

## Course outline

Faculty of Health Sciences  
School of Nutrition Sciences

### NUT 1304 INTRODUCTION to NUTRITION

Session : Fall 2019

Credits : 3

Professor : France Rioux, PhD

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Availability : by appointment

#### Course Description

Overview of the nutritional elements that make up food. Function and use of nutrients and their food sources. Recommended dietary intakes. Link between food consumption and the health of individuals. Role of dietitians and nutrition education tools. Social, cultural and psychological dimensions of food intake.

**Course Component:** Online

**Prerequisites:** 4U biology, 4U chemistry or equivalents.



## Learning objectives

At the end of this course, you should be able to:

- recognize the fundamental principles associated with nutrition and critically analyze nutrition information using reliable sources.
- interpret and apply nutrition guidelines and use educational tools such as nutrition labels and Canada's Food Guide.
- recognize classes, metabolism, roles, as well as recommendations and links to health and disease related to carbohydrates, fats and proteins.
- recognize energy-related concepts such as the energy value of foods, energy needs, intakes and expenses, and factors influencing weight management.
- recognize the classes, metabolism, roles, recommendations and links to health and disease (e.g., deficiencies or toxicities) related to vitamins and minerals.
- identify the roles, work environments and qualifications of a dietitian.

## Learning evaluations

Evaluations	Weighting	Date
<b>Mid-term exam</b> Duration : 1h20	30%	<b>October 23, 14h30-16h00. 200 Wilbrod, room 105</b>
<b>Participation (pre et post-tests)</b>	10%	
<b>Team assignment</b>	25 %	<b>22 November (Friday)</b>
<b>Final Exam</b> Duration : 3h00	<b>35%</b>	<b>To be determined, during the exam period</b>

## Mandatory Manual

Smolin LA, Grosvenor MB, Gurfinkel D. Nutrition: **Science and Applications. Second Canadian Edition.** John Wiley & Sons Canada Ltd. Toronto. 2015.

## Course content

Module and dates	Content	Chapter in the manual
<b>Get started</b>  Week of September 2	<ul style="list-style-type: none"> <li>You as a student taking an online course</li> <li>Information about your professor</li> <li>The course and its components</li> <li>Services for students</li> </ul>	
<b>Module 1- Nutrition : Food for Health</b>  Week of September 9	<ul style="list-style-type: none"> <li>Case study</li> <li>Introduction-healthy food choices and nutrients</li> <li>Nutrition and health</li> <li>Research in nutrition</li> <li>Identifying reliable sources of information</li> <li>Back to the case study</li> </ul>	<b>Chapter 1, p. 1-34</b> <b>Chapter 2, p. 71-82</b>
<b>Module 2- Nutrition Guidelines: Applying the Science of nutrition</b>  Week of September 16	<ul style="list-style-type: none"> <li>Case study</li> <li>Nutrient-based approach to nutrition recommendations</li> <li>Dietary pattern approach to nutritional guidelines</li> <li>Food labelling</li> <li>Back to the case study</li> </ul>	<b>Chapter 2, p.35-71</b> <b>Chapter 8, p.328</b>
<b>Module 3- Carbohydrates</b>  Weeks of September 23 and September 30	<ul style="list-style-type: none"> <li>Case study</li> <li>Chemistry of carbohydrates-dietary sources</li> <li>Carbohydrates in the digestive tract</li> <li>Carbohydrates in the body</li> <li>Meeting carbohydrate recommendations</li> <li>Carbohydrates and health</li> <li>Back to the case study</li> </ul>	<b>Chapter 4, p. 117-170</b>
<b>Module 4- Lipids</b>  Week of October 7	<ul style="list-style-type: none"> <li>Case study</li> <li>Types of lipid molecules-dietary sources</li> <li>Lipids in the digestive tract</li> <li>Lipid functions and transport in the body</li> <li>Meeting lipid recommendations for fat intake</li> <li>Lipids and health</li> <li>Back to the case study</li> </ul>	<b>Chapter 5, p.171-219</b>
	<b>October 13-19-Reading Week</b>	
	<b>October 23-MIDTERM EXAMS</b>	
	<b>Content covered: Modules 1, 2, 3, 4</b>	

Module and dates	Content	Chapter in the manual
<b>Module 5- Proteins</b>  <b>Week of October 21</b>	<ul style="list-style-type: none"> <li>• Case study</li> <li>• Protein molecules-dietary sources</li> <li>• Protein in the digestive tract</li> <li>• Protein in the body</li> <li>• Meeting protein needs</li> <li>• Protein and health</li> <li>• Back to the case study</li> </ul>	<b>Chapter 6, p. 230-266</b>
<b>Module 6- Energy balance and weight management</b>  <b>Week of October 28</b>	<ul style="list-style-type: none"> <li>• Case Study</li> <li>• The energy balance</li> <li>• The energy intake</li> <li>• Energy expenditure and needs</li> <li>• Energy metabolism</li> <li>• Body weight</li> <li>• Back to the case study</li> </ul>	<b>Chapter 7, p.267-316</b>
<b>Module 7- Vitamins</b>  <b>Weeks of November 4 and November 11</b>	<ul style="list-style-type: none"> <li>• What are vitamins?</li> <li>• Water-soluble vitamins</li> <li>• Fat-soluble vitamins</li> </ul>	<b>Chapter 8, p.326-373</b>  <b>Chapter 9, p.374-402</b>
<b>Module 8- Minerals, water and electrolytes</b>  <b>Weeks of November 18 and November 25</b>	<ul style="list-style-type: none"> <li>• What are minerals?</li> <li>• Major minerals-structural minerals and electrolytes</li> <li>• Trace elements</li> <li>• Water: The internal sea</li> </ul>	<b>Chapter 10, p. 409-437</b>  <b>Chapter 11, p.438-467</b>
<b>Module 9- The Dietetic profession</b>  <b>Week of December 2</b>	<ul style="list-style-type: none"> <li>• The dietetic profession</li> <li>• Dietetic education</li> <li>• Professional colleges and associations</li> <li>• The roles and workplaces of dietitians</li> </ul>	
<b>Date to be confirmed</b>	<b>Exam period- December 5-18. Modules 5, 6, 7, 8 and 9</b>	

## Learning activities

Different learning strategies will be used to enable you to meet the learning objectives of this course. The main theoretical concepts related to the course topics will be presented in the web pages, web links and course textbook. The online modules will also include pre- and post-tests, learning activities, and case studies. These learning strategies will allow you to test your knowledge, deepen the subject matter and apply the concepts to concrete situations. Online discussion groups will also take place to allow you to exchange and deepen your thoughts. Finally, many fundamental concepts of the course will be applied in the assignment on nutritional assessment.

## Course Policies

- The team assignment submitted late will be penalized by 10% per day on the final grade of the work. Work submitted more than five days late will not be accepted and will receive a score of zero.
- Up to 10% of the team assignment score may be deducted for the quality of English, including spelling and grammar errors.
- An absence at the midterm or/and final exam or a delay in returning the assignment due to a personal illness or the death of a member of the student's immediate family must be justified by a request for accommodation through a university academic advisor and through the university process for the official certificate of the personal illness or death of a member of the student's immediate family. Reasons such as travel, employment, volunteer work or misreading exam schedules are not accepted.
- No additional exams or assignment can be done to increase the final grade.
- You have 10 days after the note is posted to request a note change.

## Deferred exams

A student with a valid reason (see above) may write the final exam at a later date. This date will be scheduled on one of the sessions for the deferred exams fixed by the Unit. The date and location will be communicated to the students concerned. A midterm exam can also be deferred with accepted justification. The date is scheduled by the professor. The student must be present at the scheduled session if he/she wishes to complete the course.

## University of Ottawa Grading

A passing grade of D is required to pass the course.

Note alpha	Percentage	Numerical value	Definition
A+	90 % - 100 %	10	Exceptional
A	85 % - 89 %	9	
A-	80 % - 84 %	8	Excellent
B+	75 % - 79 %	7	Very good
B	70 % - 74 %	6	
C+	65 % - 69 %	5	good
C	60 % - 64 %	4	

Note alpha	Percentage	Numerical value	Definition
<b>D+</b>	55 % - 59 %	3	<b>Passable</b>
<b>D</b>	50 % - 54 %	2	
<b>E</b>	40 % - 49 %	1	<b>Fail</b>
<b>F</b>	0 % - 39 %	0	<b>Fail</b>
<b>ABS</b>		0	<b>Absent</b>
<b>EIN</b>		<b>0</b>	<b>Incomplete</b>

### **Mandatory textbook**

Smolin LA, Grosvenor MB, Gurfinkel D. Nutrition: Science and Applications. Second Canadian Edition. John Wiley & Sons Canada Ltd. Toronto. 2015.

It can be purchased at the Campus store, University Centre, 85 University. Ottawa, Ontario K1N 6N5

### **Academic fraud**

Academic fraud is any act committed by a student that may result in the falsification of his or her academic evaluation or that of another student.

A student who has committed or attempted to commit academic fraud, or who has been an accomplice to it, is liable to one or more of the following sanctions:

- grade F or zero for the work in question or for the course in question;
- an additional requirement of 3 to 30 credits added to the program of study;
- suspension or expulsion from the faculty.

Here are some examples of academic fraud:

- Plagiarism in any way whatsoever;
- Present research data that has been falsified or invented;
- Submit a work done by someone else;
- Use one of his/her own work already submitted in another course, without permission from the teacher.

Please consult the following link to learn more on this topic.

<https://www.uottawa.ca/vice-president-academic/academic-regulations-explained/academic-fraud>

### **The University of Ottawa does not tolerate any form of sexual violence.**

Sexual violence refers to any act of a sexual nature committed without consent, such as rape, sexual harassment or cyber attacks. The University and employee and student associations offer a range of resources and services that provide members of our community with access to confidential information and support, as well as procedures for reporting an incident or making a complaint. For any information, consult the following link on Sexual violence: support and prevention: <https://www.uottawa.ca/sexual-violence-support-and-prevention>.

