University of Guelph Department of Family Studies and Applied Nutrition

Final Project in Applied Human Nutrition FRAN*6750 Fall 2014, Winter & Spring 2015

Course Outline

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Course Description

The purpose of this research project course is to have students participate in applied implementation research related to dietetic services in public health, social services and clinical contexts. Students will be exposed to a number of approaches and will develop selected research skills for practice contexts. The course is centered on a research project to be completed over the course of the Masters of Applied Nutrition program. The course will review the research process, including report writing, and provide support for the student participating in an applied research project.

The Final Projects

Ideas for the final projects were solicited this past summer from preceptors who are interested in having MAN graduate students involved in their projects. Preceptors will be volunteering their time to work with students to complete projects relevant to practice.

Projects vary from year to year:

- Quality assurance review or audit
- Development of a research proposal with literature review
- Secondary data analysis
- Key informant interviews
- PEN project pathway development
- Patient or client surveys

The size and depth of the project are constrained by the time available and will be developed in conjunction with the course instructor and co-investigators (preceptors). Students will be expected to dedicate on **average of 3-4 hours a week to the project over the course of 3 consecutive semesters**.

End products of the course include a written project rationale, ethics application and successful completion, conduct of the study, abstract and final report as well as an oral and poster presentation of the applied research project before an audience of peers and community members.

Organization – Unique Features of Course

- This course is organized to allow MAN students to complete graduate level research projects that meet the requirements of internship AND of the same quality as masters theses, but much shorter, in keeping with project and course –based Masters degrees. Thus, we use both graduate studies evaluation methods, as well as adopting features of typical courses.
- The "course" runs all year.
- The style of conduct of the course is a blend of traditional course organization and thesis advising.
- Many aspects of research do not work out as intended and must be adapted or modified.
- All decisions in the completion of the projects are negotiated in the team, with final decisions by the course instructor and MAN coordinator.
- Students will generally work in groups of 2 to complete projects.
- Communication is critical Courselink, Skype, teleconference, Doodle, and others as needed. Time during each Monday class in the fall for team to meet. See syllabus for plan. Courselink will be the official repository for the course.
- Most deadlines can be flexible, to account for other priorities, except for certain dates, such as for oral presentations and submission of graduate studies documents. Need for changes must be communicated to the team.
- As in thesis advising, there will be multiple opportunities for discussion and feedback. Generally the student is responsible for seeking advice as needed (and early). The emphasis is on developing an excellent product that will be useful or publishable, not on comparing students to each other.
- Each student has an advisory committee and an individual program of study in Graduate Studies. For MAN, the committee for reporting purposes consists of the course instructor or faculty advisor (for those doing a project with other AHN faculty) and Alexia Prescod. Preceptors do not have "faculty standing". Each semester the thesis committee must report on overall student progress (mainly in research) to Graduate Studies. All forms are found on the Graduate Studies site.
- The Advisory Committee and Graduate Degree Program forms are completed once in the program in December (student completes and faculty advisor and student sign).
- The Semester Evaluations are completed each semester by the instructor (or other AHN faculty), signed by ALL parties (Dec, April, August). Students are encouraged to add commentary on their progress. "Grading" is Satisfactory/Some Concerns/Unsatisfactory.

Learning Outcomes

To complete this course the student will:

- Develop specific technical research skills for selected study designs and dietetic practice issues.
- **Complete an assigned applied research project** related to dietetic practice, in collaboration with the MAN program coordinator, and the course instructor, in cooperation with a topic co-investigator (AHN faculty member or practicum preceptor)
- Develop **research process/management skills** by completing a project, including developing excellent communication skills, teamwork, creative problem solving with a team, flexibility, resource management

• Produce a number of research products as outlined under evaluation.

Suggested Resources General

IHI Open School. IHI Open School Certificate of Completion- Basic Level. <u>http://www.ihi.org/offerings/IHIOpenSchool/Pages/default.aspx</u>

Health Quality Ontario. Quality Improvement Guide. Toronto: Queen's Printer for Ontario, 2012. <u>http://www.hqontario.ca/quality-improvement/tools-and-resources</u>

Dietitians of Canada: Resources about dietetic research: http://www.dietitians.ca/Knowledge-Center/Nutrition-Research-CINDAR.aspx

Writing your research proposal: A workbook for first time and inexperienced researchers in the social science and humanities.

By: Craig Higson-Smith with contributions from Julie Parle, Lis Lange and Ann Tothill <u>http://nusrlmethods2012.files.wordpress.com/2012/01/researchproposal0305.pdf</u>

University of Guelph, Office of Research: <u>http://www.uoguelph.ca/research/</u>

Panel on Research Ethics. TCPS 2: CORE — Tutorial. http://tcps2core.ca/welcome

Example REB submissions from 2013-14.

Resources on Applied Research (websites and books - not in Courselink)

Improving Patient Care: The Implementation of Change in Health Care, 2nd Edition Richard Grol (Editor), Michel Wensing (Editor), Martin Eccles (Editor), David Davis (Editor) ISBN: 978-0-470-67338-6. Wiley, 2013.

NIH. Health Services Research Information Central - Dissemination and Implementation Science. http://www.nlm.nih.gov/hsrinfo/implementation_science.html

Dissemination and Implementation Research in Health: Translating Science to Practice. Ross C. Brownson (Editor), Graham A. Colditz (Editor), Enola K. Proctor (Editor). Oxford University Press, 2012.

Knowledge Translation in Health Care: Moving from Evidence to Practice. Sharon Straus (Editor), Jacqueline Tetroe (Editor), Ian D. Graham (Editor). BMJ Books, 2nd ed, 2013.

Survey Methods

Dillman, Don A., Smyth, Jolene D, Christian, Leah Melani. Internet, phone, mail, and mixedmode surveys: the tailored design method, 4th ed. Hoboken, N.J.: Wiley & Sons c2014. (faculty copy). CPHA. Guide to Improved Data Collection in Health & Health Care Surveys (2012) AND Guide to Questionnaire Construction and Question Writing (2012). Ottawa: Canadian Public Health Association. (14.95 each) <u>http://publications.cpha.ca/collections/all/english+cpha</u>

Willis G. 1999. Cognitive Interviewing: A "How To" Guide. <u>http://fog.its.uiowa.edu/~c07b209/interview.pdf</u> (in Courselink)

Focus Groups

Krueger RA, Časey MA. Focus groups: a practical guide for applied research, 4th ed. Los Angeles, SAGE, 2009. (faculty copy) (3rd edition in library)

Larson K, Grudens-Schuck N, Lundy Allen B. Can You Call It a Focus Group? Iowa State University Extension May 2004. <u>https://store.extension.iastate.edu/Product/Can-You-Call-It-a-Focus-Group-Methodology-Brief</u> (in Courselink)

Basic Qualitative Analysis

Green, J., & Thorogood N. (2009). Qualitative methods for health research. London, UK: SAGE Publications. (faculty copy – resource)

Hsieh HF, Shannon S: Three Approaches to Qualitative Content Analysis. Qualitative Health Research 2005, 15: 1277-1288. (in Courselink)

Braun, V and Clarke, V. (2006) Using thematic analysis in psychology. Qualitative Research in Psychology, 3: 2, 77 — 101. (in Courselink)

Saldaña, Johnny. The coding manual for qualitative researchers, 2nd ed. London; Thousand Oaks, Calif: SAGE 2013 (H62 .S343 2013) (faculty copy)

Audits (differs by EMR and focus – basic tool is Excel) Clinical Audit Support Centre, UK. Clinical Audit Tools. Available from: <u>http://www.clinicalaudittools.com/</u> Intended for healthcare providers, the website includes useful and interactive resources to assist with re-invigorating the clinical audit.

Consensus processes – many approaches - Delphi, Nominal Group

Brauer P, Dietrich L, Davidson B. Nutrition in primary health care: using a Delphi process to design new interdisciplinary services. Canadian Journal of Dietetic Practice & Research 2006;Suppl:S14-S29.(in Courselink)

Mixed Methods

Creswell, JW, Plano Clark VL. Designing and Conducting Mixed Methods Research, 2nd ed. Sage: Thousand Oaks, CA, 2011.

Method of Evaluation

Assignment 1 – data analysis –separate document	10%
Research proposal – oral presentation	10%
Research proposal	10%
Research ethics submission – final for first submission or detailed	
methods if ethics not required	15%
Abstract for final research day presentation	5%
Research poster & poster presentation	5%
Research presentation (~20 min)	5%
Final written research report	25%
Effort/Progress in project (assessed by preceptor or faculty advisor) 15%	

Typical Course Administration Content

E-mail Communication

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course in writing, with your name, id#, and e-mail contact. See the graduate calendar for information on regulations and procedures for Academic Consideration:

http://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec_d0e1400.shtml

September 15, 2014Academic 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. The Academic Misconduct Policy is detailed in the Graduate Calendar:

http://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec_d0e1687.shtml

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded in any electronic media without the permission of the presenter, whether the instructor, a classmate or guest lecturer.

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 (soon to be renamed Student Accessibility Services) as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email <u>csd@uoguelph.ca</u> or refer to the <u>CSD website</u>. The standard statements are available on the <u>AVPA website</u> (undergraduate courses) or from the Office of Graduate Studies (Graduate Courses).

Resources

The Graduate Calendar is the source of information about the University of Guelph's procedures, policies and regulations which apply to graduate programs:

http://www.uoguelph.ca/registrar/calendars/graduate/current/

Research Proposal Outline – (5 pages single spaced)

Depending on the type of research you are engaged in this outline may need to change

- 1. Title
- 2. Introduction
 - a) Statement of problem
- 3. Background (review of research relevant to research)
- 4. Rationale for the research
- 5. Objectives or hypothesis
- 6. Methods
 - a) Study design (type, procedures etc)
 - b) Participants (selection, recruitment plans)
 - c) Measurements (describe tools to be used, identify variables)
- 7. Timeline (Gantt chart or diagram)
- 8. Budget
- 9. References