

FRAN*6510 Nutrition in the Community Winter 2016

Course Meets: Mondays 8:30 am-11:20 am in MACS 331

Instructor:

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MACS 228

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Purpose and Overview:

Welcome to Nutrition in the Community. I hope you find this to be an interesting and valuable course. One of the primary roles of a community nutritionist is to develop, implement, and evaluate theory-based interventions aimed at changing a population's nutrition-related behaviours. This course will provide you with the theoretical and practical knowledge to develop effective behaviour change interventions and the grant writing skills required for you to obtain funding for these programs.

Intended Audience:

This course is designed for graduate students in Applied Human Nutrition or other graduate students interested in developing, implementing, and evaluating theory-based community nutrition programs.

Course Text and Reading:

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

Course Objectives:

Content-specific objectives:

Upon completion of this course you should be able to:

- Demonstrate how psychosocial, organizational, and community theories can be used to design, implement, and evaluate public health programs.
- Use a program planning model to develop a community nutrition intervention.
- Create a theory-driven model of the predictive factors of a health behaviour.
- Describe formative assessment and its use in designing interventions.
- Write intervention objectives.
- Choose and describe appropriate intervention strategies.
- Develop process and evaluation plans for an intervention.
- Prepare a grant proposal for a community nutrition intervention based on sound program planning, development, and evaluation strategies.

Non-content objectives:

Upon completion of this course you will:

- Learn to communicate your intervention plan to others by writing in a succinct and organized fashion and by presenting your plan orally in class.
- Gain experience in working with others.
- Further develop your skills in critical analyses.
- Gain experience in grant writing.

Methods of Instruction

This course will involve two main forms of instruction: 1) lecture; and 2) group activities. Lectures will be given by myself or a guest instructor. Group activities will supplement the lecture by providing you an opportunity to work through a "real-life" example of how the material presented could be applied in the public health arena.

Your Role in this Course

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; lectures will complement and not repeat reading material. Be sure to complete your readings prior to class. This will allow our classes to be much more interesting and conducted at a considerably higher level.

Developing a good intervention program demands a great deal of thought and hard work. When you read - take time to think about how the material applies to yourself, others, and to the program you plan to develop. In understanding factors influencing eating behaviours, it is important to be sensitive to factors influencing your own behaviours, difficulties in modifying your own behaviours, and differences across cultures and population groups. In developing effective interventions, we need to identify the perceived needs of the target population, understand the factors influencing their behaviours, and develop programs that address these factors. We need clear objectives that may be evaluated and evaluation tools to help in determining the effectiveness of our programs.

The first third of the course focuses on theory and tends to be heavy on reading assignments. The remainder of the course focuses on program development and grant proposal writing. For each segment of the program development (e.g. needs assessment, writing objectives, choosing intervention strategies) time will be given in class for small group work. There is less assigned reading for this part of the course, but I urge you to re-read earlier reading and supplement your work with readings that are relevant to your particular projects.

In developing programs, community nutritionists usually work in teams. Therefore, some of the assignments in this course will be done in small groups (4 students). I strongly urge you to work together with people who have *different areas of expertise than your own*. This will help you to learn from your classmate's diverse experience and knowledge.

If you are having difficulties in understanding the material or the assignments, please be proactive in letting me know. It is very likely that your classmates share your questions. In addition to the formal evaluation conducted by the department, I will conduct an informal evaluation of the course midway through the semester. I also encourage you to e-mail me at any point during the course with constructive criticisms. Please take your role as critic seriously - you can influence the character of the course.

Evaluation

Class grades will be based on the following assignments:

% Final Assignment Due Date

10 **Grant Review**

January 25

Purpose: The purpose of this assignment is to help you be a critical reviewer of grant proposals and to assist you in preparing your own proposals.

Description: Individually, you will prepare a brief review (2 pages) of a grant distributed in class. Include a brief description of the project (1 paragraph) that shows the applicant that you understood the proposal. Review the key strengths and weaknesses of the proposal. Take into account significance (does it address an important problem), innovativeness, clarity of presentation, feasibility, strength of study design, and relevance to funder. Provide 3 suggestions for improvements for the proposal.

10 Development of Community Nutrition Intervention: Epidemiology, Rationale, and Predictive Factors

February 29

Purpose: The purpose of this assignment is to have you identify modifiable eating patterns that are contributing to a population risk for disease and to develop a rationale for intervening on that behaviour. Description: In your working group of 4 individuals select a health behaviour on which to intervene. As a group you will conduct a literature review to: 1) describe the epidemiology related to the behaviour; 2) provide a rationale for attempting to influence the target behaviour; and 3) identify predictive factors of the behaviour. The paper should be approximately 4 pages, double-spaced.

Development of a Community Nutrition Intervention: Formative Assessment

March 7

Purpose: The purpose of this assignment is to demonstrate your understanding of the role of formative assessment methods in better understanding your target audience.

Description: In your working group, describe the methods that you would choose for formative assessment and questions that you would like answered through your formative assessment. Include the following: 1) Who you would want to obtain information from; 2) Methods you would use to obtain the information; and 3) Questions to be used (in focus groups, interviews, or surveys). The paper should be approximately 4 pages, double-spaced.

10 **Development of a Community Nutrition Intervention**: March 14 **Theoretical Model and Study Objectives**

Purpose: The purpose of this assignment is to give you experience developing a theoretical model and writing study objectives that target specific predictive factors identified in the **Epidemiology**, **Rationale**, and **Predictive Factors** assignment.

Description: You will do this assignment with your working group. For theoretical model:

Prepare a diagram showing outcome behaviours to be addressed in intervention program (i.e. increased fruit and vegetable intake) and factors associated with these behaviours (identified in assignment 1) that will be addressed in your program. Indicate the theory your intervention is based upon. Your objectives should flow from this model and should be specific, measureable, achievable, realistic, and time-sensitive (SMART). This paper should be approximately 4 pages, the theoretical model will <u>not</u> be double spaced.

10 **Development of a Community Nutrition Intervention:** March 21 **Intervention Strategies**

Purpose: You will gain experience in creating intervention strategies to reach intervention objectives.

Description: In your working group create intervention strategies that you will use to positively influence predictive factors of the chosen health behaviour. The intervention strategies should flow from the theoretical model you developed in the previous assignment. This paper should be approximately 4 pages, double spaced.

10 **Development of a Community Nutrition Intervention:** March 28 **Evaluation and Logic Model**

Purpose: To give you experience in planning process and impact evaluation methods and developing logic models for your program.

Description: In your working group identify: 1) process evaluation measures that will be collected to assess the fidelity and completeness of the delivery of the intervention; and 2) outcome evaluation measures that will be conducted to assess changes in the predictive factors and the behavioural target. You will also construct a logic model for your program.

The paper should be approximately 6 pages long, the logic model will <u>not</u> be double spaced.

10 **Group Presentation**

April 4

Purpose: To give students experience in making presentations and an opportunity to share their work with other students.

Description: As a group, students will present their:

- 1) Targeted behaviour, rationale and predictive model
- 2) Intervention objectives
- 3) Formative data
- 4) Intervention strategies
- 5) Plans for evaluation

Presentation should be about 15 minutes in length.

30 Grant Application

April 4

Purpose: To give you experience in writing an actual grant proposal requesting funds for a community nutrition intervention. *Description*: As a group, will use complete the Canadian Foundation for Dietetic Research application (https://www.cfdr.ca/Downloads/Grants/2015(Updated)-Guidelines-for-Projects-up-to-20000-.aspx) to apply for funds for the program you developed in your working group. Start at Step 2 (assume you have already successfully completed Step 1, the Letter of Intent stage).

Criteria for Assessment of Assignments:

Written assignments should be typed, double-spaced, accurately referenced and formatted in appropriate academic style (for formatting of references to journal articles, books, chapters, etc. please refer to the "Publication Manual of the American Psychological Association" Washington DC: American Psychological Association).

The main areas I consider when assessing your work are:

Inclusion of all the assignments required elements.

Organization and clarity of writing and presentation.

Extent and appropriateness of information, concepts, and data used.

Evidence of critical evaluation.

Use of innovative and creative ideas.

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. 40th class day is Friday, March 11th this is the last day to drop without academic penalty. Refer to the Graduate Calendar for the schedule of dates: https://www.uoguelph.ca/registrar/calendars/undergraduate/2015-2016/c03/c03-wintersem.shtml
- 3. If you are unable to meet a course requirement because of illness or compassionate reasons, please advise me as soon as possible via email. See the graduate calendar for information on regulations and procedures for Academic Consideration: https://www.uoguelph.ca/registrar/calendars/graduate/current/
- 4. All assignments are to be submitted via Courselink dropbox. All assignments are due by 8:30a.m. on the due date. 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.
- 5. For group assignments each member of the group will receive the same grade. Please let me know if there are any problems with group members not pulling their weight. Together we will develop a plan to deal with the issue.
- 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. The Academic Misconduct Policy is detailed in the Graduate Calendar:

https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec d0e2396.shtml

7. Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct on our campus. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. As the 2015/16 Undergraduate Calendar states: "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" (p. 31).

In this course, we will be using Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to prevent plagiarism in the College of

Social and Applied Human Sciences. We will use Turnitin for all components of the group project.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

A document providing tips on how to use Turnitin is posted on Courselink under the Content tab.

Class Outline and Reading List

Date	Topic	Readings
January 11	Introduction to the course	
	Community Nutrition Interventions: Preparing a Grant Proposal	Bourne PE, Chalupa LM. Ten simple rules for getting grants. <i>PLoS Comput Biol</i> 2006;2(2): e12. doi:10.1371/journal.pcbi.0020012 Available at: http://www.ploscompbiol.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pcbi.0020012&representation=PDF
January 18	Grant writing continued	
	How does community nutrition differ from individual diet counseling?	Rose G. Sick individuals and sick populations. <i>Int J Epidemiol</i> 1985;14:32-8. Available at: http://ije.oxfordjournals.org/content/14/1/32.full.pdf+html Doyle YG, Furey A, Flowers J. Sick individuals and sick populations: 20 years later. J <i>Epidemiol Community Health</i> . 2006; 60(5): 396–398. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2563964/
January 25	Identifying Targets for Change: Epidemiology, Rationale, and Creating a Model of Predictive Factors	Baranowski T. Understanding the behavioural linkages needed for designing effective interventions to increase fruit and vegetable intake in diverse populations. <i>Journal of the American Dietetic Association</i> . 2011;111(10):1472-5. Available at: http://journals2.scholarsportal.info/pdf/00028223/v111i0010/1472_utblnfaviidp.xml
	Using theory to understand behaviour and planning programs.	Glanz K, Bishop DB. The Role of Behavioural Science Theory in Development and Implementation of Public Health Interventions. <i>Annual Review of Public Health</i> . 2010; 31 31: 399-418. Available at: http://www.annualreviews.org/doi/full/10.1146/annurev.publhealth.012809.103604

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February 15	organize group work sessions	WINTER BREAK
February 8	Self-Determination Theory No class —	Gillison FB, Standage M, Skevington SM. Relationships among adolescents' weight perceptions, exercise goals, exercise motivation, quality of life and leisure-time exercise behaviour: a self-determination theory approach. <i>Health Education Research</i> . 2006;21: 836-847. Available at: http://her.oxfordjournals.org/content/21/6/836.full.pdf+html Markland D, Ryan RM, Tobin VJ, Rollnick S. Motivational Interviewing and Self–Determination Theory. <i>Journal of Social and Clinical Psychology</i> . 2005; 24:811-831. Available at: http://search.proquest.com.subzero.lib.uoguelph.ca/docview/224853613/fulltextPDF?accountid=11233
	Theory of Planned Behaviour	Kim K, Reicks M, Sjoberg S. Applying the Theory of Planned Behaviour to Predict Dairy Product Consumption by Older Adults. <i>Journal of Nutrition Education and Behavior</i> . 2003; 35 (6): 294-301. Available at: http://journals1.scholarsportal.info/details-sfx.xqy?uri=/14994046/v35i0006/294_attopbdpcboa.xml
February 1	Transtheoretical Model of Behaviour Change	*Grant review due by 8:30am to Courselink Dropbox Kristal AR, Glanz K, Curry SJ, Patterson RE. How can stages of change be best used in dietary interventions? <i>Journal of the American Dietetic Association</i> . 1999;99(6):670-684. Available at: http://journals1.scholarsportal.info/details-sfx.xqy?uri=/00028223/v99i0006/679_hcsocbbuidi.xml
	Stimulus- Response Theory Health Belief Model	Abood DA, Black DR, Feral D. Nutrition Education Worksite Intervention for University Staff: Application of the Health Belief Model. <i>Journal of Nutrition Education and Behavior</i> . 2003;35:260-267 Available at: http://journals1.scholarsportal.info.subzero.lib.uoguelph.ca/det_ails-sfx.xqy?uri=/14994046/v35i0005/260_newifuaothbm.xml

February 22	Social Cognitive Theory Social Ecological Models	Lytle LA, Perry CL. Applying research and theory in program planning: An example from a nutrition education intervention. Health Promotion Practice. 2001;2(1):68-80. Available at: http://journals1.scholarsportal.info/details- sfx.xqy?uri=/15248399/v02i0001/68_aratipefanei.xml Stokols D. Translating social ecological theory into guidelines for community health promotion. American Journal of Health Promotion. 1996;10(4):282-298. Available at: https://webfiles.uci.edu/dstokols/Pubs/Translating.PDF
February 29	Formative Assessment: What is it? Why do we need it?	Goldberg J, Rudd RE, Dietz W. Using 3 data sources and methods to shape a nutrition campaign. <i>Journal of the American Dietetic Association</i> . 1999;99:717-722. Available at: http://journals2.scholarsportal.info/details-sfx.xqy?uri=/00028223/v99i0006/717_u3dsamtsanc.xml Haines J, Neumark-Sztainer D, Thiel L. Addressing Weight-Related Issues in an Elementary School: What do Students, Parents, and School Staff Recommend? <i>Eating Disorders</i> . 2007;15:5-21. Available at: http://journals1.scholarsportal.info/details-sfx.xqy?uri=/10640266/v15i0001/5_awiiaespassr.xml *Epidemiology, rationale and predictive factors due by 8:30am to Courselink Dropbox
March 7	Writing Objectives: The Principles Creating a Logic Model	The Health Communications Unit, Creating a Logic Model Available at: http://www.hqontario.ca/Portals/0/documents/qi/qi-rg-logic-model-1012-en.pdf *Formative assessment due by 8:30am to Courselink Dropbox
March 14	Choosing Appropriate Intervention Strategies	Swinburn B, Egger G. Preventive strategies against weight gain and obesity. <i>Obesity Reviews</i> . 2002;3: 289–301. Available at: http://onlinelibrary.wiley.com/doi/10.1046/j.1467-789X.2002.00082.x/full Perry CL, Lytle LA, Feldman H, et al. Effects of the Child and Adolescent Trial for Cardiovascular Health (CATCH) on Fruit and Vegetable Intake <i>Journal of Nutrition Education</i> . 1998;30 (6): 354-360. Available at: http://journals1.scholarsportal.info/details-sfx.xqy?uri=/00223182/v30i0006/354_eotcaahofavi.xml

		*Theoretical model and objectives due by 8:30am to Courselink Dropbox
March 21	Evaluation:	Perry CL, Sellers DE, Johnson C. The Child and Adolescent
	Process and	Trial for Cardiovascular Health (CATCH): Intervention,
	Outcome	Implementation, and Feasibility for Elementary Schools in the
		United States. <i>Health Education and Behavior</i> . 1997; 24: 716-
		735. Available at: http://heb.sagepub.com/content/24/6/716
		*Intervention strategies due by 8:30am to Courselink
		Dropbox
March 28	Developing	Osganian SK, Hoelscher DM, Zive M, Mitchell PD, Snyder P,
	Budgets	Webber LS. Maintenance of effects of the Eat Smart school
		food service program: results from the CATCH-ON study.
	Sustaining	Health Education and Behaviour. 2003;30(4):418-433.
	Change in	Available at: http://journals1.scholarsportal.info/details-
	Community	sfx.xqy?uri=/10901981/v30i0004/418_moeoteprftcs.xml
	Intervention	
		*Evaluation and logic model due by 8:30am to Courselink
		Dropbox
April 4	Group	
	presentation and	* Final grant due by 8:30am to Courselink Dropbox
	class wrap-up	