

Health Sciences 3801b
Measurement and Analysis in Health Sciences
School of Health Studies, Western University

January to April 2015

1. Course Information

This course is an introduction to statistical analysis in health sciences research. Although formulas are given and calculations are performed, the principal orientation of the course is conceptual rather than mathematical. Your grade in this course is based on three quizzes and a final exam.

Classes: 2 hours
Fridays, 9:30 to 11:30, NS 1

Prerequisite Checking

You should consult the Western Academic Calendar (www.westerncalendar.uwo.ca) for the prerequisites of this course. Unless you have either the prerequisites for this course or written permission from your Dean to enrol in it, you may be removed from this course and deleted from your record. This decision may not be appealed. You will receive no adjustment of your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Course Materials

There is no textbook to be purchased for this course. I have prepared readings to accompany the classes, and these readings are posted in OWL. Each reading provides an introduction to the topic and includes a series of cases that we will work through in class.

4. Evaluation

Your grade in this course is based on three online quizzes and a final exam. Each quiz is worth 15 percent of your course grade, and the final exam is worth 46 percent of your course grade. The quizzes and exam are composed of calculation questions and thought questions. The calculation questions test your ability to perform the numerical procedures presented in the readings. The thought questions test your understanding of the concepts and general principles presented in the readings.

!e quizzes are one-hour in length, and they are administered online using OWL. Each quiz will be open for a two-day period. You can login to OWL at any time during the period to complete the quiz. !e schedule of quizzes is listed in the schedule section (below). !e "rst quiz covers readings 1 and 2, the second quiz covers readings 1 to 3, the third quiz covers readings 1 to 4. !e "nal exam covers readings 1 to 5, and it is scheduled during the official examination period. !e quizzes are open-book in the sense that you have access to your notes and the readings while completing the quiz. !e quizzes are expected to be completed on your own, without collaboration with other students.

If you are unable to complete a quiz during the scheduled time as a result of medical or non-medical reasons, you must consult an academic counsellor to obtain academic accommodation. Once academic accommodation is obtained, the percentage associated with a missed quiz will be evenly distributed among the other quizzes and the "nal exam. If you were unable to complete the "rst quiz because of illness, the second quiz would be worth 12 percent (i.e., 18% + 6%), the third quiz would be worth 24 percent (i.e., 18% + 6%), and the "nal exam would be worth 52 percent (i.e., 18% + 46%).

If you miss the "nal exam due to medical illness or non-medical reasons, you must consult an academic counsellor to obtain academic accommodation to write a make-up exam.

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5. Student Code of Conduct

!e purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at !e University of Western Ontario, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of disciplinary actions that may be imposed, and set out the disciplinary procedures that the University will follow. For more information, visit [http://www.uwo.ca/registrar/academic_integrity/](#)

Documentation heading of the following website: <https://studentservices.uwo.ca/secure/index.cfm>

Documentation is required for non-medical absences where the course work is more than 10% of the overall grade. Students may contact their Faculty Academic Counselling Office for what documentation is needed.

Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Students should work with their professors and their Academic Counselling Office in a timely manner. Documentation for any request for accommodation shall be submitted, as soon as possible, to the appropriate Academic Counselling Office of the student's Faculty of registration & Health Studies. Students should contact the School of Health Studies main office (222 HSB).

8. Scholastic Offences

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

9. Support Services

Support services are offered on campus through the Student Development Centre, Health Services, the Office of the Registrar, and the Office of the Ombudsperson.

10. Course Schedule

Week	Date	Topic	Online Quizzes (Open)
1	Jan 9	Course Overview	
2	Jan 16	Scoring (Reading 1)	
3	Jan 23	Simple Regression (Reading 2)	
4	Jan 30	Simple Regression (Reading 2)	
5	Feb 6	Uncertainty (Reading 3)	Quiz 1 (Feb 4 to Feb 5)
6	Feb 13	Uncertainty (Reading 3)	
	Feb 20	No Class & Reading Week	
7	Feb 27	Multiple Regression (Reading 4)	Quiz 2 (Feb 25 to Feb 26)
8	Mar 6	Multiple Regression (Reading 4)	
9	Mar 13	Analysis of Variance (Reading 5)	Quiz 3 (Mar 11 to Mar 12)
10	Mar 20	Analysis of Variance (Reading 5)	
11	Mar 27	Analysis of Variance (Reading 5)	
12	Apr 3	No Class	