

University of Guelph
Department of Family Studies and Applied Nutrition

Final Project in Applied Human Nutrition FRAN*6750 Fall 2016, Winter & Spring 2017

Course Outline

Instructor: Janis Randall Simpson, PhD, RD, FDC

MINS 037 (class)

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Course Description

- *Paradigms, models and terminology for practice based “research” in health and social services contexts*
- *Planning studies: typical study designs, logic models*
- *Basic methods of conceptualizing, conducting, analyzing and presenting focus groups, surveys, key informant interviews, audits, consensus processes*
- *Development of a range of research skills by participating in a community research project*

The goal of this course is for students to gain skills in applied implementation research for dietetic services in public health, social services and/or clinical contexts. Students will be exposed to a number of approaches and will develop selected research skills. The course also includes a 'research project' to be completed over the course of the Masters of Applied Nutrition (MAN) program. The format includes formal class instruction as well as individual mentoring.

Research Projects

In the F16 semester, students, in consultation with the course instructor will decide on a 'research project' that normally will be conducted in the setting for the W2017 placements.

Projects vary from year to year and have included:

- 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
- AHN faculty research

The breadth and depth of the projects are constrained by the time available and are 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 research proposal; an oral presentation of the research proposal; involvement in revision/review of an ethics application (if applicable); successful conduct of the research project; an interim project report; and, production of an abstract and final report.

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.
- The “course” runs all year.
- The format is a blend of traditional classroom work with individual advising.
- The research process ALWAYS involves the unexpected; projects WILL evolve.
- All decisions on the completion of the projects are negotiated with the co-investigator(s), with final decisions on course completion made by the course instructor and MAN coordinator.
- Students may work individually, in pairs or in groups, depending on the project and in consultation with the course instructor. For the 2016-17 academic year, it is most likely that students will work individually.
- Communication is critical - Courselink, Skype, teleconference, Doodle, and others as needed. 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 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 the MAN coordinator. 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 course 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(s) (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.

Resources

Required Online Courses

IHI Open School. IHI Open School Certificate of Completion- Basic Level. Improvement Capability - courses 101, 102, 103, 104, 105. (depending on availability)

<http://www.ihl.org/offerings/IHIOpenSchool/Pages/default.aspx>

Panel on Research Ethics. TCPS 2: CORE — Tutorial. <http://tcps2core.ca/welcome> (8 modules)

Basic Research Skills

1. Systematic Searching – do you know how to search using MeSH headings in Pubmed?
2. Gathering and keeping track of references -
<http://guides.lib.uoguelph.ca/c.php?g=137782&p=900773>
3. Basic SPSS Version 23 to complete analysis of dataset – go to software distribution site at:
<http://www.lib.uoguelph.ca/get-assistance/maps-gis-data/data-analysis/spss>

Research and Ethics

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

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 Tohill
<http://nusrlmethods2012.files.wordpress.com/2012/01/researchproposal0305.pdf>

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

Example REB submissions from 2013-15 (on Couselink).

Applied Research - Implementation and Knowledge Translation

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. (Available online through the library)

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. (Available online through the library)

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. (Available in hard copy or online through the library) R723.7.K663.2013

Survey Methods

Dillman, Don A., Smyth, Jolene D, Christian, Leah Melani. Internet, phone, mail, and mixed-mode surveys: the tailored design method, 4th ed. Hoboken, N.J.: Wiley & Sons c2014. (JRS has a copy from WLU).

Aday, Lu Ann. Cornelius, Llewellyn Joseph. Designing and conducting health surveys: a comprehensive guide 3rd ed. San Francisco: Jossey-Bass c2006. Book in library RA408.5A33

Qualtrics University. Learn Qualtrics in 5 Steps.
<http://www.qualtrics.com/university/researchsuite/misc-pages/misc/learn-qualtrics-in-5-steps/>

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) <http://publications.cpha.ca/collections/all/english+cpha> (faculty copy)

Willis G. 1999. Cognitive Interviewing: A “How To” Guide.
[cognitive interviewing how to guide.pdf](#) (in Courselink)

Beatty P, Willis G. Research Synthesis: The Practice of Cognitive Interviewing. Public Opinion Quarterly, Vol. 71, No. 2, Summer 2007, pp. 287–311.(Courselink)

Blair J, Conrad FG. Sample Size for Cognitive Interview Pretesting. Public Opinion Quarterly 2011;75:636-58.(in Courselink)

Focus Groups

Krueger RA, Casey MA. Focus groups: a practical guide for applied research, 5th ed. Los Angeles, SAGE, 2015. (signed out by JRS)

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

Basic Qualitative Analysis

Green, J., & Thorogood N. (2009). Qualitative methods for health research. London, UK: SAGE Publications. (Paula Brauer has a copy)

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) (Paula Brauer has a copy)

Wreally Studios (2014) Transcribe software <https://transcribe.wreally.com/>

Audits (differs by EMR and focus – basic tool is Excel)

Clinical Audit Support Centre, UK. Clinical Audit Tools. Available from: <http://www.clinicalauditsupport.com/>

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. (available in library) H62 .C6962 2011

Program Evaluation

Mertens, D. M., & Wilson, A. T. (2012). Program Evaluation Theory and Practice: A Comprehensive Guide. New York, NY: The Guilford Press. (ebook in library)

Logic models

Wyatt Knowlton, L., & Phillips, C. C. (2013). The Logic Model Guidebook: Better Strategies for Great Results. Thousand Oaks, CA: Sage Publications, Inc. (available in library) HG177 .K56 2013

Method of Evaluation

Assignment 1 - data analysis - separate document	10%
Completion of IHI Certificate	10 %
Completion of ethics course	10%
Research proposal - oral presentation (F16)	15%
Research proposal - written (F16)	15%
Interim research report - written (W17)	10%
Final written research report - written (S17)	20%
Effort/Progress in project (assessed by preceptor or faculty advisor)	10%

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:

https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec_d0e2232.shtml

Academic Misconduct

https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec_d0e2709.shtml

The University takes a serious view of academic misconduct and will severely penalize students, faculty and staff who are found guilty of offences associated with misappropriation of others' work, misrepresentation of personal performance and fraud, improper access to scholarly resources, and obstructing others in pursuit of their academic endeavours.

In addition to this policy, the University has adopted a number of policies that govern such offences, including the policies on Misconduct in Research and Scholarship and the Student Rights and Responsibilities regulations. These policies will be strictly enforced.

<http://www.uoguelph.ca/research/for-researchers/research-integrity-and-conflict-of-interest>

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.

Resources

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

<https://www.uoguelph.ca/registrar/calendars/graduate/current/>