PSYC*2360, Course Outline: Winter 2019

General Information

Course Title: Psychological Methods and Statistics

Course Description:
This course is designed to provide students with a general introduction to scientific methods in the field of psychology. The course will cover important concepts, principles, and issues with both experimental and non-experimental research designs. By the end of this course, successful students will be able to:

- Identify, apply, and evaluate different research methods
- Critically evaluate scientific research
- Conduct a literature search and identify and summarize the relevant literature
- Develop research hypotheses and design a study to test their research hypotheses
- Write a research proposal

Credit Weight: 0.50

Academic Department (or campus): Department of Psychology

Semester Offering: W19

Class Schedule and Location: Mondays and Wednesdays 2:30pm-3:20pm; ROZH, 103

Instructor Information

Instructor Name: Nick Hobson, PhD
Instructor Email: nhobson@uoguelph.ca
Office location and office hours: Mackinnon Ext. building 4022, Mondays 3:30pm-4:30pm

GTA Information

GTA Name: Veesta Mavandad
GTA Email: vmavanda@uoguelph.ca
Seminar Coordinator

GTA Name: Kelsy Ervin
GTA Email: kervin@uoguelph.ca
Lab 01 (Tues 9:30am-10:20am)
MIN 037

GTA Name: Thomas Horman
GTA Email: thorman@uoguelph.ca
Lab 02 (Tues 10:30am-11:20am)
MIN 037

GTA Name: Jessie Heaman
GTA Email: jheaman@uoguelph.ca
Lab 2 (Wed 3:30pm-4:20pm)
ANNU 204

GTA Name: Lab 3 (Wed 4:30pm-5:20pm)
Course Content

Specific Learning Outcomes:

LO 1.3 – Problem Solving,
LO 2.1 – Information literacy,
LO 2.2 – Methodological Literacy,
LO 2.3 – Quantitative Literacy,
LO 2.5 – Visual Literacy,
LO 4.2 – Written Communication,
LO 4.3 – Reading Comprehension,
LO 5.3 – Ethical Issues in Research

Lecture Content:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic and corresponding readings</th>
<th>Assignments, due dates for quizzes and Research in Action (RIA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 7th, 9th</td>
<td>Week 1: Psychology as a science; scientific literacy&lt;br&gt; <strong>Chapter 1</strong></td>
<td>N/A</td>
</tr>
<tr>
<td>Jan 14th, 16th</td>
<td>Week 2: Research process, variables, and hypotheses&lt;br&gt; <strong>Chapter 2</strong></td>
<td>Quiz and RIA Week 2 Due: Jan 18th</td>
</tr>
<tr>
<td>Jan 21st, 23rd</td>
<td>Week 3: Ethics within and beyond the lab&lt;br&gt; <strong>Chapter 3</strong></td>
<td>Quiz and RIA Week 3 Due: Jan 25th</td>
</tr>
<tr>
<td>Review Feb 4th Midterm Feb 6th</td>
<td>Week 5: Midterm review session + Midterm</td>
<td></td>
</tr>
<tr>
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<td>--------------------------------------------------------------------------</td>
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</tbody>
</table>
| Feb 11th, 13th | Week 6: Observational research and coding procedures  
*Chapter 6*                                                                 | Quiz and RIA Week 6  
Due: Feb 15th  
Plan for research proposal  
Due: Feb 11th, 11:59PM |
| Feb 18th, 20th | No classes – reading week                                                                         | N/A                                                                      |
| Feb 25th, 27th | Week 7: Survey and questionnaire design  
*Chapter 7*                                                                 | Quiz and RIA Week 7  
Due: Feb 29th |
| Mar 4th, 6th  | Week 8: One-way designs (within- and between-subjects designs)  
*Chapters 8 & 10*                                                        | Quiz and RIA Week 8  
Due: Mar 8th |
| Mar 11th, 13th | Week 9: Factorial design and interaction effects  
*Chapter 11*                                                              | Quiz and RIA Week 9  
Due: Mar 15th |
| Mar 18th, 20th | Week 10: Mixed design  
*Chapter 12*                                                                  | Quiz and RIA Week 10                                                   |
| Mar 25th, 27th | Week 11: Priming and implicit procedures  
*Supplemental reading:*  
http://blogs.discovermagazine.com/neuroskptic/2016/10/13/social-priming-works-after-all/#.XBgU0VxKjiU  
https://www.thecut.com/2017/01/psychology-racism-measuring-tool-isnt-up-to-the-job.html | Quiz and RIA Week 12  
Due: April 5th  
Research Proposal Due  
Wed April 3rd, 11:59 pm |
| April 1st, 3rd | Week 12: Intervention and evaluation  
*Chapter 13*                                                                | Quiz and RIA Week 12  
Due: April 5th |

**Seminars:**

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Seminar Goal</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7</td>
<td><strong>No Seminars</strong></td>
<td><em>changes posted on CourseLink</em></td>
</tr>
</tbody>
</table>
| January 14| Research Planning  
- Topic & Question  
- Searching for and reading articles                                             | *All reflections completed in class*             |
<p>| January 21| Introduction                                                                | Reflection 1                                      |</p>
<table>
<thead>
<tr>
<th>Week of:</th>
<th>Seminar Goal</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>changes posted on CourseLink</em></td>
<td><em>All reflections completed in class</em></td>
<td></td>
</tr>
<tr>
<td>January 28</td>
<td>Methods</td>
<td>Reflection 3</td>
</tr>
<tr>
<td>February 4</td>
<td>Research Plan Support Class</td>
<td>No Reflection, Midterm February 6th</td>
</tr>
<tr>
<td>February 11</td>
<td>Results</td>
<td>Reflection 4, Plan for research proposal: Due Mon. Feb. 11th, 11:59 pm</td>
</tr>
<tr>
<td>February 18</td>
<td><strong>No Seminars (reading week)</strong></td>
<td></td>
</tr>
<tr>
<td>February 25</td>
<td>Results Continued, Plan Feedback Support Class</td>
<td>Reflection 5</td>
</tr>
<tr>
<td>March 4</td>
<td>Sample Paper Review</td>
<td>Reflection 6</td>
</tr>
<tr>
<td>March 11</td>
<td>Academic Writing</td>
<td>Reflection 7</td>
</tr>
<tr>
<td>March 18</td>
<td>APA 6 (In-text and formatting), Support Class</td>
<td>Reflection 8</td>
</tr>
<tr>
<td>March 25</td>
<td>References and Abstract Support Class</td>
<td>Reflection 9</td>
</tr>
<tr>
<td>April 1</td>
<td><strong>In-Class Office Hour</strong></td>
<td>Research Proposal: Due Wed April 3rd, 11:59 pm</td>
</tr>
</tbody>
</table>

**Course Assignments and Tests:**

<table>
<thead>
<tr>
<th>Assignment or Test</th>
<th>Due Date</th>
<th>Contribution to Final Mark (%)</th>
<th>Learning Outcomes Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly online quizzes</td>
<td>Weekly quizzes due by 11:59 pm on Friday of the corresponding week.</td>
<td>10.5% (7@1.5%) (drop the lowest)</td>
<td>A1-3; B1-3; C1-3; D1-2</td>
</tr>
<tr>
<td>Research in action (RIA)</td>
<td>Weekly assignments due by 11:59 pm on Sunday of the corresponding week.</td>
<td>10.5% (7@1.5%) (drop the lowest)</td>
<td>A1-3; B1-3; C1-3; D1-2</td>
</tr>
<tr>
<td>Seminar reflections</td>
<td>Due in-class at the end of each seminar meeting</td>
<td>9%</td>
<td>A1-3; B1-3; C1-3; D1-2</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>Wednesday February 6th (during class), Weeks 1-4</td>
<td>20%</td>
<td>A1-3; B1-2; C1-C3; D2</td>
</tr>
</tbody>
</table>
Final examination date and time: April 11th, 8:30am-10:30am

Final exam weighting: 25%

Examination Regulations

Course Resources

Required Texts:


Other Resources:

1. Courselink Website. Lecture slides and seminar slides will be provided on the Courselink website. Seminar slides will be posted after the conclusion of each week.

2. Launchpad software (included with text) is used to provide the Research in Action (RIA) assignments and quizzes.
   - The access code for Launchpad appears on the inside cover of the textbook.
   - Instructions on how to access Launchpad are provided on CourseLink. A representative will also be coming in to class on January 14th to discuss more in detail.

Course Policies

Attendance: Regular attendance at lectures is strongly recommended. Although lectures will closely follow the presentation in the textbook, many students find the material challenging. My goal is to communicate key concepts in a clear and uncomplicated fashion.

Effective time management is critical. To succeed in this course, it is essential that you keep up with the readings, weekly quizzes research in action activities, and seminar reflections and
assignments. You should take a disciplined approach and attend lectures and seminars. You are encouraged to ask the professor and course coordinator questions when you are struggling.

Late or missed deadlines:

For the plan for research proposal, it is at the discretion of your TA as to whether they will accept late assignments. Please do not email the course instructor. If an extension is granted, the assignment should be submitted to the CourseLink Dropbox, on the extended due date. After the extension period has expired, 5% of the value of the report will be deducted for each additional day of delay. After 3 calendar days, the grade received will be 0%.

For the research proposal, late submissions will be penalized at a rate of 5% per day and will not be accepted after 1 week past the deadline. If there is a valid reason to require an extension (see above), a penalty may be avoided. In such a case, you must email requests for consideration to the course coordinator (vmavanda@uoguelph.ca), and you must cc your TA in any such email.

For the midterm, in the event that a student misses the midterm exam due to documented medical, psychological or compassionate reasons, then the final exam will be count toward 45% of the final grade. If a student fails to provide appropriate grounds for academic consideration, the grade on the missed midterm will be 0.

For the final exam, Students who do not write the final examination should follow the University’s procedures for requesting academic consideration (see below).

Undergraduate Grading Procedures

Page Limits:

Marks will be docked for exceeding the page limit on your research proposal and research plan. 5% deduction if longer than ½ page or more over the page limit

Course Policy on Group Work:

Each student is expected to complete all assignments on their own. If there is evidence that students are collaborating while completing online assessments, then those cases will be dealt with as per the regulations on Academic Misconduct. However, students are encouraged to form study groups in preparation for the graded assessments.

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.

Undergraduate Grading Procedures
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

Grounds for Academic Consideration

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 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 March 8th, 2019.

Drop date

For regulations and procedures for Dropping Courses, see the Schedule of Dates in the Academic Calendar.

Current Undergraduate Calendar

Additional Course Information

1. Weekly Quizzes and Research in Action activities.
   You should plan to spend at least 5 hours in addition to class and seminar time doing your readings and assessments. The deadline to receive grades on the online assignments is 11:59 pm on the Friday at the end of the assigned week. You may attempt each quiz an unlimited number of times. However, your grade will be the higher score of the first two attempts.

2. Seminars

   You will attend and participate in approximately 10 seminars. Seminars are essential in learning how to develop a research plan and write a proposal. During the seminars, you will work on the following collaborative learning activities:
   - Learn how to conduct a library search for journal articles
   - Find out the structure of psychology journal articles
   - Create research questions and hypotheses
   - Participate in self-reflection exercise about your learning in research methods
   - Learn how to write an introduction, methods, and results section for a research paper

   Seminar Reflections

   At the end of each weekly seminar, students will submit a completed seminar reflection to their course TA. These reflections will help students identify their topics of interest, explore research ideas, and clarify course concepts. Seminar reflections will be marked on the basis of completion and demonstration of exploration of course concepts (0, 1, or 2). Students will be asked to complete 9 reflections with the option of dropping their lowest grade to ultimately count towards 9% of the final grade.
3. Plan for Research Proposal

Working individually students will develop a plan for their research proposal that outlines your current plan for your research proposal, including: 1) Your general topic of interest, 2) Your research question or questions, 3) The identified variables of interest, 4) Operational definitions for the identified variables of interest, 5) General description of proposed methodology, and 6) a list of five related peer reviewed journal articles. APA Referencing is not yet required. Maximum two pages double spaced (not including list of references).

4. Research Proposal

Working individually, students will prepare a research paper which outlines the justification and methodology for a research project. While the project is not actually conducted, a results section is to be written as if the project was completed. APA guidelines for scientific writing will be followed and a detailed rubric will be provided.

5. Midterm

The midterm exam will comprise 40 multiple-choice questions similar to those on the weekly quizzes. The midterm will cover material from the first four lectures (and corresponding readings).

6. Final Exam

The final exam will comprise 60 multiple-choice questions similar to those on the weekly quizzes. It will be non-cumulative and cover the remaining lecture weeks (and corresponding chapters/readings).