

PSYC*6380, Course Outline: Fall 2017

General Information

Course Title: Multivariate Statistics for Psychology

Course Description:

By the end of this course, the successful student will be an informed, thoughtful, and skilled user of multivariate statistical techniques. 'Recipe book' and 'one size fits all' approaches will be eschewed in favour of extensive data exploration (largely graphical) and interpretation, and—where justified—estimation of parameter values.

Credit Weight: 0.50

Academic Department (or campus): Psychology

Semester Offering: Fall

Class Schedule and Location: Tuesdays (and Nov. 30th) 8:30 AM to 11:20 AM; MINS 101

Instructor Information

Instructor Name: Ian Newby-Clark

Instructor Email: inewby@uoguelph.ca

Office location and office hours: MacKinnon Extension 3006; By Appointment

GTA Information

None

Course Content

Specific Learning Outcomes:

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

1. **justify**, in writing, his/her approach to a multivariate data analytic problem given the nature of the data and the nature of the problem.
2. **justify**, in oral form, his/her approach to a multivariate data analytic problem given the nature of the data and the nature of the problem.
3. **conduct** justified analyses of data using the statistical program R.

4. **effectively communicate** the results of multivariate statistical analyses through **clear and persuasive writing (including graphs)**.
5. **effectively communicate** the results of multivariate statistical analyses through **clear and persuasive oral presentations**.
6. **facilitate his/her own development as a behavioural scientist** by writing short position papers (maximum two pages plus references; APA Style) on readings and class discussions.
7. **facilitate classmates' and his/her own learning** by effectively **collaborating** on group assignments and by **fully participating** in class activities and discussions.

Lecture Content:

None.

Labs:

None.

Seminars:

This course will comprise a combination of intensive discussion of methodological and statistical issues and the formulation of justifiable approaches to multivariate data analytic problems. The issues and problems, in large part, will be guided by the interests of students.

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Position Paper	Sept 17 th	5	6
Position Paper	Sept 24 th	5	6
Position Paper	Oct 1 st	5	6
Position Paper	Oct 15 th	5	6
Group Oral Report of Statistical Investigation #1	Oct 17 th Oct 24 th	15	2,3,5
Group Oral Response to Feedback on Statistical Investigation #1	Oct 31 st	10	2,3,5
Group Written Report of Statistical Investigation #1	Nov 3 rd	10	1,3,4
Group Oral Report of Statistical Investigation #2	Nov 14 th Nov 21 st	15	2,3,5

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Group Oral Response to Feedback on Statistical Investigation #2	Nov 28 th	10	2,3,5
Group Written Report of Statistical Investigation #2	Dec 1 st	10	1,3,4
Facilitation of Classmates' Learning	Oct 24 th	5	7
	Nov 30 th	5	7

Additional Notes (if required):

Final examination date and time: N/A

Final exam weighting: N/A

Course Resources

Required Texts:

All required readings will be assigned via email and the course website. Unless otherwise specified (and provided for), they will be retrievable via the library's search engines.

Recommended Texts:

All recommended readings will be assigned via email and the course website. Unless otherwise specified (and provided for), they will be retrievable via the library's search engines.

Lab Manual:

Other Resources:

It is highly recommended that students visit the course website (on Courselink) frequently for information and updates.

Field Trips:

None

Additional Costs:

None

Course Policies

Grading Policies

Late assignments will be given a grade of zero. No allowance will be made for computer problems. It is therefore highly recommended that students back up their work and that assignments be submitted well before posted deadlines.

[Graduate Grade interpretation](#)

Course Policy on Group Work:

It is expected that all members of a group will participate fully and enthusiastically in all group activities. Details about 'who is responsible for what' will vary from assignment to assignment.

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

[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 [Graduate Calendar](#):

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 November 3rd, 2017. For regulations and procedures for Dropping Courses, see the [Schedule of Dates in the Academic Calendar](#).

[Current Graduate 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.