

# PSYC\*4780, Course Outline: Fall 2017

## General Information

**Course Title:** Advanced Research Methods and Statistics

**Course Description:** As a companion to honours thesis, this course focuses on advanced research methods, including qualitative methods, and statistical techniques, and presenting research in oral and written form. Topics of emphasis will be internal validity, ecological validity, and construct validity, as well as the correspondence between complex designs and the statistical techniques that can be used to analyze the data resulting from such designs. In addition to readings, lectures, and in-class exercises, students will be guided through the process of analyzing qualitative data and reporting on an empirical investigation in oral and written form.

Credit Weight: 0.5

Academic Department (or campus): Psychology

Semester Offering: Fall 2017

Class Schedule and Location: Wed, Fri: 1:00PM - 2:20PM  
ROZH, Room 105

## Instructor Information

Instructor Name: Dr. Shayna Skakoon-Sparling

Instructor Email: [sskakoon@uoguelph.ca](mailto:sskakoon@uoguelph.ca) (please include PSYC 4780 in subject of all emails). I will attempt to respond to emails within 24 hours, M-F, I may respond through an announcement in class or on CourseLink if the answer pertains to the whole class.

Office location: MacKinnon (old building), room 542

Office hours: Wednesdays 2:30 – 4:30pm, by appointment

## Course Content

### **Specific Learning Outcomes:**

By the end of this course, a successful student will be able to:

1. Devise methods, operationalize measures, and identify statistical techniques, for an empirical investigation and articulate the reasons for choosing those methods, operationalizations, and statistical techniques.
2. Design appropriate methodologies (including statistical analysis) to test an empirical question.

3. Select and use the appropriate technology to conduct an empirical investigation.
4. Write a research report in a manner in keeping with the standards of the discipline.
5. Demonstrate a well-developed ability to extract theoretical and empirical information from complex psychological texts and articles.
6. Generate ideas and questions from written text in the field of psychology.
7. Conduct research in a manner congruent with diverse ethical demands and regulations.

**Lecture Content:**

<b>Date</b>	<b>Topics and Activities</b>
Week 1	Introduction and Review of Basic Research Concepts (Internal & Ecological Validity)
Week 2	Ethics
Week 3	Inferential Statistics & the New Statistics
Week 4	Simple Experimental Designs & Factorial Designs
Week 5	Qualitative Research Designs & Focus Groups/ Interviews
Week 6	Thematic Analysis & Discourse Analysis
Week 7	Midterm Exam & Follow-Up
Week 8	Conducting Survey Research & Scale Design
Week 9	Scale Validation & Correlation
Week 10	Multiple Regression & Complex Factorial Designs
Week 11	Advanced Statistical Techniques
Week 12	The Replication Crisis & Replicable Science Methods
Week 13	In Class Presentations

**Labs: none**

**Seminars: none**

### Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Reflection #1	Sept 13 <sup>th</sup>	1%	1, 2, 3, 6, 7
Certification in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans OR Certification in Animal Research Ethics	Sept 20 <sup>th</sup>	1%	7
In-Class Written Exam	Oct 18 <sup>th</sup>	20%	1,5,6
Research Proposal	Oct 29 <sup>th</sup>	25%	1,2,3,4,5,6
Group Evaluation Project	Nov 12 <sup>th</sup>	10%	1,2,3,4,5,6
In-Class Presentation	Nov 22 <sup>nd</sup> / 24 <sup>th</sup>	20%	1, 2, 3, 5, 6
Presentation Write-up	Nov 29 <sup>th</sup>	22%	1,2,3,4,5,6
Reflection #2	Nov 29 <sup>th</sup>	1%	1, 2, 3, 6, 7

### Additional Notes (if required):

**Final examination date and time: No final exam**

**Final exam weighting: No final exam**

### Course Resources

#### Required Texts:

Gavin, H. (2008). *Understanding research methods and statistics in psychology*. London: SAGE Publications Ltd. doi: 10.4135/9781446214565

(Available online from the University of Guelph Library)

#### Recommended Texts: None

**Lab Manual: N/A**

**Other Resources: Additional readings or other material will uploaded to Courselink or available from the University of Guelph Library.**

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th Ed). Thousand Oaks, CA: Sage Publications.

Palys, T., & Atchison, C. (2014). *Research Decisions: Quantitative, Qualitative, and Mixed Methods Designs* (5th Ed). Toronto, ON: Nelson Education.

**Field Trips: None**

**Additional Costs: None**

## **Course Policies**

### **Grading Policies**

**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.

### **Course Policy on Group Work:**

Working collaboratively with a team is a common and important aspect of research in Psychology. I expect group members to organize themselves and coordinate to ensure that each member is contributing equally to the best of their ability.

### **Course Policy regarding use of electronic devices and recording of lectures:**

Electronic recording of classes is expressly forbidden without consent of the instructor. 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.

## **University Policies**

### **Academic Consideration**

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

Academic Consideration:

[Academic Consideration, Appeals and Petitions](#)

### **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 Undergraduate Calendar:

[Academic Misconduct Policy](#)

### **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](#) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email [accessibility@uoguelph.ca](mailto:accessibility@uoguelph.ca) or the [Student Accessibility Services Website](#)

### **Course Evaluation Information**

Please refer to the [Course and Instructor Evaluation Website](#) .

### **Drop date**

The last date to drop one-semester courses, without academic penalty, is November 3<sup>rd</sup>, 2017. For regulations and procedures for Dropping Courses, see the [Schedule of Dates in the Academic Calendar](#).

[Current Undergraduate Calendar](#)

### **Additional Course Information**

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

In this course, your instructor will be using Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to prevent plagiarism in the College of Social and Applied Human Sciences.

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

***A Note on The Grading of This Course:***

Grades and other evaluations reflect your performance in a course. In other words, your mark is something that you earn based on your effort as well as the quality of your work; it is not something assigned to you at random by the instructor or your TAs. Sometimes you can work really hard on an assignment or test and still receive a grade lower than what you hoped for. Similarly, I could try really hard to knit a sweater and the result may still not fit the wearer how I hoped it would, no matter the amount of time or effort I felt I had expended.

Your TA and I take time to carefully evaluate all of our students' performance throughout the course. Still, there are a handful of students every semester who insist on contacting us to argue their grades, without being able to present strong evidence for a grading error. Many instructors find these types of attempts to negotiate for a higher grade a sign of disrespect. Additionally, it can be interpreted as a sign that the student thinks that their instructor doesn't carefully evaluate grading and performance. I understand that this may not be your intention, but nonetheless be mindful when sending emails.

This does not mean that you should not feel welcome to raise any concerns you may have about your assignments or exams, I wish you only to be aware that unfounded negotiation can be a detriment to your reputation as a student. Importantly, if you are unclear about the value of an assignment (or extra credit) for any course, please take time to clarify with your instructor and/or your TAs well before the end of the semester or the due date of an assignment.