

Department of Family Relations and Applied Nutrition

NUTR*3090 Clinical Nutrition I Winter 2018 – COURSE OUTLINE

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Lectures	Tues, Thurs 8:30-9:50 AM	MCKN, Room 120
Laboratories	Wed 8:30 - 11:20 AM Wed 11:30 AM -2:20 PM	MCKN 229 and others (see schedule) MCKN 232 and others (see schedule)
Final Exam	Wed, 18 April (2:30 PM – 4:30 PM)	TBA

To Contact Us (out of class time)

1. Send an email with your question or to request an appointment. Most emails will be answered within 24 hours. If you have not had any response – best to send another email. Provide several possible times if you want a phone or in-person meeting. We will confirm a specific time.
2. The Courselink general discussion area is for student use – instructors and TAs will not be checking it.
3. Questions and answers of general interest or important information will be posted to the Courselink News or sent as a broadcast email to your uoguelph account. Please make sure you are receiving emails to this account as this is the official way the university communicates with all students.

Course Description

The epidemiology, pathophysiology, and role of nutrition will be considered in the prevention and management of several major chronic conditions including cardiovascular diseases, disorders of energy balance and diabetes mellitus. There is an emphasis on developing the skills for high risk individual management approaches.

Prerequisite(s): (BIOM*2000 or BIOM*3200), FRHD*3070, NUTR*2050, (NUTR*3190 or NUTR*3210), STAT*2090

Co-requisite(s): FRHD*3400

Restriction(s): NUTR*3040. Registration is limited to students registered in the B.A.Sc. AHN major.

Course Format

The course consists of two one-and a half hour weekly lectures, and a three-hour laboratory each week.

Course Website

NUTR*3090 uses Courselink. There you will find PowerPoint presentations, notes, links to readings, the gradebook, assignments, discussion areas and other resources.

Responsibilities of the Instructors

We will guide students as skillfully as possible through a series of structured activities designed to promote mastery of introductory nutrition assessment and counselling skills and knowledge for the major nutrition related health conditions in Canada. We will promote a positive learning environment that progressively challenges students to develop their critical thinking, communication and application skills.

Responsibilities of the Students

Students have the usual responsibilities to attend all lectures and laboratory sessions and to work with their teams to complete group projects. Any course material discussed in class or provided in class notes and PowerPoint presentations is testable. Students are expected to respect others in the classroom, avoiding distracting activity that may inhibit others' learning. Students are expected to come to class prepared to participate in group activities. Available course material and /or readings should be read before class, if possible. Each student is expected to identify any problems with the course materials or website to the instructor(s) as they arise.

Learning Outcomes

From departmental learning outcomes and from the Integrated Competencies for Dietetic Education and Practice (2013) at: <http://www.pdep.ca/>

Content areas: Role of diet (and other factors) in the development and management of risk factors and chronic conditions related to cardiovascular diseases. These include hypertension, dyslipidemia and diabetes mellitus. Energy imbalance/body fat as a cause or consequence of human diseases, including excess and low body weight and fat stores.

1. Demonstrate knowledge of the epidemiology (who gets it), etiology (causes), pathophysiology (what happens to their bodies when people get it), natural history, current prevention and treatment methods (medical, behavioural and nutritional) of the conditions in Canada.
2. Demonstrate oral and written skills in the nutrition care process for individuals by conducting and evaluating: A. nutrition assessment, B. making a nutrition diagnosis, C. planning and executing nutrition interventions (counselling or nutrition education), D. monitoring progress and E. documentation.
3. Demonstrate knowledge of the organization of the Canadian health care system and federal legislation, regulations and policies applicable to applied nutrition practice.
4. Demonstrate knowledge of current systems for creating and translating evidence into practice as it relates to provision of nutrition services to prevent and treat the conditions under study.
5. Demonstrate skills in finding and evaluating evidence to support or change nutrition services for the conditions under study.
6. Demonstrate skills in combining evidence, reflection and consultation in developing nutrition care plans.

7. Demonstrate beginning skills in self-reflection, self-directed learning, teamwork and assessment of others' learning and professional practice skills to improve practice.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement due to illness or compassionate reasons, please advise the course instructor(s) and your classmate team in writing, with name, address and e-mail contact, as soon as possible. Where possible, this should be done in advance of the missed work or event. All written assignments are due on the due date (either submitted on Courselink by midnight or directly to Dr. El Khoury in class). Written assignments will be accepted up to one week past the due date, but will incur a penalty (5% per day), unless there is documentation from the Program Counsellor.

In the event that you are not able to write a midterm examination (e.g. for an illness or because of another commitment), the weight of that midterm will be moved to the remaining examinations. See the undergraduate calendar for information on regulations and procedures for Academic Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Keep Back-up Copies of Assignments!

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible. For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: <https://www.uoguelph.ca/csd/>. Audio-recording of lectures is permitted.

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor. The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Evaluation

	Description	Due Date	% of Grade
Midterm 1	Assessment, critical appraisal and DM	Feb 15	10
Midterm 2	CVD	Mar 13	15
Final	Cumulative	April 18	25
Group Case Studies In lab	2 discussions (first session is practice)	In class assessment of participation	5
Counselling Assignment	Practice Counselling		
Patient scenario	Create a realistic scenario from template	Feb 13	5
Patient 3-day food record and pedometer steps	Complete	Mar 6	6
Patient reflection on counselling	Written reflection on experience	April 3	6
Counsellor nutrition Assessment, initial teaching plan and BTB plan	Based on Day 1 visit and patient record	Mar 9	12
Counsellor reflection		April 3	6
Observer reflections x 3	Using CC guide	Mar 6, Mar 16, Mar 27	10

***Please Note: You must pass the examination components in order to pass the course.**

Group Case Study Discussions (in the lab)

In the lab, you'll practice creating nutrition care plans (including assessment, diagnosis, interventions and monitoring) by working through case studies in groups of 3 students.

Practice Counselling (Counselling, being a patient and observing)

This is the assignment where you'll be bringing all your skills together by creating and implementing a nutrition care plan for a patient with diabetes. You will work in groups of three and you will all rotate between three roles: observer, patient and counsellor. Different types of diabetes will be assigned to each group member. Each group member will conduct 3 counselling sessions (an initial appointment and two follow-up appointments) as the counsellor. As a patient, you will reflect on the experience of being counselled, asked to record food intake and use a pedometer. As an observer, you will use a guide to provide feedback to the counsellor on the 3 sessions.

Special note on video recording: Each group has to record their Day 1 – Nutrition Assessment session plus any other session of their choice (Day 2 or Day 3). These videos will be very helpful and are required to complete the assignment. Each group has to submit their recorded sessions directly to Dr. El Khoury; otherwise, a penalty will be applied to the marks of counsellor and patient reflection documents, worth 5% for each document, for each group member.

Resources and Where to Find Them

With the proliferation of many resources in different formats and of differing quality and detail, it is important to document sources. On the following pages are listed all the resources and references we will be using, all in one place.

Recommended Textbook (NUTR*3090 and NUTR*4040)

Mahan LK, Raymond JL. Krause's Food and the Nutrition Care Process (14th ed). St Louis: Elsevier Saunders, 2017.

Hardcover on Reserve

Nelms M, Sucher KP, Lacey K. Nutrition Therapy and Pathophysiology. Belmont, CA: Wadsworth, Cengage Learning 2016. 3rd edition. (Note: Recommended - US focused on clinical care only)

Gibson R. Principles of Nutritional Assessment (2nd ed). Oxford University Press, 2005.

Other Readings

Selected practice guidelines and key readings. These are the journal article readings that are definitely under Course Readings. Links to web pages are also under General Resources

Week 1 – Jan 9-11

Lim SS, Vos T, Flaxman AD et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet 2012; 380: 2224-60.

van't Riet J, Sijtsema SJ, Dagevos H, De Bruijn GJ. The importance of habits in eating behaviour. An overview and recommendations for future research. Appetite 2011; 57: 585-96.

Montano DE, Kasprzyk D: Chap. 4. Theory of Reasoned Action, Theory of Planned Behavior, and the Integrated Behavioral Model. In Health Behavior and Health Education: Theory, Research, and Practice. 4th edition. Edited by Glanz K, Rimer BK, Viswanath K. Jossey-Bass; 2008.

Collins J: Education techniques for lifelong learning: principles of adult learning. RadioGraphics 2004, 24: 1483-1489.

Vanstone M, Giacomini M, Smith A, Brundisini F, DeJean D, Winsor S: How diet modification challenges are magnified in vulnerable or marginalized people with diabetes and heart disease: a systematic review and qualitative meta-synthesis. Ont Health Technol Assess Ser 2013, 13: 1-40.

Thompson FE, Kirkpatrick SI, Subar AF, Reedy J, Schap TE, Wilson MM et al.: The National Cancer Institute's Dietary Assessment Primer: A Resource for Diet Research. J Acad Nutr Diet 2015, 115: 1986-1995.

Week 2 – Jan 16-18

Kromhout D, Giltay EJ, Geleijnse JM. Fatty Acids and Cardiovascular Events after Myocardial Infarction. N Engl J Med 2010; 363: 2015-26. (example study)

Schrempft S, van Jaarsveld CH, Fisher A, Wardle J: The Obesogenic Quality of the Home Environment: Associations with Diet, Physical Activity, TV Viewing, and BMI in Preschool Children. PLoS One 2015; 10:

e0134490. (example study)

Greenhalgh T: How to read a paper. Statistics for the non-statistician. I: Different types of data need different statistical tests. *BMJ* 1997; 315: 364-366.

Greenhalgh T: How to read a paper. Statistics for the non-statistician. II: "Significant" relations and their pitfalls. *BMJ* 1997; 315: 422-425.

Guyatt GH, Oxman AD, Vist GE et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ* 2008; 336: 924-6.

Weeks 3 and 4 – Jan 23 – Feb 1

Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Can J Diabetes* 2013; 37: S1-S212.

http://guidelines.diabetes.ca/app_themes/cdacpg/resources/cpg_2013_full_en.pdf

Weeks 5 and 6 – Feb 6-15

Anderson TJ, Gregoire J, Hegele RA et al. 2012 update of the Canadian Cardiovascular Society guidelines for the diagnosis and treatment of dyslipidemia for the prevention of cardiovascular disease in the adult. *Can J Cardiol* 2013; 29: 151-67. <http://www.ccs.ca/index.php/en/guidelines/guidelines-library>

Anderson TJ, Gregoire J, Hegele RA et al. Are the ACC/AHA Guidelines on the Treatment of Blood Cholesterol a Game Changer? A Perspective From the Canadian Cardiovascular Society Dyslipidemia Panel. *Canadian Journal of Cardiology* 2014; 30: 377-80.

<http://www.ccs.ca/index.php/en/guidelines/guidelines-library>

Anderson TJ, Grégoire J, Pearson GJ et al. 2016 Canadian Cardiovascular Society Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in the Adult. *Canadian Journal of Cardiology* 2016; 32: 1263-1282.

<http://www.ccs.ca/index.php/en/guidelines/guidelines-library>

Week 7 – Feb 27 – Mar 1

Canadian Hypertension Education Program (CHEP) Recommendations.

<https://www.hypertension.ca/en/chep>

Week 8 – Mar 6-8

Tobe SW, Stone JA, Walker KM et al. Canadian Cardiovascular Harmonized National Guidelines Endeavour (C-CHANGE): 2014 update. *CMAJ* 2014; 186: 1299-305.

Handbook of Obesity, Epidemiology, Etiology, Pathophysiology, 4th ed. CRC Press; 2014.

Blomain ES, Dirhan DA, Valentino MA, Kim GW, Waldman SA: Mechanisms of Weight Regain following Weight Loss. *ISRN Obes* 2013; 2013: 210524.

Reinhardt M, Thearle MS, Ibrahim M, Hohenadel MG, Bogardus C, Krakoff J et al.: A Human Thrifty Phenotype Associated With Less Weight Loss During Caloric Restriction. *Diabetes* 2015; 64: 2859-2867.

Weeks 9, 10, 11 – Mar 13-29

Handbook of Obesity, Clinical Applications, 4 ed. CRC Press; 2014.

Canadian Task Force on Preventive Health Care. Adult and child obesity guidelines.

<http://canadiantaskforce.ca/>

Peirson L, Douketis J, Ciliska D, Fitzpatrick-Lewis D, Ali MU, Raina P. Treatment for overweight and obesity in adult populations: a systematic review and meta-analysis. CMAJ Open 2014; 2: E306-E317.

Peirson L, Douketis J, Ciliska D, Fitzpatrick-Lewis D, Ali MU, Raina P. Prevention of overweight and obesity in adult populations: a systematic review. CMAJ Open 2014; 2: E268-E272.

Peirson L, Fitzpatrick-Lewis D, Ciliska D, Usman AM, Raina P, Sherifali D. Strategies for weight maintenance in adult populations treated for overweight and obesity: a systematic review and meta-analysis. CMAJ Open 2015; 3: E47-E54.

Peirson L, Fitzpatrick-Lewis D, Morrison K, Warren R, Usman AM, Raina P. Treatment of overweight and obesity in children and youth: a systematic review and meta-analysis. CMAJ Open 2015;3: E35-E46.

Peirson L, Fitzpatrick-Lewis D, Morrison K et al. Prevention of overweight and obesity in children and youth: a systematic review and meta-analysis. CMAJ Open 2015; 3: E23-E33.

Leiter LA, Fitchett DH, Gilbert RE et al. Cardiometabolic risk in Canada: a detailed analysis and position paper by the cardiometabolic risk working group. Can J Cardiol 2011; 27: e1-e33.

Week 11- Mar 27-29

Nicely TA, Lane-Loney S, Masciulli E, Hollenbeak CS, Ornstein RM: Prevalence and characteristics of avoidant/restrictive food intake disorder in a cohort of young patients in day treatment for eating disorders. J Eat Disord 2014; 2: 21.