FRAN\*6000 (F18) 1

## FRAN\*6000: Quantitative Research Methods (.50 credits)

#### Fall 2018 Course Syllabus

**Department of Family Relations and Applied Nutrition University of Guelph** 

Instructor: Dr. John Dwyer, PhD (Psychology), Applied Human Nutrition Office: Macdonald Institute Building, room 227B Email: <u>dwyer@uoguelph.ca</u>

Office hours: By appointment on Monday and Wednesday

#### **Course format:**

Expected enrolment is approximately 30. Topics that will be examined in the course are listed in the course outline. Classes will consist of (a) instructor-led mini-lectures and/or class activities (including Sage research methods videos, which are videos developed with expert researchers), (b) student-led discussion of readings and class activities, and (c) guest presentations. You will discuss research methodology concepts and issues in readings related to quantitative research methods and critique readings that illustrate empirical quantitative research.

Class times: Wednesday, 8:30 - 11:20 am, Macdonald Stewart Hall, room 331

#### **Course website:**

Announcements, updated schedules, grades, and other information will be posted on CourseLink (a website for on-campus courses): <u>https://courselink.uoguelph.ca/shared/login/login.html</u>.

#### **Course description:**

This is a graduate course in **quantitative research methods**. Theory, research ethics, sampling strategies, questionnaire development, measurement issues, scale development, survey design, cross-sectional and longitudinal research designs, and experimental and quasi-experimental research designs are discussed. The course includes critical appraisal of the research literature.

This course is designed to provide you with a conceptual understanding of the issues and methods that are related to the development and implementation of quantitative research. The Department of FRAN provides an interdisciplinary program of graduate studies in (a) applied human nutrition, (b) family relations and human development, and (c) couple and family therapy. To make the course more relevant to you, I have assigned readings from various areas and your research proposal can address a general research topic of your choice.

**Prerequisite(s):** 75% in an undergraduate research methods course.

Considering the prerequisite, it is your responsibility to ensure that you currently



have a basic / fundamental knowledge of research methods, which serves as the foundation for this higher-level, graduate research methods course.

If necessary, you can refer to an applied research methods textbook to review some content in a previous undergraduate research methods course. There are many textbooks to choose from. The textbook for FRHD\*3070 (Research Methods) is: Neuman, W. L., & Robson, K. (2018). Basics of social research: Qualitative and quantitative approaches (4th Canadian ed.). Don Mills, ON: Pearson Canada Inc..

#### Learning objectives for students:

- 1. To develop conceptual and operational definitions of constructs commonly used in research, through in-class discussion.
- 2. To apply theory in research, through in-class discussion.
- 3. To develop sound research objectives or hypotheses to guide research, through in-class discussion.
- 4. To critique and develop survey questions based on principles of survey design, through inclass discussion.
- 5. To apply principles of measurement about establishing the validity and reliability of existing and new measures, during in-class discussion.
- 6. To develop specific research designs to examine various research objectives or hypotheses, through in-class discussion.
- 7. To assess ethical issues in empirical research, through in-class discussion.
- 8. To critically appraise research described in peer-reviewed journal articles.
- 9. To develop a well-conceptualized quantitative research proposal.

## 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 Student Accessibility Services (SAS) as soon as possible. For more information, contact SAS at 519-824-4120 (ext. 56208), email accessibility@uoguelph.ca, or refer to the SAS website.

#### 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.

The graduate calendar states:

- "Plagiarism is misrepresenting the ideas, expression of ideas or work of others as one's own. It includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and representing these as one's own thinking by not acknowledging the appropriate source or by the failure to use appropriate quotation marks."
- "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: https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/sec\_d0e2632.shtml

Library resources about academic integrity and plagiarism are available at <u>http://guides.lib.uoguelph.ca/AcademicIntegrity</u>

# *Turnitin (message from Associate Vice-President [Academic], University of Guelph, August 10, 2015):*

"In this course, your instructor will be using Turnitin, integrated with the CourseLink Dropbox tool, to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph.

All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing academic 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."

Information about Turnitin is uploaded on CourseLink.

## **Evaluation:**

### 1. Small-group facilitation of readings: 20%

Student enrolment will be considered to determine the group size (e.g., 2 or 3 students) for facilitation of readings and the number of facilitation rounds (e.g., 2) per group.

You will be given time to create your own group on September 12. After this, I will assign

students who are not in groups to specific groups. Then, I will randomly assign groups to specific dates to facilitate a collection of readings from the list of readings (e.g., part 1 or part 2).

During each facilitation round (a round ends when all groups facilitate assigned readings), you will be responsible for **facilitating a 1-hour class discussion** of these readings. Strong facilitators provide a lot of opportunities for all classmates to participate in class (this is particularly important given that class participation is evaluated in this course).

The readings consist of (a) chapters and "other" articles (in the subsequent course schedule, I designated some articles as more conceptual articles rather than "empirical" articles) to increase knowledge of methodology concepts and issues and/or (b) "empirical" articles to apply critical appraisal skills.

If you have assigned chapters and "other" articles, use your discretion in how to facilitate discussion of the content in a way that encourages student engagement. For example, you might use a combination of a brief presentation (e.g., Microsoft PowerPoint slides or a handout), discussion questions, and/or class activity to apply the content.

- If you plan on doing a class activity, discuss it with me prior to class to ensure that it does not overlap with my class activities.
- If you use Microsoft PowerPoint slides or a handout, bring a hard copy to class for me.

If you have assigned articles designated as "empirical" in the list of readings, develop and ask discussion questions related to **both** methodology concepts and issues **and** critical appraisal of the article (**particularly focusing on the research topic for that week**). Critical appraisal questions relate to the research objectives or hypotheses, research design, sampling, measurement, data collection and analysis, interpretation of the results, and other aspects of and issues in the research, to stimulate class discussion.

• Your summary of the article, prior to the discussion questions, should be limited to 1 minute so that valuable discussion time is not reduced.

## Facilitators are expected to seek out additional background information necessary to both understand the readings and lead the discussion.

Staff in the Data Resource Centre (DRC) in the library are available to provide statistics consultation to students in this course. I encourage facilitators to make an appointment with DRC staff if facilitators want assistance to enhance their understanding of the statistics used in the assigned readings. DRC staff will not provide consultation on research methodology. To request DRC consultation, (a) go to the library website (<u>http://www.lib.uoguelph.ca</u>), (b) click get assistance > map, GIS, & data > book maps, GIS, & data appointments, and (c) in the message, state that you are a student in Dr. Dwyer's course (FRAN\*6000) and are requesting statistics consultation.

• If you obtain statistics consultation from DRC staff, then acknowledge the specific DRC staff who provided assistance on a specific date during your facilitation.

## Grading rubric for facilitators:

Component	Quality of excellent performance	%
Content	<ul> <li>Facilitators focus on methodological concepts and issues in readings comprehensively</li> <li>Re: "empirical" articles: Facilitators mainly focus on the research topic for that week when facilitating critical appraisal of articles</li> <li>Re: "empirical articles": Facilitators demonstrate conceptual understanding of statistics in articles</li> <li>Facilitators present additional background information to support readings</li> </ul>	/ 30
Methods (e.g., brief presentation; discussion; class activity) to provide content	<ul> <li>Methods actively engage and motivate all students</li> <li>Re: chapters and "other" articles: Microsoft PowerPoint slides or a handout are clear and well- organized</li> <li>Re: chapters and "other" articles: Class activity is relevant, well-organized, and creative</li> <li>Facilitators guide the discussion (they don't dominate discussion; also, it is not a presentation). Discussion is well-organized and encourages different viewpoints</li> <li>Facilitators use open-ended discussion questions. Questions are understandable and thought-provoking. Questions encourage students to refer to readings</li> </ul>	/ 40
Communication and facilitation skills	<ul> <li>Group members facilitate in a coordinated manner</li> <li>Facilitators maintain eye contact, speak clearly, and speak at an appropriate volume and speed</li> <li>Facilitators keep the discussion on task. They refocus the discussion when it becomes sidetracked</li> <li>Facilitators listen attentively (e.g., ask clarifying and probing questions; paraphrase), build on students' comments, and summarize the discussion</li> <li>Re: "empirical" articles: Facilitators limit their thorough yet concise summary of each article to 1 minute</li> <li>Facilitators spend sufficient time on each reading during the 1-hour allotment</li> </ul>	/ 30
Total		/ 100%

## 2. Class participation: 20% (10% for 1st half of course and 10% for 2nd half)

All of us share the responsibility of creating an environment that promotes class discussions. Review the readings prior to the classes. Participation in discussions contributes to learning so you are expected to attend classes and participate in discussions. Grading will be based on meaningful class participation (e.g., asking thought-provoking questions; offering quality and insightful ideas) rather than mere attendance.

## 3. Small-group written quantitative research proposal: 30%

You will be given time to create your own group during a class in September. After this, I will assign students who are not in groups to specific groups.

Student enrolment will be considered to determine the group size (e.g., 2 students).

The research proposal will address a general research topic of your choice. You are required to write a research proposal to examine the effectiveness of an existing community intervention in Canada.

- Research proposal must not be related to the focus of a thesis or research project that you have done, are planning on doing during your graduate program studies, or are currently doing.
- Do not select a specific intervention if an assessment of that intervention has already been described in a journal article or a research report. You need to consider this when reviewing literature to select an intervention.
- A sufficiently detailed description of the intervention should be available. This is required so that you can describe the intervention in the method section of the research proposal.

Please meet with me to discuss and obtain approval of your proposed research, which must be feasible, before you go ahead to write the research proposal. You are not expected to actually conduct the research as part of the requirements of this course.

The research proposal should include elements such as a title page, a brief introduction, research hypotheses and their rationale, the method that includes sub-sections, references, and an appendix / appendices.

Guidelines for writing your research proposal (including the grading rubric) are in Appendix A.

Your group is to write the proposal independently. Don't collaborate with other groups on the proposal (it is not an inter-group effort). It is not appropriate for me to provide feedback on proposals during their development because this would result in an improper assessment of submissions that would be partially based on my input.

BOTH a paper copy and an electronic copy of the proposal are due by Nov. 28, 11:30 am. Late submissions have a 10% (out of 100) per day penalty.

- The paper copy should include any appendices. I will rely on this copy for grading.
- When you submit your paper copy, sign a form that will be available to ensure that you are given marks for completed work.
- Upload the electronic copy (Microsoft Word) (include any appendices) in Dropbox in CourseLink (don't submit it to my email address).

4. In-class exam: 30%

This individual exam will be a critical appraisal of an empirical article in a journal, which will be distributed during class.

The exam will be completed during the Oct. 24 class, 8:30 am - 11:20 am.

## Grading system:

The grading schedule described in the graduate calendar is as follows: 90-100% (A+), 80-89% (A- to A), 70-79% (B), 65-69% (C), and 0-64% (F).

## **Protocol:**

- The electronic recording of classes is expressly forbidden without the prior consent of the instructor. This prohibition extends to all components of the course, including, but not limited to lectures and seminars, whether conducted by the instructor or a seminar leader or demonstrator, or other designated person. When recordings are permitted, they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.
- 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.
- Information about what you should do if you are unable to complete course work because of medical, psychological or compassionate circumstances is given in the graduate calendar, in the "grounds for academic consideration" section. If you are not able to meet an in-course requirement due to illness or compassionate reasons, please inform me in writing. Where possible, this should be done in advance of the missed work or event. If this is not possible, this should be done as soon as possible after the due date. If appropriate documentation of your inability to meet the in-course requirement is necessary, I will request it of you.
- The last date to drop one-semester courses, without academic penalty, is November 2.

## **Required readings:**

The readings for each week should be read before coming to class so that you are prepared to raise and discuss issues from your readings during class. Bring your readings to class.

The chapters are available either via:

- Library's ARES course reserve system: <u>https://www.lib.uoguelph.ca/find/find-type-resource/course-reserves-ares</u>
- Reserve desk in the library (as a 2-hour loan) [Trochim et al. (2016) book]: https://www.lib.uoguelph.ca
- Primo Central (as e-books): <u>https://www.lib.uoguelph.ca</u>

Access the chapters in ARES well in advance of class because the Trochim et al. (2016) book is a single-user only book (i.e., only one person can access the book at one time) and the Dillman et al. (2014) book is a multiple-user book that has limits on the number of pages that can be downloaded and printed per user every 24 hours.

The journal articles are available through the library via e-journals: <u>https://www.lib.uoguelph.ca/find</u>

## **Recommended resources:**

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (December 2014). Tricouncil policy statement: Ethical conduct for research involving humans. Available at <u>http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/Default/</u>

The Tri-council policy statement 2 (TCPS 2) tutorial course on research ethics. Available at <u>http://www.pre.ethics.gc.ca/eng/education/tutorial-didacticiel/</u> (last modified February 26, 2018). This tutorial takes approximately 3 hours to complete.

Books that emphasize a conceptual understanding of statistics:

- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Thousand Oaks, CA: Sage Publications, Inc..
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2017). *Applied multivariate research: Design and interpretation* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc..

G\*Power is software to calculate statistical power. Available to download free at <u>http://www.gpower.hhu.de/en.html</u>

## **Course schedule:**

In the schedule below, classes will also include instructor-led mini-lectures and/or class activities.

I reserve the right to revise the schedule of classes as needed, as long as you are given adequate notice. If class is cancelled (e.g., bad weather), all remaining classes will be shifted (e.g., cancelled class will be the next class).

 $\mathbf{E} = \mathbf{I}$  designated an article as an "empirical" article (see facilitation of readings section) rather than a conceptual article.

Date	Topic and required readings
Sept. 12	Overview of course; introduction to research methodology
	(a) Writing a research proposal
	<ul> <li>Locke, L. F., Spirduso, W. W., &amp; Silverman, S. J. (2014). <i>Proposals that work: A guide for planning dissertations and grant proposals</i> (6th ed.). Thousand Oaks, CA: Sage Publications, Inc</li> <li>Chapter 1: The function of the proposal (pp. 3-24)</li> </ul>
	- Chapter 4: Content of the proposal: Important considerations (pp. 63-90)
	[E]: Dlugonski, D., Das, B. M., & Martin, T. (2015). Increasing collective efficacy for physical activity: Design and rationale of moms UNITE for health.

Date	Topic and required readings
	Contemporary Clinical Trials, 45(Part B), 233-238. doi:10.1016/j.cct.2015.09.003
	(b) Advanced literature search and literature review (if you have a laptop, bring it)
	Guest presenter: Christopher Popovich, Assistant Librarian, Learning and Curriculum Support, McLaughlin Library, U of G
Sent 10	• 10:00 - 11:00 am; no readings
Sept. 19	Theory in research
	Part 1:
	<b>E:</b> Malek, L., Umberger, W. J., Makrides, M., & ShaoJia, Z. (2017). Predicting healthy eating intention and adherence to dietary recommendations during pregnancy in Australia using the theory of planned behaviour. <i>Appetite</i> , <i>116</i> (September), 431-441.
	http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2017.05.028
	E: Kosma, M., & Cardinal, B. J. (2016). The transtheoretical model, physical activity, and falls risks among diverse older adults. <i>Activities, Adaptation &amp; Aging, 40</i> (1), 35-52. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/01924788.2016.1127051
	Gervais, C., de Montigny, F., Lacharité, C., & Dubeau, D. (2015). The Father Friendly Initiative within Families: Using a logic model to develop program theory for a father support program. <i>Evaluation and Program Planning</i> , <i>52</i> (October), 133- 141. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2015.04.006</u>
	Part 2:
	<b>E</b> : Borowski, S. C., & Tambling, R. B. (2015). Applying the health belief model to young individuals' beliefs and preferences about premarital counseling. <i>The Family Journal, 23</i> (4), 417-426. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/1066480715602221</u>
	E: Mullane, S. L., Toledo, M. J. L., Rydell, S. A., Feltes, L. H., Vuong, B., Crespo, N. C., Pereira, M. A., & Buman, M. P. (2017). Social ecological correlates of workplace sedentary behavior. <i>International Journal of Behavioral Nutrition and</i> <i>Physical Activity, 14</i> (August), 10 pages. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1186/s12966-017-0576-x</u>
	Kok, G., Peters, L. W. H., & Ruiter, R. A. C. (2017). Planning theory- and evidence- based behavior change interventions: A conceptual review of the intervention mapping protocol. <i>Psicologia: Reflexão e Crítica, 30</i> (October), 13 pages. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1186/s41155-017-0072-x</u>

Date	Topic and required readings
Sept. 26	(a) Writing survey questions
	<ul> <li>Dillman, D. A., Smyth, J. D., &amp; Christian, L. M. (2014). <i>Internet, phone, mail, and mixed-mode surveys: The tailored design method</i> (4th ed.). Hoboken, NJ: John Wiley &amp; Sons, Inc</li> <li>Chapter 2: Reducing people's reluctance to respond to surveys (pp. 19-55)</li> </ul>
	<b>E</b> : Robb, K. A., Gatting, L., & Wardle, J. (2017). What impact do questionnaire length and monetary incentives have on mailed health psychology survey response? <i>British Journal of Health Psychology</i> , <i>22</i> (4), 671-685. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/bjhp.12239</u>
	<ul> <li>Dillman, D. A., Smyth, J. D., &amp; Christian, L. M. (2014). <i>Internet, phone, mail, and mixed-mode surveys: The tailored design method</i> (4th ed.). Hoboken, NJ: John Wiley &amp; Sons, Inc</li> <li>Chapter 4: The fundamentals of writing questions (pp. 94-126)</li> <li>Chapter 5: How to write open- and closed-ended questions (pp. 127-168)</li> </ul>
	(b) Cognitive interviewing
	<ul> <li>Collins, D. (Editor) (2015). <i>Cognitive interviewing practice</i>. Thousand Oaks, CA: Sage Publications, Inc</li> <li>Chapter 1 (by D. Collins): Cognitive interviewing: Origin, purpose and limitations (pp. 3-27).</li> </ul>
	- Chapter 5 (by J. D'Ardenne): Developing interview protocols (pp. 101-125)
	<b>E</b> ]: Hilton, C. E. (2017). The importance of pretesting questionnaires: A field research example of cognitive pretesting the Exercise Referral Quality of Life Scale (ER-QLS). <i>International Journal of Social Research Methodology, 20</i> (1), 21-34. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/13645579.2015.1091640
Oct. 3	Measurement and scale development
	Part 1:
	<ul> <li>DeVellis, R. F. (2017). Scale development: Theory and applications (4th ed.).</li> <li>Thousand Oaks, CA: Sage Publications, Inc</li> <li>Chapter 3: Reliability (pp. 39-82)</li> <li>Chapter 4: Validity (pp. 83-103)</li> <li>Chapter 5: Guidelines in scale development (pp. 105-151)</li> </ul>
	<b>E</b> : Sevigny, P. R., Loutzenhiser, L., & McAuslan, P. (2016). Development and validation of the Fathering Self-Efficacy Scale. <i>Psychology of Men &amp; Masculinity</i> , <i>17</i> (1), 92-102. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1037/a0039659</u>
	Part 2:

Date	Topic and required readings
	<b>[E]:</b> Bryan, C. J. (2018). A preliminary validation study of two ultra-brief measures of suicide risk: The suicide and perceived burdensomeness visual analog scales. <i>Suicide and Life-threatening Behavior, early view issue</i> (March), 1-10. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/sltb.12447</u>
	<b>E:</b> Annear, M. J., Toye, C. M., Eccleston, C. E., McInerney, F. J., Elliott, K. J., Tranter, B. K., Hartley, T., & Robinson, A. L. (2015). Dementia Knowledge Assessment Scale: Development and preliminary psychometric properties. <i>Journal of the American Geriatrics Society</i> , <i>63</i> (11), 2375-2381. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/jgs.13707
	E: Park, H., & Shin, S. (2015). Development and psychometric testing of a semantic differential scale of sexual attitude for the older person. <i>Nursing and Health Sciences, 17</i> (4), 526-532. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/nhs.12230
Oct. 10	Randomized experiments
	Part 1:
	<ul> <li>Trochim, W. M., Donnelly, J. P., &amp; Arora, K. (2016). <i>Research methods: The essential knowledge base</i> (2nd ed.). Boston, MA: Cengage Learning.</li> <li>Chapter 8: Introduction to design (pp. 205-228).</li> <li>Chapter 9: Experimental design (pp. 229-256).</li> </ul>
	<b>[E]:</b> Savage, M. W., Deiss Jr., D. M., Roberto, A. J., & Aboujaoude, E. (2017). Theory-based formative research on an anti-cyberbullying victimization intervention message. <i>Journal of Health Communication</i> , <i>22</i> (2), 124-134. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10810730.2016.1252818</u>
	<b>E</b> : Palmeira, L., Pinto-Gouveia, J., & Cunha, M. (2017). Exploring the efficacy of an acceptance, mindfulness & compassionate-based group intervention for women struggling with their weight (Kg-Free): A randomized controlled trial. <i>Appetite</i> , <i>112</i> (May), 107-116. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2017.01.027
	Part 2:
	<b>[E]:</b> Rozental, A., Shafran, R., Wade, T., Egan, S., Nordgren, L. B., Carlbring, P., Landström, A., Roos, S., Skoglund, M., Thelander, E., Trosell, L., Örtenholm, A., & Andersson, G. (2017). A randomized controlled trial of internet-based cognitive behavior therapy for perfectionism including an investigation of outcome predictors. <i>Behaviour Research and Therapy</i> , <i>95</i> (August), 79-86. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.brat.2017.05.015

Date	Topic and required readings
	[E]: Jaffery, A., Edwards, M. K., & Loprinzi, P. D. (2018). The effects of acute
	exercise on cognitive function: Solomon experimental design. The Journal of
	Primary Prevention, 39(1), 37-46. https://doi-
	org.subzero.lib.uoguelph.ca/10.1007/s10935-017-0498-z
	<b>[E]:</b> Vasquez, E. A., Ball, L., Loughnan, S., & Pina, A. (2017). The object of my aggression: Sexual objectification increases physical aggression toward women. <i>Aggressive Behavior, advance online publication</i> (June), (13 pages).
0 + 17	http://dx.doi.org.subzero.lib.uoguelph.ca/10.1002/ab.21719
Oct. 17	Quasi-experimental research
	Part 1:
	<ul> <li>Trochim, W. M., Donnelly, J. P., &amp; Arora, K. (2016). <i>Research methods: The essential knowledge base</i> (2nd ed.). Boston, MA: Cengage Learning.</li> <li>Chapter 10: Quasi-experimental design (pp. 257-276).</li> </ul>
	<b>E:</b> Anderson, C. N., Holody, K. J., Flynn, M. A., & Hussa-Farrell, R. (2017). An exploratory evaluation of the feasibility, acceptability, and efficacy of the mental fitness disordered eating program in schools. <i>Eating Disorders: The Journal of Treatment &amp; Prevention</i> , <i>25</i> (3), 230-245. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10640266.2017.1289793
	<b>[E]:</b> Thomas, J. M., Ursell, A., Robinson, E. L., Aveyard, P., Jebb, S. A., Herman, C. P., & Higgs, S. (2017). Using a descriptive social norm to increase vegetable selection in workplace restaurant settings. <i>Health Psychology</i> , <i>36</i> (11), 1026-1033. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1037/hea0000478
	Part 2:
	<b>[E]:</b> Rew, L., Powell, T., Brown, A., Becker, H., & Slesnick, N. (2017). An intervention to enhance psychological capital and health outcomes in homeless female youths. <i>Western Journal of Nursing Research, 39</i> (3), 356-373. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/0193945916658861</u>
	<b>[E]:</b> Cranney, L., Phongsavan, P., Kariuki, M., Stride, V., Scott, A., Hua, M., & Bauman, A. (2016). Impact of an outdoor gym on park users' physical activity: A natural experiment. <i>Health &amp; Place, 37</i> (January), 26-34. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.healthplace.2015.11.002
	<b>[E]:</b> Humphreys, D. K., Gasparrini, A., & Wiebe, D. J. (2017). Evaluating the impact of Florida's "stand your ground" self-defense law on homicide and suicide by firearm: An interrupted time series study. <i>JAMA Internal Medicine</i> , <i>177</i> (1), 44-50. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1001/jamainternmed.2016.6811
Oct. 24	In-class exam

Date	Topic and required readings
	No readings
Oct. 31	(a) Phone and mail surveys
	<ul> <li>Dillman, D. A., Smyth, J. D., &amp; Christian, L. M. (2014). <i>Internet, phone, mail, and mixed-mode surveys: The tailored design method</i> (4th ed.). Hoboken, NJ: John Wiley &amp; Sons, Inc</li> <li>Chapter 8: Telephone questionnaires and implementation (pp. 258-300)</li> <li>Chapter 10: Mail questionnaires and implementation (pp. 351-397)</li> </ul>
	<b>[E]:</b> Restorick Roberts, A., Betts Adams, K., & Beckette Warner, C. (2017). Effects of chronic illness on daily life and barriers to self-care for older women: A mixed-methods exploration. <i>Journal of Women &amp; Aging</i> , <i>29</i> (2), 126-136. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/08952841.2015.1080539</u>
	(b) Survey research: Examples of modes
	[E]: Puhl, R. M., Latner, J. D., O'Brien, K., Luedicke, J., Forhan, M., & Danielsdottir, S. (2016). Cross-national perspectives about weight-based bullying in youth: Nature, extent and remedies. <i>Pediatric Obesity</i> , <i>11</i> (4), 2016, 241-250. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/ijpo.12051
	Lovett, M., Bajaba, S., Lovett, M., & Simmering, M. J. (2018). Data quality from crowdsourced surveys: A mixed method inquiry into perceptions of amazon's mechanical turk masters. Applied Psychology: An International Review, 67(2), 339-366. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/apps.12124</u>
	<b>E:</b> Feigelman, W., Rosen, Z., Joiner, T., Silva, C., & Mueller, A. S. (2017). Examining longer-term effects of parental death in adolescents and young adults: Evidence from the national longitudinal survey of adolescent to adult health. <i>Death</i> <i>Studies</i> , <i>41</i> (3), 133-143. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/07481187.2016.1226990
Nov. 7	Web surveys: Qualtrics (online survey software) workshop
	<ul> <li>Dillman, D. A., Smyth, J. D., &amp; Christian, L. M. (2014). <i>Internet, phone, mail, and mixed-mode surveys: The tailored design method</i> (4th ed.). Hoboken, NJ: John Wiley &amp; Sons, Inc</li> <li>Chapter 9: Web questionnaires and implementation (pp. 301-350)</li> </ul>
	Guest presenter: Quin Shirk-Luckett, Analyst, Data Resource Centre, McLaughlin Library, U of G
	<ul> <li>Workshop location TBA (perhaps MacDonald Stewart Hall, room 243), 9:00 - 11:00 am</li> </ul>
	No readings
Nov. 14	Evaluation research

Date	Topic and required readings
	Part 1:
	Mason, S., & Hunt, A. (2018). So what do you do? Exploring evaluator descriptions of their work. <i>American Journal of Evaluation, online first</i> (May), 1-19. <u>https://doi.org/10.1177/1098214018767049</u>
	Galport, N., & Azzam, T. (2017). Evaluator training needs and competencies: A gap analysis. <i>American Journal of Evaluation, 38</i> (1), 80-100. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/1098214016643183
	<b>[E]:</b> Berkley-Patton, J., Bowe Thompson, C., Bradley-Ewing, A., Berman, M., Bauer, A., Catley, D., Goggin, K., Williams, E., Wainright, C., Petty, T., & Aduloju-Ajijola, N. (2018). Identifying health conditions, priorities, and relevant multilevel health promotion intervention strategies in African American churches: A faith community health needs assessment. <i>Evaluation and Program Planning, 67</i> (April), 19-28. <u>https://doi.org/10.1016/j.evalprogplan.2017.10.012</u> .
	Chen, H. T. (2016). Interfacing theories of program with theories of evaluation for advancing evaluation practice: Reductionism, systems thinking, and pragmatic synthesis. <i>Evaluation and Program Planning</i> , <i>59</i> (December), 109-118. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2016.05.012
	Part 2:
	<b>E:</b> Kennedy, A. B., Schenkelberg, M., Moyer, C., Pate, R., & Saunders, R P. (2017). Process evaluation of a preschool physical activity intervention using webbased delivery. <i>Evaluation and Program Planning, 60</i> (February), 24-36. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2016.08.022
	Huckel Schneider, C., Milat, A. J., & Moore, G. (2016). Barriers and facilitators to evaluation of health policies and programs: Policymaker and researcher perspectives. <i>Evaluation and Program Planning, 58</i> (October), 208-215. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2016.06.011
	Yusa, A., Hynie, M., & Mitchell, S. (2016). Utilization of internal evaluation results by community mental health organizations: Credibility in different forms. <i>Evaluation and Program Planning</i> , <i>54</i> (February), 11-18. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2015.09.006
Nov. 21	Ethics in research
	Part 1:
	Sharpe, D., & Poets, S. (2017). Canadian psychology department participant pools: Closing for the season? <i>Canadian Psychology</i> , <i>58</i> (2), 168-177. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1037/cap0000090</u>

Date	Topic and required readings
	Cox, S. M., & McDonald, M. (2013). Ethics is for human subjects too: Participant perspectives on responsibility in health research. <i>Social Science &amp; Medicine</i> , 98(December), 224-231. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.socscimed.2013.09.015
	[E]: Duvall Antonacopoulos, N. M., & Serin, R. C. (2016). Comprehension of online informed consents: Can it be improved? <i>Ethics &amp; Behavior, 26</i> (3), 177-193. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10508422.2014.1000458
	<b>[E]:</b> Keys, E., & Bhogal, M. S. (2016). Mean girls: Provocative clothing leads to intra-sexual competition between females. <i>Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, advance online publication</i> (December), (9 pages). <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1007/s12144-016-9536-x</u>
	Part 2:
	Collins, A. B., Strike, C., Guta, A., Baltzer Turje, R., McDougall, P., Parashar, S., & McNeil, R. (2017). "We're giving you something so we get something in return": Perspectives on research participation and compensation among people living with HIV who use drugs. <i>International Journal on Drug Policy, 39</i> (January), 92-98. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.drugpo.2016.09.004
	True, G., Alexander, L. B., & Fisher, C. B. (2017). Supporting the role of community members employed as research staff: Perspectives of community researchers working in addiction research. <i>Social Science &amp; Medicine, 187</i> (August), 67-75. <u>http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.socscimed.2017.06.023</u>
	Walters, S. R., & Godbold, R. (2014). Someone is watching you: The ethics of covert observation to explore adult behaviour at children's sporting events. <i>Journal of Bioethical Inquiry</i> , 11(4), 531-537.
	http://dx.doi.org.subzero.lib.uoguelph.ca/10.1007/s11673-014-9543-2 Sommers, R., & Miller, F. G. (2013). Forgoing debriefing in deceptive research: Is it ever ethical? <i>Ethics &amp; Behavior, 23</i> (2), 98-116. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10508422.2012.732505
Nov. 28	Experience sampling method
	Part 1:
	Hektner, J. M., Schmidt, J. A., & Csikszentmihalyi, M. (2007). <i>Experience sampling method: Measuring the quality of everyday life</i> . Thousand Oaks, CA: Sage Publications, Inc
	- Chapter 3: Collecting the data (pp. 31-59).

Date	Topic and required readings
	- Chapter 4: Dealing with the data: Coding, entry, cleaning, and data management (pp. 61-80).
	<b>[E]:</b> Fitzsimmons-Craft, E. E. (2017). Eating disorder-related social comparison in college women's everyday lives. <i>International Journal of Eating Disorders</i> , <i>50</i> (8), 893–905. <u>https://doi-org.subzero.lib.uoguelph.ca/10.1002/eat.22725</u>
	<b>[E]:</b> Martino, S. C., Setodji, C. M., Dunbar, M. S., Gong, M., & Shadel, W. G. (2018). Effects of antismoking media on college students' smoking-related beliefs and intentions. <i>Psychology of Addictive Behaviors</i> , <i>32</i> (1), 76-83. http://dx.doi.org.subzero.lib.uoguelph.ca/10.1037/adb0000332

## Appendix A

## Guidelines for writing small-group quantitative research proposal

Review the information in a previous section of the syllabus (regarding the proposal) and follow the guidelines below when writing your proposal.

## **Checklist for research proposal:**

- ☑ Use Turnitin to screen your proposal
- ☑ Should have (a) a separate title page (include your research topic), (b) a brief introduction that includes background information and a review of relevant research literature as well as the general purpose of your research, (c) research hypotheses and their rationale, (d) the method that includes sub-sections that discuss participants, research design, description of conditions (e.g., intervention; comparison condition), measures, and procedure, (e) a separate page(s) for the reference section, and (f) an appendix / appendices (e.g., consent form; questionnaires)
- ☑ To make it easier for me to grade proposals, use the following headings and sub-headings in this order (after the title page): Introduction; hypotheses; method (sub-headings are participants, research design, intervention, comparison or control condition, measures, and procedure), references, and appendices
- ☑ Maximum of 15 pages. If more than 15 pages are submitted, only the first 15 pages will be graded
- ☑ Page limit does not include the number of separate pages for the title page, reference section, and appendices
- ☑ 8.5" x 11" paper
- $\blacksquare$  Printed on 1 side of page
- $\blacksquare$  Your name and page number are in the header of the document
- $\blacksquare$  Double-space the lines (but single-space the lines in the reference section)
- $\blacksquare$  2.5 cm. margins
- ☑ Times New Roman font and 12-point font size
- ☑ Not stapled (using a paper clip is fine)

## Writing style (including references):

Use the style in the American Psychological Association's (2010) <u>Publication manual of the American Psychological Association</u> (APA) (6th ed.) for citing references in the body of the proposal and for listing references. You don't have to use the APA style for writing other elements of the proposal.

- The APA style is described at the following website, which has a free tutorial (it can be accessed by selecting "Learning APA style" from the menu): <u>http://www.apastyle.org/learn/index.aspx</u>
- Library resources about APA style for citing and listing references are available at <a href="https://guides.lib.uoguelph.ca/APA">https://guides.lib.uoguelph.ca/APA</a> (last updated April 12, 2018).

## The research proposal should include headings and sub-headings such as:

## Title page:

State a title for your research proposal, your name, and the course number and title.

## Introduction:

This section should be brief (about 4 pages). You should describe the problem that will studied, state why the problem warrants new research, describe the relevant previous research literature, specify the general purpose of your research, and state the implications of your research.

## **Hypotheses:**

State the hypotheses and describe how they were developed from theory or previous research (i.e., describe the rationale for the hypotheses). These statements should be quite specific and include operational definitions of the variables being examined.

## Method:

This section provides details about how you will conduct the research. There should be subsections such as participants, research design, description of conditions, measures, and procedure.

#### a) Participants:

Describe the eligibility and exclusion criteria (including demographic characteristics) in this subsection. Specify the total number of participants required and the number of participants in each condition. Describe how this required sample size was determined (i.e., describe the procedure and results for calculating statistical power).

#### b) Research design:

Specify the research design (e.g., perhaps a specific quasi-experimental design) and diagrammatically show it, describe the rationale for using this design, and discuss design issues such as internal validity and threats to internal validity.

#### c) Description of conditions:

Describe the intervention for the intervention group and the condition for the comparison or control group (e.g., content; how it was delivered).

#### d) Measures:

Provide the conceptual definition of each variable and discuss how each variable (including demographic variables) will be operationally defined so that it can be measured. The rationale for using each measure should be given. Background information such as the validity and reliability of the measures should be discussed. Specify the strengths and weaknesses of the measures. If you are proposing to develop the measures, then this should be detailed here. Provide sample questions for the measures.

#### e) Procedure:

Describe each step in the research process in sufficient detail to clearly communicate how the research will be done. State how you will obtain research ethics clearance for the research and specify how ethical standards will be met in the research (e.g., informed consent). Describe the procedure for the sampling strategy (e.g., convenience sampling), recruiting participants,

assigning participants to conditions, administering measures, and the planned statistical analyses.

## **References:**

The reference citations in the body of the proposal must be listed in the reference section.

## **Appendices:**

Any information that supports your proposal, such as a letter of informed consent and questionnaires, should appear as appendices.

## Grading rubric:

Component	%
Introduction (e.g., problem; research literature; general purpose of your	/ 10
research; implications)	
Hypotheses (including rationale)	/ 10
Method: Participants (e.g., eligibility and exclusion criteria; required sample	/ 5
size)	
Method: Specific research design (including rationale and design issues such	
as internal validity and threats to internal validity)	/ 15
Method: Description of conditions (e.g., intervention for intervention group	
and condition for comparison or control group)	/ 10
Method: Measures (e.g., conceptual and operational definitions; validity and	/ 15
reliability; sample questions)	
Method: Procedure (including research ethics, sampling strategy, recruitment,	/ 15
assigning participants to conditions, administering measures, and statistical	
analyses)	
References, appendices, writing style, organisation, and grammar	/ 20
Total	/ 100