



## COLLEGE of SOCIAL AND APPLIED HUMAN SCIENCES

DEPARTMENT OF FAMILY RELATIONS  
AND APPLIED NUTRITION

# FRAN\*6000 Quantitative Research Methods

## COURSE OUTLINE – FALL 2021

### 1. GRADUATE CALENDAR DESCRIPTION

This course includes critical appraisal of the research literature. Research ethics, subject selection, measurement issues, survey design, experimental and quasi-experimental designs, cross-sectional and longitudinal designs, scale development, questionnaire development and sampling strategies are discussed.

**Credit Weight:** 0.5 credits

**Course Hours:** 3-0 (36 lecture; 0 lab/seminar)

**Pre-Requisite(s):**

**Co-Requisites(s):**

**Restriction(s):**

### 2. COURSE DESCRIPTION

This course is designed to provide you with a conceptual understanding of the issues and methods related to the development and implementation of quantitative research. The course entails critical appraisal of the research literature. To make the course more relevant to you, I have assigned readings from various academic disciplines and your research proposal can address a general research topic of your choice.

### 3. TIMETABLE

**Lecture:** Wednesday, 8:30 - 11:20 am

**Location:** Synchronous (virtual room): Zoom

### 4. INSTRUCTIONAL SUPPORT

**Course Instructor:** Dr. John Dwyer

**Email:** [dwyer@uoguelph.ca](mailto:dwyer@uoguelph.ca)

**Telephone:** 519-824-4120 ext. 52210

**Office:** Zoom

**Office Hours:** By appointment

**Teaching Assistant:** NA

**Email:** NA  
**Office:** NA  
**Office Hours:** NA

## 5. LEARNING RESOURCES

### Required Resource(s):

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: <https://www.lib.uoguelph.ca/find/course-reserves-ares>
- Omni (as e-books): <https://www.lib.uoguelph.ca/find/journal-articles-databases>

Access the chapters in ARES well in advance of class because 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 Omni:

<https://www.lib.uoguelph.ca/find/journal-articles-databases>

### Recommended Resource(s):

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.

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (2019). Tri-council policy statement: Ethical conduct for research involving humans. TCPS2 December 2018. Available at <http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/Default/>

The Tri-council policy statement 2 (TCPS 2) online tutorial course on research ethics. Available at [https://ethics.gc.ca/eng/education\\_tutorial-didacticiel.html](https://ethics.gc.ca/eng/education_tutorial-didacticiel.html). 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 <http://www.gpower.hhu.de/en.html>

## **6. LEARNING OUTCOMES**

At the completion of the course, successful students will be able to:

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

## **7. TEACHING AND LEARNING ACTIVITIES/CLASS SCHEDULE**

Week (date)	Topic and required readings
<p><b>1</b> <b>(Sept. 15)</b></p>	<p><b>Overview of course; introduction to research methodology</b></p> <p><b>(A) Writing a research proposal (I will facilitate this section)</b></p> <p>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..</p> <ul style="list-style-type: none"> <li>• Chapter 1: The function of the proposal (pp. 3-24)</li> <li>• Chapter 4: Content of the proposal: Important considerations (pp. 63-90)</li> </ul> <p>[E]: Dlugonski, D., Das, B. M., &amp; Martin, T. (2015). Increasing collective efficacy for physical activity: Design and rationale of moms UNITE for health. <i>Contemporary Clinical Trials</i>, 45(Part B), 233-238. doi:10.1016/j.cct.2015.09.003</p> <p><b>(B) Advanced literature search and literature review</b></p> <ul style="list-style-type: none"> <li>• <b>Guest presenter (Zoom): Yoonhee Lee, Learning and Curriculum Support Librarian, McLaughlin Library, U of G; 10:15 - 11:15 am; no readings</b></li> </ul>

Week (date)	Topic and required readings
2 (Sept. 22)	<p><b>(A) Theory in research</b></p> <p>[E]: Malek, L., Umberger, W. J., Makrides, M., &amp; 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>, 116(September), 431-441. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2017.05.028">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2017.05.028</a></p> <p>[E]: Kosma, M., &amp; Cardinal, B. J. (2016). The transtheoretical model, physical activity, and falls risks among diverse older adults. <i>Activities, Adaptation &amp; Aging</i>, 40(1), 35-52. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/01924788.2016.1127051">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/01924788.2016.1127051</a></p> <p>Gervais, C., de Montigny, F., Lacharité, C., &amp; 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>, 52(October), 133-141. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2015.04.006">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2015.04.006</a></p> <p><b>(B) Theory in research</b></p> <p>[E]: Borowski, S. C., &amp; Tambling, R. B. (2015). Applying the health belief model to young individuals' beliefs and preferences about premarital counseling. <i>The Family Journal</i>, 23(4), 417-426. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/1066480715602221">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/1066480715602221</a></p> <p>[E]: Mullane, S. L., Toledo, M. J. L., Rydell, S. A., Feltes, L. H., Vuong, B., Crespo, N. C., Pereira, M. A., &amp; Buman, M. P. (2017). Social ecological correlates of workplace sedentary behavior. <i>International Journal of Behavioral Nutrition and Physical Activity</i>, 14(August), 10 pages. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1186/s12966-017-0576-x">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1186/s12966-017-0576-x</a></p> <p>Jiménez-Aguilar, A., Rodríguez-Oliveros, M. G., Uribe-Carvajal, R., González-Unzaga, M. A., Escalante-Izeta, E. I., &amp; Reyes-Morales, H. (2019). Design of an educational strategy based on intervention mapping for nutritional health promotion in child care centers. <i>Evaluation and Program Planning</i>, 76(October), Article 101672, 11 pages. <a href="https://doi.org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2019.101672">https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.evalprogplan.2019.101672</a></p>

Week (date)	Topic and required readings
3 (Sept. 29)	<p><b>(A) Writing survey questions</b></p> <p>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..</p> <ul style="list-style-type: none"> <li>• Chapter 2: Reducing people’s reluctance to respond to surveys (pp. 19-55)</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> <p>[E]: Robb, K. A., Gattling, L., &amp; 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>, 22(4), 671-685.</p> <p><a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/bjhp.12239">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/bjhp.12239</a></p> <p><b>(B) Cognitive interviewing</b></p> <p>Collins, D. (Editor) (2015). <i>Cognitive interviewing practice</i>. Thousand Oaks, CA: Sage Publications, Inc..</p> <ul style="list-style-type: none"> <li>• Chapter 1 (by D. Collins): Cognitive interviewing: Origin, purpose and limitations (pp. 3-27)</li> <li>• Chapter 5 (by J. D’Ardenne): Developing interview protocols (pp. 101-125)</li> </ul> <p>[E]: 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</i>, 20(1), 21-34.</p> <p><a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/13645579.2015.1091640">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/13645579.2015.1091640</a></p>

Week (date)	Topic and required readings
<p><b>4</b> <b>(Oct. 6)</b></p>	<p><b>(A) Measurement and scale development</b></p> <p>DeVellis, R. F. (2017). <i>Scale development: Theory and applications</i> (4th ed.). Thousand Oaks, CA: Sage Publications, Inc..</p> <ul style="list-style-type: none"> <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> <p>[E]: Farris, S. G., Burr, E. K., Kibbey, M. M., Abrantes, A. M., &amp; DiBello, A. M. (2020). Development and initial validation of the Exercise Sensitivity Questionnaire. <i>Mental Health and Physical Activity, 19</i>, Article 100346. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.mhpa.2020.100346">https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.mhpa.2020.100346</a></p> <p><b>(B) Measurement and scale development</b></p> <p>[E]: Weigl, K., &amp; Forstner, T. (2021). Design of paper-based visual analogue scale items. <i>Educational and Psychological Measurement, 81</i>(3), 595–611. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1177/0013164420952118">https://doi-org.subzero.lib.uoguelph.ca/10.1177/0013164420952118</a></p> <p>[E]: Mikhail, D., Rolls, B., Yost, K., Balls-Berry, J., Gall, M., Blixt, K., Novotny, P., Albertie, M., &amp; Jensen, M. (2020). Development and validation testing of a weight management nutrition knowledge questionnaire for adults. <i>International Journal of Obesity, 44</i>, 579–589. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1038/s41366-019-0510-1">https://doi-org.subzero.lib.uoguelph.ca/10.1038/s41366-019-0510-1</a> [Reminder to read “supplementary information” (knowledge questionnaire) in the article]</p> <p>[E]: Wilson, M. A. G., Tran, Y., Wilson, I., &amp; Kurrle, S. (2019). Development of the Australian Ageing Semantic Differential, a new instrument for measuring Australian medical student attitudes towards older people. <i>Australasian Journal on Ageing, 38</i>(3), e67–e74. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1111/ajag.12627">https://doi-org.subzero.lib.uoguelph.ca/10.1111/ajag.12627</a></p>

Week (date)	Topic and required readings
5 (Oct. 13)	<p><b>(A) Randomized experiments</b></p> <p>Rubin, A., &amp; Babbie, E. R. (2017). <i>Research methods for social work</i> (9th ed.). Boston, MA: Cengage Learning.</p> <ul style="list-style-type: none"> <li>• Chapter 11: Causal inference and experimental designs (pp. 243-271)</li> </ul> <p>[E]: Arabyat, R. M., Borrego, M., Hamidovic, A., Sleath, B., &amp; Raisch, D. W. (2019). The impact of a theory-based web-intervention on the intention to use prescription drugs for non-medical purposes among college students: A randomized controlled trial. <i>Health Education Research</i>, 34(2), 173–187. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1093/her/cyy047">https://doi-org.subzero.lib.uoguelph.ca/10.1093/her/cyy047</a></p> <p>[E]: Keadle, S. K., Meuter, L., Phelan, S., &amp; Phillips, S. M. (2021). Charity-based incentives motivate young adult cancer survivors to increase physical activity: A pilot randomized clinical trial. <i>Journal of Behavioral Medicine</i>, advance online publication (April), 12 pages. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1007/s10865-021-00218-w">https://doi-org.subzero.lib.uoguelph.ca/10.1007/s10865-021-00218-w</a></p> <p><b>(B) Randomized experiments</b></p> <p>[E]: Palmeira, L., Pinto-Gouveia, J., &amp; Cunha, M. (2017). Exploring the efficacy of an acceptance, mindfulness &amp; compassionate-based group intervention for women struggling with their weight (Kg-Free): A randomized controlled trial. <i>Appetite</i>, 112(May), 107-116. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2017.01.027">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2017.01.027</a></p> <p>[E]: Gouveia, B. R., Gouveia, É. R., Ihle, A., Jardim, H. G., Martins, M. M., Freitas, D. L., &amp; Kliegel, M. (2018). The effect of the ProBalance Programme on health-related quality of life of community-dwelling older adults: A randomised controlled trial. <i>Archives of Gerontology and Geriatrics</i>, 74, 26–31. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.archger.2017.08.012">https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.archger.2017.08.012</a></p> <p>[E]: Crozier, A. J., &amp; Spink, K. S. (2017). Effect of manipulating descriptive norms and positive outcome expectations on physical activity of university students during exams. <i>Health Communication</i>, 32(6), 784–790. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1080/10410236.2016.1172295">https://doi-org.subzero.lib.uoguelph.ca/10.1080/10410236.2016.1172295</a></p>



Week (date)	Topic and required readings
<p><b>6</b> <b>(Oct. 20)</b></p>	<p><b>(A) Quasi-experimental research</b></p> <p>Rubin, A., &amp; Babbie, E. R. (2017). <i>Research methods for social work</i> (9th ed.). Boston, MA: Cengage Learning.</p> <ul style="list-style-type: none"> <li>Chapter 12: Quasi-experimental designs (pp. 272-291)</li> </ul> <p>[E]: Anderson, C. N., Holody, K. J., Flynn, M. A., &amp; Husa-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>, 25(3), 230-245. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10640266.2017.1289793">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10640266.2017.1289793</a></p> <p>[E]: Rosenberg, D. E., Gell, N. M., Jones, S. M. W., Renz, A., Kerr, J., Gardiner, P. A., &amp; Arterburn, D. (2015). The feasibility of reducing sitting time in overweight and obese older adults. <i>Health Education &amp; Behavior</i>, 42(5), 669–676. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1177/1090198115577378">https://doi-org.subzero.lib.uoguelph.ca/10.1177/1090198115577378</a></p> <p><b>(B) Quasi-experimental research</b></p> <p>[E]: Ralston, P. A., Wickrama, K. (K. A. S.), Coccia, C. C., Lemacks, J. L., Young-Clark, I. M., &amp; Ilich, J. Z. (2020). Health for Hearts United longitudinal trial: Improving dietary behaviors in older African Americans. <i>American Journal of Preventive Medicine</i>, 58(3), 361–369. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.amepre.2019.09.024">https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.amepre.2019.09.024</a></p> <p>[E]: Cranney, L., Phongsavan, P., Kariuki, M., Stride, V., Scott, A., Hua, M., &amp; Bauman, A. (2016). Impact of an outdoor gym on park users' physical activity: A natural experiment. <i>Health &amp; Place</i>, 37(January), 26-34. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.healthplace.2015.11.002">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.healthplace.2015.11.002</a></p> <p>[E]: Humphreys, D. K., Gasparrini, A., &amp; 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>, 177(1), 44-50. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1001/jamainternmed.2016.6811">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1001/jamainternmed.2016.6811</a></p>
<p><b>7</b> <b>(Oct. 27)</b></p>	<p><b>In-class exam (online)</b></p> <ul style="list-style-type: none"> <li>No readings</li> </ul>

Week (date)	Topic and required readings
<p><b>8</b> <b>(Nov. 3)</b></p>	<p><b>(A) Phone and mail surveys</b></p> <p>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..</p> <ul style="list-style-type: none"> <li>• Chapter 8: Telephone questionnaires and implementation (pp. 258-300)</li> <li>• Chapter 10: Mail questionnaires and implementation (pp. 351-397)</li> </ul> <p>[E]: Bolger, M. A., &amp; Bolger, P. C. (2019). Predicting fear of crime: Results from a community survey of a small city. <i>American Journal of Criminal Justice</i>, 44(2), 334-351.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1007/s12103-018-9450-x">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1007/s12103-018-9450-x</a></p> <p><b>(B) Survey research: Examples of modes</b></p> <p>[E]: Callow, D. D., Arnold-Nedimala, N. A., Jordan, L. S., Pena, G. S., Won, J., Woodard, J. L., &amp; Smith, J. C. (2020). The mental health benefits of physical activity in older adults survive the COVID-19 pandemic. <i>The American Journal of Geriatric Psychiatry</i>, 28(10), 1046–1057.  <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.jagp.2020.06.024">https://doi-org.subzero.lib.uoguelph.ca/10.1016/j.jagp.2020.06.024</a></p> <p>Lovett, M., Bajaba, S., Lovett, M., &amp; Simmering, M. J. (2018). Data quality from crowdsourced surveys: A mixed method inquiry into perceptions of amazon's mechanical turk masters. <i>Applied Psychology: An International Review</i>, 67(2), 339-366.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/apps.12124">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/apps.12124</a></p> <p>[E]: Hamza, C. A., Ewing, L., Heath, N. L., &amp; Goldstein, A. L. (2021). When social isolation is nothing new: A longitudinal study on psychological distress during COVID-19 among university students with and without preexisting mental health concerns. <i>Canadian Psychology</i>, 62(1), 20–30. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1037/cap0000255">https://doi-org.subzero.lib.uoguelph.ca/10.1037/cap0000255</a></p>
<p><b>9</b> <b>(Nov. 10)</b></p>	<p><b>Web surveys: Qualtrics (online survey software) workshop</b></p> <ul style="list-style-type: none"> <li>• <b>Guest presenter (Zoom): Quin Shirk-Luckett, Analyst, Data Resource Centre, McLaughlin Library, U of G; 9:00 - 11:00 am; no readings</b></li> </ul> <p>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..</p> <ul style="list-style-type: none"> <li>• Chapter 9: Web questionnaires and implementation (pp. 301-350) [I assigned the chapter as background reading for the workshop]</li> </ul>

Week (date)	Topic and required readings
<p><b>10</b> <b>(Nov. 17)</b></p>	<p><b>(A) Evaluation research</b></p> <p>Wanzer, D. L. (2021). What Is evaluation? Perspectives of how evaluation differs (or not) from research. <i>American Journal of Evaluation</i>, 42(1), 28–46.  <a href="https://doi.org/10.1177/1098214020920710">https://doi.org/10.1177/1098214020920710</a></p> <p>Galport, N., &amp; Azzam, T. (2017). Evaluator training needs and competencies: A gap analysis. <i>American Journal of Evaluation</i>, 38(1), 80-100.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/1098214016643183">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1177/1098214016643183</a></p> <p>[E]: Da Costa, D., Zerkowitz, P., Letourneau, N., Howlett, A., Dennis, C.-L., Russell, B., Grover, S., Lowensteyn, I., Chan, P., &amp; Khalifé, S. (2017). HealthyDads.ca: What do men want in a website designed to promote emotional wellness and healthy behaviors during the transition to parenthood? <i>Journal of Medical Internet Research</i>, 19(10), article e325, 15 pages. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.2196/jmir.7415">https://doi-org.subzero.lib.uoguelph.ca/10.2196/jmir.7415</a></p> <p><b>(B) Evaluation research</b></p> <p>[E]: Driediger, M., Vanderloo, L. M., Burke, S. M., Irwin, J. D., Gaston, A., Timmons, B. W., Johnson, A. M., &amp; Tucker, P. (2018). The implementation and feasibility of the Supporting Physical Activity in the Childcare Environment (SPACE) intervention: A process evaluation. <i>Health Education &amp; Behavior</i>, 45(6), 935–944. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1177/1090198118775489">https://doi-org.subzero.lib.uoguelph.ca/10.1177/1090198118775489</a></p> <p>Azzam, T., Linnell Wanzer, D., Knight, C., &amp; Codd, H. (2021). The manifestations of politics in evaluation: An exploratory study across the evaluation process. <i>Evaluation and Program Planning</i>, 88, article 101947, 13 pages. <a href="https://doi.org/10.1016/j.evalprogplan.2021.101947">https://doi.org/10.1016/j.evalprogplan.2021.101947</a></p> <p>Perrin, B. (2019). How to manage pressure to change reports: Should evaluators be above criticism? <i>American Journal of Evaluation</i>, 40(3), 354–375. <a href="https://doi-org.subzero.lib.uoguelph.ca/10.1177/1098214018792622">https://doi-org.subzero.lib.uoguelph.ca/10.1177/1098214018792622</a></p>

Week (date)	Topic and required readings
11 (Nov. 24)	<p><b>(A) Ethics in research</b></p> <p>Sharpe, D., &amp; Poets, S. (2017). Canadian psychology department participant pools: Closing for the season? <i>Canadian Psychology</i>, 58(2), 168-177.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1037/cap0000090">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1037/cap0000090</a></p> <p>[E]: Keys, E., &amp; 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</i>, advance online publication (December), 9 pages.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1007/s12144-016-9536-x">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1007/s12144-016-9536-x</a></p> <p>Sommers, R., &amp; Miller, F. G. (2013). Forgoing debriefing in deceptive research: Is it ever ethical? <i>Ethics &amp; Behavior</i>, 23(2), 98-116.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10508422.2012.732505">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10508422.2012.732505</a></p> <p><b>(B) Ethics in research</b></p> <p>Collins, A. B., Strike, C., Guta, A., Baltzer Turje, R., McDougall, P., Parashar, S., &amp; 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</i>, 39(January), 92-98.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.drugpo.2016.09.004">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.drugpo.2016.09.004</a></p> <p>Curran, D., Kekewich, M., &amp; Foreman, T. (2019). Examining the use of consent forms to promote dissemination of research results to participants. <i>Research Ethics</i>, 15(1), 1–28.  <a href="https://doi.org/10.1177/1747016118798877">https://doi.org/10.1177/1747016118798877</a></p> <p>[E]: Duvall Antonacopoulos, N. M., &amp; Serin, R. C. (2016). Comprehension of online informed consents: Can it be improved? <i>Ethics &amp; Behavior</i>, 26(3), 177-193.  <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10508422.2014.1000458">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1080/10508422.2014.1000458</a></p>

Week (date)	Topic and required readings
12 (Dec. 1)	<p><b>(A) Experience sampling method (1-hour facilitation)</b></p> <p>Hektner, J. M., Schmidt, J. A., &amp; Csikszentmihalyi, M. (2007). <i>Experience sampling method: Measuring the quality of everyday life</i>. Thousand Oaks, CA: Sage Publications, Inc..</p> <ul style="list-style-type: none"> <li>Chapter 3: Collecting the data (pp. 31-59)</li> </ul> <p>Degroote, L., DeSmet, A., De Bourdeaudhuij, I., Van Dyck, D., &amp; Crombez, G. (2020). Content validity and methodological considerations in ecological momentary assessment studies on physical activity and sedentary behaviour: A systematic review. <i>International Journal of Behavioral Nutrition and Physical Activity</i>, 17, article 35, 13 pages. <a href="https://doi.org.subzero.lib.uoguelph.ca/10.1186/s12966-020-00932-9">https://doi.org.subzero.lib.uoguelph.ca/10.1186/s12966-020-00932-9</a></p> <p>[E]: Bejarano, C. M., Cushing, C. C., &amp; Crick, C. J. (2019). Does context predict psychological states and activity? An ecological momentary assessment pilot study of adolescents. <i>Psychology of Sport and Exercise</i>, 41(March), 146-152. <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.psychsport.2018.05.008">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.psychsport.2018.05.008</a></p> <p>[E]: Chia, J. L. P., Fuller-Tyszkiewicz, M., Buck, K., Chamari, K., Richardson, B., &amp; Krug, I. (2018). An ecological momentary assessment of the effect of fasting during Ramadan on disordered eating behaviors. <i>Appetite</i>, 127(August), 44-51 <a href="http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2018.04.017">http://dx.doi.org.subzero.lib.uoguelph.ca/10.1016/j.appet.2018.04.017</a></p>

**Note:** This is a tentative schedule. Due to various unknown factors, there may be changes. Any changes will be announced during class and an announcement will be posted on the CourseLink site.

In the schedule above, 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.

E = I designated an article as an “empirical” article (see facilitation of readings section) rather than a “conceptual” article.

## 8. ASSESSMENT DETAILS

Assessment	LOs Addressed	Due Date	% of Final
<u>Facilitation of readings (pair of students)</u> Details are in Appendix A.	1-9	Throughout semester	20
<u>Class participation</u>	1-9	Throughout semester	20

Assessment	LOs Addressed	Due Date	% of Final
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.			
10% for 1st half of course and 10% for 2nd half.			
<u>Written quantitative research proposal (pair of students)</u> Details are in Appendix B.	1-9	Dec. 1, 11:30 am	30
<u>In-class exam (online)</u> This individual, closed-book exam will be a critical appraisal of an empirical article in a journal, which will be distributed at the beginning of the class for the exam.	1-9	Oct. 27, 8:30 - 11:20 am	30
<b>Total:</b>			100%

## 9. COURSE STATEMENTS

### Course Website:

There is a course website at <http://courselink.uoguelph.ca>. Often, your questions about administration matters will be answered by referring to the syllabus and/or CourseLink. All components of this course will be housed on the CourseLink site including this course outline, assignments, and links to further resources. Your assignments will be submitted through the Dropbox function. Marks and feedback will also be released on the site. Please familiarize yourself with this website as soon as possible and visit it regularly throughout the semester.

### Late Assignments:

Late assignments will be accepted up to 5 days following the due date and will receive a penalty of 10% per day EXCEPT under documented grounds for compassionate consideration. Assignments submitted more than one week late without documented grounds will receive a grade of zero. If you are going to hand an assignment in late, you must contact your course instructor to inform them when you will be submitting your assignment.

**Receipt of Grades:**

After you receive a grade on CourseLink, please review your feedback. Any inquiry or dispute over the grade must be made within two weeks from the date they are posted. If you fail to protest any grade during this time limit, changes to the grade will not be considered.

**Turnitin Software:**

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.

**10. UNIVERSITY STATEMENTS****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 in-course requirements due to illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing with name, ID#, and email contact. [See the graduate calendar for information on regulations and procedures for Academic Consideration.](#)

**Drop date:**

Students have until the last day of classes to drop courses without academic penalty. The regulations and procedures for [Dropping Courses](#) are available in the Graduate Calendar.

**Copies of out-of-class assignments:**

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

**Accessibility:**

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: [www.uoguelph.ca/sas](http://www.uoguelph.ca/sas)

### **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.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

[The Academic Misconduct Policy is detailed in the Graduate Calendar.](#)

### **Recording of materials:**

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

### **Resources:**

The [Academic Calendar](#) is the source of information about the University of Guelph's procedures, policies and regulations which apply to graduate programs.

### **Illness:**

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

### **Safety Protocols:**



For information on current safety protocols, follow these links: <https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/>  
<https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

**Disclaimer:**

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

## Appendix A

### Facilitation of readings (pair of students)

You will be given time to pair up with another student during the first class. I will assign students who did not form a pair during this class to specific pairs. Then, I will randomly assign pairs to specific dates to facilitate a collection of assigned readings (e.g., part A or part B).

- Depending on student enrolment, Individual students may be facilitators.

Student enrolment will be considered to determine the number of facilitation rounds (e.g., 1 or 2) per pair of students. During each facilitation round (a round ends when all pairs facilitate assigned readings), you will be responsible for **facilitating a 1-hour class discussion** of 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 “conceptual” articles to increase knowledge of methodology concepts and issues and (b) “empirical” articles to apply critical appraisal skills.

For assigned chapters and “conceptual” 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 at least 3 days prior to class to ensure that it does not overlap with my class activities.**
- If you use Microsoft PowerPoint slides or a handout, provide a copy to me prior to class.

For 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 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 maximized.

**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 (<https://www.lib.uoguelph.ca/using-library/spaces/data-resource-centre>), (b) click booked appointments > book a data appointment, and (c) complete the form [in the request, 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 during your facilitation the specific DRC staff who provided assistance.

<b>Grading rubric for facilitators</b>		
<b>Component</b>	<b>Quality of excellent performance</b>	<b>%</b>
Content	<ul style="list-style-type: none"> <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
Delivery strategies (e.g., brief presentation; discussion; class activity) to provide content	<ul style="list-style-type: none"> <li>• Delivery strategies actively engage and motivate all students</li> <li>• Re: chapters, “conceptual” articles, and “empirical” articles: Microsoft PowerPoint slides or a handout are clear and well-organized</li> <li>• Re: chapters, “conceptual” articles, and “empirical” articles: Class activity is relevant, well-organized, and creative</li> <li>• Facilitators guide the discussion (they don’t dominate discussion; 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 style="list-style-type: none"> <li>• Pair 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 side-tracked</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
<b>Total</b>		<b>/ 100%</b>

## **Appendix B**

### **Written quantitative research proposal (pair of students)**

You will be given time to pair up with another student during a class in September. I will assign students who did not form a pair during this class to specific pairs.

- Depending on student enrolment, Individual students may write the research proposal.

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. 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.

**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.

**Your pair is to write the research proposal independently. Don't collaborate with other pairs 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.**

**Upload an electronic copy of the research proposal (Microsoft Word only; do not upload a pdf document) in Dropbox in CourseLink (don't submit it to my email address). Late submissions have a 10% (out of 100) per day penalty.**

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#### **Guidelines for writing quantitative research proposal (pair of students)**

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
- Upload (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) as a single document in Dropbox in CourseLink

- At the bottom of the title page, briefly list each pair member's contribution to completing the proposal. This is for my review to determine whether each member contributed substantially.
- 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
- Your name and page number are in the header of the document
- Double-space the lines (but single-space the lines in the reference section); 2.5 cm. margins; Times New Roman font and 12-point font size (for easy reading)

### **Writing style (including references):**

Use the style in the American Psychological Association's (2020) Publication manual of the American Psychological Association (APA) (7th 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 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 be 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 sub-sections such as participants, research design, description of conditions, measures, and procedure.

a) Participants:

Describe the eligibility and exclusion criteria (including demographic characteristics) in this sub-section. 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 research; implications)	/ 10

<b>Grading rubric</b>	
<b>Component</b>	<b>%</b>
Hypotheses (including rationale)	/ 10
Method: Participants (e.g., eligibility and exclusion criteria; required sample size)	/ 5
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 reliability; sample questions)	/ 15
Method: Procedure (including research ethics, sampling strategy, recruitment, assigning participants to conditions, administering measures, and statistical analyses)	/ 15
References, appendices, writing style, organisation, and grammar	/ 20
<b>Total</b>	<b>/ 100</b>