) View all videos prior to class and do the self-assessment questions.

3) COME TO CLASS!!

4) A substantial amount of the course is based on the textbook so use it as a supporting reference to assist in your comprehension of the material.

5) Please note that the term tests and final exam are based on the required readings and material discussed in lectures & videos. You are NOT responsible for material in the textbook that is not covered in the required readings, videos, or lectures.

6) Check out the documents posted in the study skills section on the course website and see the links below (Help with Academic Skills) for University resources.

7) Keep up-to-date on the required readings. It is easy to fall behind.

8) Start working on assignments early- they take longer to complete than most students estimate.

9) Do NOT forget the online quizzes – they are worth 1% each.

10) In order to be successful on tests or exams, you must be able to both comprehend the material and recall it. Review your notes for comprehension regularly and use the discussion board to post questions about anything you don't understand or visit instructors during office hours to ask questions.

If you have been reviewing the material during the term for comprehension, you can focus on recall in the days immediately before the exam. Be sure to give yourself enough time. Depending on the subject, you may need 1-2 hours (maybe even more for very dense material) of study/lecture or video hour of content. Become aware of how long it takes you to learn things so you can plan realistically. The last day before a test or exam should ideally be for review only. Finally, during an exam, persevere; don't give in to the stress.

# 13) 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 G.

# 14) 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: <u>http://www.accessibility.utoronto.ca/</u>

# 15) 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: <u>http://www.asc.utoronto.ca/</u> 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: <u>http://www.artsci.utoronto.ca/current/advising/ell</u>

**Writing Centres:** Writing Centres provide assistance with writing assignments for all students. Check out available services at: <u>http://www.writing.utoronto.ca/writing-centres</u>