The University of Western Ontario
HS2801A
Research Methods in Health Sciences
September 2020

Instructor: Michael Robinson PhD CAT(C) ATC
Lecture Location: Online
Lab Location: Online
Email: mrobin7@uwo.ca
Office Hours: Every Monday and Wednesday from 11:30 am to 12:30 pm via Zoom:
https://westernuniversity.zoom.us/j/96776257908

Teaching Assistant: TBD

Lectures
There is one lecture per week. Lectures will be available no later than 9 am on the Monday of each week.

Labs
There are five labs throughout the course plus required readings. There will be virtual office hours and drop-in lab sessions scheduled throughout the course.

Prerequisite Checking
Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees if you are dropped from a course for failing to have the necessary prerequisites.

Course Description
This course is an introduction to methods used in health sciences research. Although formulas are given and calculations are presented, the principal orientation of the course is conceptual rather than mathematical.

Statement on Multiple Choice Exams
Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Course Materials
All course materials will be posted to OWL in advance of lectures.
The required, free textbook for this course is:


Textbook readings will be assigned via Perusall and more information will be provided during the first week of class.

Attendance and Classroom Behaviour (online and/or in-person)
In the School of Health Studies, each course instructor sets specific expectations for attendance and participation that are specific to the course, teaching objectives, and learning outcomes. Regular attendance is expected and essential for all courses, but particularly those that include participation grades in their evaluation schemes. Participation means not only attendance, but active engagement in the class, including (for example) contribution to small and large group discussions, a demonstrated effort to prepare for class by completing assigned readings before class, and following the instructor's guidelines for use of electronic devices during class time. Students who miss classes, or parts of classes, are responsible for the material they have missed. Instructors are not obliged to review the contents of missed lectures.

Methods of Evaluation

Examinations (70%) via Gradescope:

Midterm 35% October 21st 2020
Final 35% TBD

Labs (30%):

Lab Assignments 20% (5 x 4%)

Lab assignments are to be submitted by 23:59 EST on the due date indicated in the schedule via Gradescope.

Perusall Participation 10%

Your Perusall score is calculated as of Dec 4th at 12:00 PM EST (noon) using the scoring algorithm described in the Perusall Assignment document on OWL.
<table>
<thead>
<tr>
<th>Week Of</th>
<th>Lecture</th>
<th>Lab</th>
<th>Lab Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Sep</td>
<td>Course Overview, Introduction to Research,</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Asking Good Questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-Sep</td>
<td>Design, Analysis, Conclusions and Knowledge</td>
<td>Lab #1</td>
<td>Sept 25\textsuperscript{th} 23:59</td>
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<tr>
<td></td>
<td>Translation</td>
<td></td>
<td></td>
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<tr>
<td>20-Sep</td>
<td>Ethics, Bias and Error</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>27-Sep</td>
<td>Measurement</td>
<td>Lab #2</td>
<td>Oct 9\textsuperscript{th} 23:59</td>
</tr>
<tr>
<td>4-Oct</td>
<td>Experimental Research</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>11-Oct</td>
<td>Non-Experimental Research</td>
<td>Lab #3</td>
<td>Oct 23\textsuperscript{rd} at 23:59</td>
</tr>
<tr>
<td>18-Oct</td>
<td></td>
<td>Midterm</td>
<td></td>
</tr>
<tr>
<td>25-Oct</td>
<td>Non-Experimental Research</td>
<td>Lab #4</td>
<td>Nov 13\textsuperscript{th} 23:59</td>
</tr>
<tr>
<td>1-Nov</td>
<td></td>
<td>Reading Week</td>
<td></td>
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<tr>
<td>8-Nov</td>
<td>Psychometrics and Test Construction</td>
<td>Lab #5</td>
<td>N/A</td>
</tr>
<tr>
<td>15-Nov</td>
<td>Other Types of Research</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>22-Nov</td>
<td>Descriptive Statistics</td>
<td>Lab #6</td>
<td>Dec 4\textsuperscript{th} 23:59</td>
</tr>
<tr>
<td>29-Nov</td>
<td>Inferential Statistics</td>
<td>None</td>
<td>N/A</td>
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</tbody>
</table>
ADDITIONAL STATEMENTS

Statement on Academic Offences:

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Accommodation for illness:

The University recognizes that a student’s ability to meet their academic responsibilities may, on occasion, be impaired by extenuating circumstances, including short-term illness or injury. Reasonable academic consideration is a cooperative process between the University, the student, and academic staff. All participants in the process must act in good faith, and fulfil their respective obligations, if it is to succeed.

Students who experience an extenuating circumstance (illness, injury, or other extenuating circumstance) sufficiently significant as to temporarily render them unable to meet academic requirements, may submit a request for academic consideration through the following routes:

(i) Submitting a Self-Reported Absence form, provided that the conditions for submission are met;

(ii) For medical absences, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner, in order to be eligible for Academic Consideration; or

(iii) For non-medical absences, submitting appropriate documentation (e.g., obituary, police report, accident report, court order, etc.) to Academic Counselling in their Faculty of registration, in order to be eligible for academic consideration.

Students seeking academic consideration:

- Are advised to consider carefully the implications of postponing tests or midterm exams or delaying handing in work;

- Are encouraged to make appropriate decisions, based on their specific circumstances, recognizing that minor ailments (e.g., upset stomach) or upsets (e.g., argument with a friend) are not normally an appropriate basis for a self-reported absence;

- Must communicate with their instructors no later than 24 hours after the end of the period covered by either the self-reported absence or SMC, or immediately upon their return following a documented absence;

- Are advised that all necessary documentation, forms, etc. are to be submitted to academic counselling within two business days after the date specified for resuming responsibilities.
Students who experience an unexpected illness or injury or an extenuating circumstance (48 hours or less) that is sufficiently severe as to temporarily render them unable to meet academic requirements (e.g., attending lectures or labs, writing tests or midterm exams, completing and submitting assignments, participating in presentations) should self-declare using the online Self-Reported Absence portal. This option should be used in situations where the student expects to resume academic responsibilities within 48 hours or less. The following conditions are in place for self-reporting of medical or extenuating circumstances:

a. Students will be allowed a maximum of two self-reported absences between September and April, and one self-reported absence between May and August;

b. The duration of the excused absence will be for a maximum of 48 hours from the time the Self-Reported Absence form is completed through the online portal, or from 8:30am the following morning if the form is submitted after 4:30pm;

c. The duration of the excused absence will terminate prior to the end of the 48 hour period, should the student undertake significant academic responsibilities (e.g., write a test, submit a paper) during that time;

d. The duration of an excused absence will terminate at 8:30am on the day following the last day of classes each semester, regardless of how many days of absence have elapsed;

e. Self-reported absences will not be allowed for scheduled final examinations; for midterm examinations scheduled during the December examination period; or for final lab examinations (i.e., “bellringers”);

f. Self-reporting may not be used for assessments (e.g., midterm exams, tests, reports, presentations, or essays) worth more than 30% of any given course;

g. Students must be in touch with their instructors no later than 24 hours after the end of the period covered by the Self-Reported Absence form, to clarify how they will be expected to fulfil the academic expectations they may have missed.

Support Services:

There are various support services around campus and these include, but are not limited to:

1. Student Development Centre -- [http://www.sdc.uwo.ca/ssa/](http://www.sdc.uwo.ca/ssa/)

Health and Wellness:

As part of a successful undergraduate experience at Western, we encourage you to make your health and wellness a priority. Western provides several on-campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. For example, to support physical activity, all students receive membership in Western’s Campus Recreation Centre as part of their registration fees. Numerous cultural
events are offered throughout the year. Please check out the Faculty of Music web page (http://www.music.uwo.ca/), or the McIntosh Gallery (http://mcintoshgallery.ca/). Further information regarding health and wellness-related services available to students may be found at http://www.health.uwo.ca/.

If you are in emotional or mental distress, please visit Western Psychological Services (https://www.uwo.ca/health/psych) for a list of options for obtaining help. To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: https://uwo.ca/health/wec/education/learning.html.

Grade policy:

The university-wide descriptor of the meaning of letter grades, as approved by Senate:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
<td>One could scarcely expect better from a student at this level</td>
</tr>
<tr>
<td>A</td>
<td>80-89</td>
<td>Superior work that is clearly above average</td>
</tr>
<tr>
<td>B</td>
<td>70-79</td>
<td>Good work, meeting all requirements and eminently satisfactory</td>
</tr>
<tr>
<td>C</td>
<td>60-69</td>
<td>Competent work, meeting requirements</td>
</tr>
<tr>
<td>D</td>
<td>50-59</td>
<td>Fair work, minimally acceptable.</td>
</tr>
<tr>
<td>F</td>
<td>below 50</td>
<td>Fail</td>
</tr>
</tbody>
</table>

It is expected that the grades for this course will fall between 70-74%. In the event that the course average falls outside this range, a constant may be added (or subtracted) from each student’s grade, by the instructor, to bring the class average in line with school policy.