

Department of Family Relations and Applied Nutrition



NUTR*4070: Nutrition Education

Fall 2015

Who I am and where you can find me:

Dr. Jess Haines, PhD, MHSc, RD
MACS 226
Phone: X53780
Office hours: Tuesdays 12:00-1:00, or by appointment
Email: jhaines@uoguelph.ca

Please note: I do my best to reply promptly to email messages, but expect up to 48 hours for me to respond.

Your teaching assistants:

| Name | Email | Office Hours |
|-----------------|--|----------------|
| Michelle Boere | mboere@uoguelph.ca | By appointment |
| Simone Holligan | holligas@uoguelph.ca | By appointment |
| Carley O'Kane | cokane@uoguelph.ca | By appointment |

Class meets:

Tuesdays and Thursdays, 4:00p – 5:20 pm in Room Annu 156.

Prerequisites: FRHD*3400, NUTR*2050

Purpose and overview of course:

Welcome to Nutrition Education! I hope you find this to be an interesting course that provides you with knowledge and skills that are relevant to your career. Educating groups or individuals on how to make healthful food choices is an important aspect of both clinical dietetic practice and health promotion activities. This course will help you to understand how to assess the nutrition education needs of both groups and individuals and to develop, implement, and evaluate programs or campaigns to meet those needs.

Course objectives:

Content-specific objectives:

Upon completion of this course you should be able to:

- 1) Discuss the role of nutrition education in clinical dietetic practice and public health nutrition.
- 2) Describe selected theories of behaviour change and how they may be used to plan, implement, and evaluate nutrition education programs/resources.
- 3) Describe the basic steps in program planning, implementation, and evaluation.
- 4) Assess the nutritional education needs of groups and individuals.
- 5) Discuss various strategies that are used in nutrition education in a variety of settings.
- 6) Assess nutrition education resources for specific target groups.
- 7) Develop nutrition education materials following an evidence based approach.

Skill-based objectives:

Upon completion of this course you will:

- 8) Enhance your communication skills by: a) developing nutrition education resources; b) developing a written report describing the development of a nutrition education intervention.
- 9) Enhance your critical thinking and research skills by using scientific literature to provide a rationale for your nutrition education intervention.
- 10) Enhance your level of cultural competence by examining your own own cultural identity and how one's cultural identity can influence their approach to their nutritional health.

Addressing Applied Human Nutrition Outcomes (see Appendix on page 17)

This course addresses the following AHN Learning Outcomes:

1. Core Knowledge: nutrition communication and education, community/public health nutrition
2. Supporting Knowledge: health behaviour theory, determinants of health
3. Critical Thinking and Research Skills
4. Communication Skills: written, oral, and visual
5. Professional Skills: cultural competence, organization, time management

Methods of instruction

This course will involve two main forms of instruction: 1) lecture; and 2) in-class discussion and activities. The in-class discussion and activities will supplement the lecture by providing you an opportunity to think about and apply the material provided in lecture to “real-life” cases or examples.

Course text and reading:

There is no textbook for this course. Weekly readings will be assigned.

My Responsibilities

1. Create a course curriculum that helps students to assess the nutrition education needs of both groups and individuals and to develop, implement, and evaluate programs to meet those needs.
2. Be honest about my views while allowing students to make up their own minds about course content.
3. Be prepared for every class.
4. Be available to communicate with students about course content and assignments.
5. Respond to email messages within 48 hours.

Your Responsibilities

1. Be prepared for every class by doing all required readings.
2. Be respectful of other students and guest speakers.
3. Come to class on time and stay until the end of the class period.
4. Work with group members outside of class to create an oral presentation.
5. Check Courselink every 48 hours for important announcements and use Courselink to communicate with other students and the instructor.
6. Complete course requirements with integrity.

Courselink

Courselink will be used as our **primary** mode of communication. I have created discussion boards for: 1) questions, comments or thoughts re: Course Content; 2) questions or comments re: Course Assignments; 3) communication with your classmates (the TAs and I will not monitor this discussion board).

I will post the lecture slides each week, under the *Content* tab. Please either print the PDF and bring to class for note-taking by hand, or use the “commenting enabled” format for note-taking by laptop.

Distribution of Grades

| Component | Due Date | % of Final Grade |
|---|---|------------------|
| Step 1: Assess | Oct 1 to Courselink | 10% |
| Midterm (1 hour) | Oct 15 in-class | 15% |
| Step 2: Plan | Oct 22 to Courselink | 10% |
| Step 3: Implement | Nov 10 to Courselink | 10% |
| Advocacy case study write-up | Nov 19 or Nov 26 to Courselink Due date depends on the "role" assigned in the case study | 5% |
| Final Nutrition Education Project (includes Step 4: Evaluate) | Dec 3 to Courselink | 40% |
| Participation- including self-evaluation | Ongoing; self-evaluation due Dec 3 to Courselink | 10% |

Midterm exam will be multiple choice and will focus on weeks 1-4.

Advocacy Case Study Write-Up

This is an in-class activity that will be distributed and explained in class and posted to Courselink on Nov 12 (one week before the in-class activity). The case study write-up will be submitted to Courselink.

Nutrition Education Project

Individually, you will develop a nutrition education intervention. This project will be broken down into steps; you will complete Step 1- Step 3 of this project, receive feedback and be able to incorporate this feedback into your final project due on the last day of class. Below describes the steps required for this project:

Step 1: Assess, due October 1 to Courselink

Identify nutrition-related behaviour and target audience: You will identify a nutrition-related behaviour and target population on which to intervene. You can select a clinical population (e.g., Type 2 Diabetics) or a general population (i.e., health promotion approach) to target for this assignment. Using evidence from the scientific literature, you will provide a rationale for addressing your selected behaviour (e.g., how prevalent is the behaviour? what are the implications of the behaviour, to the individual or to the health care system?), as well as a rationale for intervening in your target population. (max 0.5 page, 12 point font, 1.5 spacing)

What are known key factors that influence this behaviour in your target population?: Using findings from research studies you will outline the key predictive factors that have been shown to influence your selected nutrition related behavior. You should outline what is known about how personal factors, such as knowledge, attitudes, preferences, and social factors, such as peer norms or family influence, and environmental factors, such as access to foods, may influence your behaviour of interest. (max 2 pages, 12 point font, 1.5 spacing; citations do not count in the page maximum)

You will be evaluated on content (covering information requested), organization, and composition.

Step 2: Plan, due October 22 to Courselink

Behaviour Theory: Identify the health behaviour theory on which you will base your nutrition education intervention. Identify the **key** constructs that are relevant for your particular nutrition related behaviour that you expect to address in your nutrition education intervention. (max 1 page (or 1.5 pages if using figure to represent theory), 12 point font, 1.5 spacing)

Goal(s) and objectives: You will create the goal(s) and objectives for your intervention. Create objectives for the behaviour you intend to change, as well as the **key** predictive factors and theoretical constructs you expect to change. Your objectives should be consistent from what was stated in your previous sections and should be specific, measurable, achievable, realistic, and time-sensitive (SMART). (max 0.5 page, 12 point font, 1.5 spacing)

You will be evaluated on content (covering information requested), organization, and composition.

Step 3: Implement, due November 10 to Courselink

In this assignment, you will describe the nutrition education strategies and activities you will use in your nutrition intervention to change the key predictive factors and theoretical constructs that influence your targeted behaviour. You will provide an overview of the strategies you will use. Tables may be helpful to present this material. (max 3 pages, 12 point font, 1.5 spacing)

You will also develop, in detail, **one** of the following education materials:

- 1) Written handout; or
- 2) Infographic; or
- 3) Curriculum for 1 group education/in-service session; or
- 4) Mass Media: Public Service Announcement (audio/video/print); or

For this educational material, you will identify your educational objectives for the education material (e.g., what predictive factor/theoretical construct do you expect to change with this educational product).

You will be evaluated on content (covering information requested), creativity, organization, and composition.

Final Nutrition Education Intervention Assignment, due Dec 3 to Dropbox

In this assignment, you will:

- 1) Create an Executive Summary that briefly describes the rationale, intervention and evaluation methods and expected impact of your nutrition education intervention. (max 0.5 pages, 12 point font, single spaced)
- 2) Describe and provide rationale for your target behaviour and target population and key factors influencing your target behaviour. (max 2.5 pages, 12 point font, 1.5 spacing)
- 3) Describe the health behaviour theory and key constructs on which you based your nutrition education intervention. (max 2 pages, 12 point font, 1.5 spacing)
- 4) Identify the goals and objectives and the strategies and activities of your intervention program (max 3.5 pages, 12 point font, 1.5 spacing).
- 5) Describe your evaluation plan: including your outcome and process evaluation plan (max 3 pages, 12 point font, 1.5 spacing)

You will be evaluated on content (covering information requested), creativity, organization, and composition. Citations do not count in the page maximums.

Participation, post self-reflection to Dropbox by Dec 3

My belief regarding this class is that you “get out what you put in”. I will do my best to keep the class interesting and challenging. However, this will largely be dependent on your active involvement. Class attendance is critical to getting all you can out of this course as we will be covering in detail the material you need to complete your assignments.

The participation grade for this course will be based on two components: a) the first component is based on attendance and the frequency and quality of your oral participation in class, and b) the second component is based on your self-evaluation of your participation (see Self-Reflection on page 16, due on **Dec 3 to Dropbox**). You will reflect on your participation and assign yourself a grade out of 10 and I will take this grade into consideration when determining your grade for participation.

Policies and Procedures:

1. Any students who need course adaptations or accommodations because of a disability, please come speak with me as early as possible.
2. Students who require accommodations on the basis of religious obligations are referred to the policy at: <http://www.uoguelph.ca/hre/hr/hrreligious.shtml>.
3. 40th class day is October 31 - this is the last day to drop the course without academic penalty.
4. If you are unable to meet a course requirement because of illness or compassionate reasons, please advise me as soon as possible via email. You will be asked to provide appropriate documentation of your circumstances. Further information on the University policy is outlined in the Undergraduate Calendar at: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/>
5. Late assignments are accepted up to 5 days past the due date with a 15% penalty (3% each day including weekends). After 5 days assignments will not be accepted unless compassionate or extenuating circumstances are brought to my attention.

6. 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 Graduate Calendar:

http://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec_d0e1609.shtml

| WEEK | Date | TOPIC | READINGS |
|--------------------|---------|---|---|
| Introductory class | Sept 10 | Course overview. What is nutrition education? | |
| Week 1 | Sept 15 | Overview of nutrition education/health promotion planning. Step 1: Assess | See checklist at: http://www.kemh.health.wa.gov.au/services/amssu/docs/Planning_Evaluating_HP_Checklist.pdf |
| | Sept 17 | Step 1, continued | |
| Week 2 | Sept 22 | Step 2: Plan What is health behaviour theory? How do we use theory? Health Belief Model | Kim H-S, Joo A, No J-K. Applying the Health Belief Model to college students' health behavior. Nutrition Research and Practice 2012;6(6):551-558. |
| | Sept 24 | How does culture influence one's approach to nutrition and health? | Beagan BL, Kumas-Tan Z. Approaches to diversity in family medicine. Canadian Family Physician. 2009; 55: e21-e28 Tervalon M, Murray-García J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. J Health Care Poor Underserved. 1998;9(2):117-25. Goody CM, Drago L. Using Cultural Competence Constructs to Understand Food Practices and Provide Diabetes Care and Education. Diabetes Spectrum.2009; 22:43-7. |
| Week 3 | Sept 29 | Health behaviour theories, continued Theory of Planned Behaviour Self-Determination Theory | Kothe EJ, Mullan BA, Butow P. Promoting fruit and vegetable consumption. Testing an intervention based on the theory of planned behaviour. Appetite. 2012;58:997-1004. Resnicow et al. Tailoring a Fruit and Vegetable Intervention on Novel Motivational Constructs: Results of a Randomized Study Annals of Behavioral Medicine. 2008;35: 159-169 |
| | Oct 1 | Health behaviour theories, continued Social Cognitive Theory Stages of Change Part 1: Assess, due | Poddar KH, Hosig KW, Anderson ES, Nickols-Richardson SM, Duncan SE. Web-based nutrition education intervention improves self-efficacy and self-regulation related to increased dairy intake in college students. J Am Diet Assoc. 2010;110:1723-7. Finckenor M, Byrd-Bredbenner C. Nutrition intervention group program based on preaction-stage-oriented change processes of the Transtheoretical Model promotes long-term reduction in dietary fat intake. J Am Diet Assoc. 2000;100:335-42. |

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| Week 4 | Oct 6 | Health behaviour theories, continued Social Ecologic Approach/Framework | Elder JP et al. A description of the social–ecological framework used in the trial of activity for adolescent girls (TAAG). Health Education Research. 2007;22:155-65. |
| | Oct 8 | Step 2: Plan Creating Goals and Objectives | |
| Week 5 | Oct 13 | NO CLASS Fall Break Day | |
| | Oct 15 | Midterm exam- in class | |
| Week 6 | Oct 20 | Step 3: Implementation Nutrition Education Strategies Overview and Development of Print Nutrition Education Materials | |
| | Oct 22 | Nutrition Education Strategies: Infographics Step 2: Plan due | |
| Week 7 | Oct 27 | Nutrition Education strategies: Group-based education/ in-service | |
| | Oct 29 | Nutrition Education strategies: Mass Media | |
| Week 8 | Nov 3 | Nutrition education strategies: Programming within schools | |
| | Nov 5 | No class: work on final projects | |
| Week 9 | Nov 10 | Nutrition education strategies: Personalized nutrition/ Nutrigenomics Part 3: Implementation due | Cormier et al., Nutrigenomics - Perspectives from registered dietitians: A report from the Quebec-wide e-consultation on nutrigenomics among registered dietitians. J Hum Nutr Diet. 2014 Aug;27(4):391-400. |
| | Nov 12 | Nutrition education strategies: | Brug J, Spikmans F, Aartsen C, Breedveld B, Bes R, Fereira I. Training dietitians in basic motivational |

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|---------|--------|--|--|
| | | Motivational Interviewing | interviewing skills results in changes in their counseling style and in lower saturated fat intakes in their patients. J Nutr Educ Behav. 2007;39(1):8-12. |
| Week 10 | Nov 17 | Nutrition education strategies: Policy | |
| | Nov 19 | Nutrition Education Strategies: Advocacy for Policy Change: Case Study Due | |
| Week 11 | Nov 24 | Step 4: Evaluation Outcome evaluation | |
| | Nov 26 | Process Evaluation Case Study Due | |
| Week 12 | Dec 1 | Knowledge Translation/ Dissemination | Minto et al. Dissemination of the Canadian clinical practice guidelines for nutrition support: Results of a cluster randomized controlled trial. Critical Care Medicine. 2006;34:2362-2369 |
| | Dec 3 | Final Nutrition Education Project Due Class wrap-up | |

Grading Rubric for Step 1: Assess

Name: _____

Target behaviour and population are justified based on scientific literature (4).

The predictive factors of the nutrition behaviour of interest are clearly described and justified based on findings from scientific literature (4).

Skillful, pleasant and easy to read. Sentence structure is concise, grammatically correct, cohesive. Minimum use of extraneous or repetitious material. No spelling or punctuation errors. References are cited correctly. (2)

Total

/10

Grading Rubric for Step 2: Plan

Name: _____

Description of health behaviour theory is easy to follow and includes key components of the theory. Choice of theory is well justified. (4)

The goal(s) and objectives of the program are clear, specific, and measurable and flow from predictive factors/health theory (3)

Skillful, pleasant and easy to read. Sentence structure is concise, grammatically correct, cohesive. Minimum use of extraneous or repetitious material. No spelling or punctuation errors. References are cited correctly. (2)

Total

/10

Grading Rubric for Step 3: Implement

Name: _____

Program strategies and activities are theory-based and are appropriate given the intervention objectives. (4)

The educational objective associated with the sample nutrition education tool is clear and appropriate given the intervention objectives. (1)

Language and message of the sample nutrition education tool is appropriate for the target audience. Easy to understand and follow. Engaging and creative. (4)

Skillful, pleasant and easy to read. Sentence structure is concise, grammatically correct, cohesive. Minimum use of extraneous or repetitious material. No spelling or punctuation errors. References are cited correctly. (1)

Total

/10

Grading Rubric for Final Project

Name: _____

1. Executive Summary

Includes sufficient relevant information for the reader to understand the rationale, intervention and evaluation methods, and impact of the proposed intervention program. (5)

2. Step 1: Assess

Target behaviour and population are justified based on scientific literature (2).

The predictive factors of the nutrition behaviour of interest are clearly described and justified based on findings from scientific literature (3).

3. Step 2: Plan

Description of health behaviour theory is easy to follow and includes key components of the theory. Choice of theory is well justified. (3)

The goal(s) and objectives of the program are clear, specific, and measurable and flow from predictive factors/health theory (2)

4. Step 3: Implement

Program strategies and activities are theory-based and are appropriate given the intervention objectives. (3)

The educational objective associated with the sample nutrition education tool is clear and appropriate given the intervention objectives. (1)

Language and message of the sample nutrition education tool is appropriate for the target audience. Easy to understand and follow. (2)

5. Step 4: Evaluate

Clear, comprehensive process evaluation plan that is consistent with the nutrition intervention strategies. (5)

Clear, comprehensive outcome evaluation plan that is consistent with the stated objectives. (5)

Proposed measures are suitable given the stated outcomes and target population. (3)

6. Organization, presentation and composition.

Skillful, pleasant and easy to read. Sentence structure is concise, grammatically correct, cohesive. Ideas are consistent throughout the project. Minimum use of extraneous or repetitious material. Systematic using subheadings. No spelling or punctuation errors. References are cited correctly. (6)

Total

/40

Self Reflection on Participation

NAME: _____

DATE: _____

1. Within the classroom, I contributed to the class in the following ways:

2. My level of participation was
- High
 - Average
 - Low

Provide justification for your rating.

3. To prepare for class, I:

4. Outside of the classroom, I contributed to the class in the following ways (e.g., discussed content with classmates/others, extra readings, provided feedback to other groups)

My self-assessment grade for my participation _____ / 10

APPENDIX

Applied Human Nutrition Learning Outcomes:

1. Core Knowledge in Applied Human Nutrition

Integrate and apply knowledge in core food and nutrition domains. *Core domains* include nutrition and metabolism; clinical nutrition; nutrition assessment; nutrition services management and food service systems; nutrition communication and education; food skills; community/public health nutrition; nutrition policy; and, nutrition across the lifespan.

Students will demonstrate this outcome by using critical thinking, research, communication and professional skills to complete complex learning and problem-solving activities, examples of which include:

- Creating evidence-based nutrition care and assessment plans for individuals which integrate counselling strategies and behaviour change theories
- Planning, delivering and evaluating food and nutrition initiatives (such as a community nutrition education program; quantity food production, menu planning and service)

2. Supporting Knowledge in Applied Human Nutrition

Utilize broad foundational knowledge of associated disciplines and topics to support core knowledge and learning, and to complete complex learning and problem-solving activities as assessed in applied human nutrition. *Associated disciplines and topics* include anatomy, physiology, biochemistry, chemistry, food science, culinary arts, microbiology, pharmacology, sociology, psychology, physical activity, health behaviour theory, determinants of health, management, and research methods.

3. Critical Thinking and Research Skills

Use analytic, problem-solving, research and statistical skills to identify knowledge gaps and to find, critically evaluate and apply nutrition and health information and research.

Students will demonstrate this outcome by skillfully analyzing and appraising nutrition and health-related information obtained from research, experience, reflection, and/or written or oral communications. With these skills, students will design nutrition care plans and research studies.

4. Communication Skills

Synthesize and convey information, arguments and analyses accurately and appropriately for the target audience, using a variety of oral, written and visual communication modalities.

Students will demonstrate oral communication skills by creating logically structured oral presentations which address the breadth and depth of content required of the topic; creating and utilizing audiovisual materials appropriate for the topics; facilitating understanding of content for the audience; and delivering content in an engaging manner. Examples of oral efforts include seminar presentations, journal article critiques, food demonstrations, nutrition counseling sessions, etc.

Students will demonstrate written communication skills by creating logically structured, grammatically correct documents which address the breadth and depth of content required of the topics, and in which various thoughts and arguments flow and are supported and appropriate for the target audience. Examples of written efforts include systematic literature reviews, lab reports, case studies, patient education materials, etc.

Students will demonstrate visual communication skills by analyzing or representing data in graphs, figures or charts; and creating and utilizing audiovisual materials appropriate for the topics. Examples of visual efforts include poster presentations, maps, diagrams, graphs and tables.

5. Professional Skills

Apply basic knowledge of ethics and standards of professional practice in the broad practice of nutrition.

Students will demonstrate this outcome by respectfully and professionally collaborating with others towards a common goal, while demonstrating cultural competence and proficiency in teamwork, leadership, organization and time management. *Others* may include peers, instructors, registered dietitians, patients, clients, family, community partners, healthcare colleagues, industry stakeholders, etc.