

Department of Statistical and Actuarial Sciences

Regression (SS3859A/SS9859A)

Course outline for Fall/Winter 2020

Although this academic year might be different, Western University is committed to a **thriving campus**. We encourage you to check out the [Digital Student Experience](#)

decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Course Instructor	Contact Information
Hyukjun (Jay) Gweon	hgweon@uwo.ca

Teaching Assistants	Contact Information
Chelsea Ugenti	cuggenti@uwo.ca
Yishan Zang	yzang8@uwo.ca

Table of Contents and Schedule

Below is the planned weekly schedule.

Week	Dates	Topic
1	Sept 9 - 13	Basics of R, Review of hypothesis testing
2	Sept 14 - 20	SRS - LS estimation, MLE, Decomposition of Variation
3	Sept 21 - 27	Sampling Distribution, CI and PI for beta Testing, MLR estimation
4	Sept 28 - Oct 4	MLR Inference, Nested model
5	Oct 5 - 11	Categorical Variables, Interaction
6	Oct 12 - 18	Thanksgiving, Model diagnostics
7	Oct 19 - 25	Unusual points - Outlier, Leverage, Influence Transformation
8	Oct 26 - Nov 1	Transformation, Collinearity Variable]TJ.81 590.62 Tm0 EMC q138.14 51.89 533.86 ;

[Google Chrome](#) or [Mozilla Firefox](#) are the preferred browsers to optimally use OWL; update your browsers frequently. Students interested in evaluating their internet speed, please click [here](#).

5. Methods of Evaluation

The overall course grade will be calculated as listed below:

Assignments	20%
Midterm Tests	30%
Group Project	20%
Final Exam	30%

Assignments

There will be **four homework assignments** (each is worth 5%) during the course. You will be asked to use R to solve most of homework problems. You are required to submit all R codes with the answers.

Midterm Tests

There will be **two written tests** that cover the course material. The dates of the tests are **Oct 5th (Midterm 1)** and **Nov 16th (Midterm 2)**. **Each midterm test** will be worth **15%** of your final grade. The topics covered for each test will be announced later.

Group Project

The project will consist of a group data analysis (at most three students in each group). Students are required to use R for the regression analysis and submit a project report. Detailed instructions will be posted later.

Final Exam

The date of the final exam will be set by the university.

Note: In assignments and tests, there may be additional questions for SS9859A students.

Accommodated Evaluations

For assignments and tests, late submissions will not be accepted.

If you have an illness self-report, you must contact the instructor before the due.

The weight of a missed midterm exam (with an illness self-report) will be transferred to

expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

for exams scheduled by the Office of the Registrar (e.g., December and April exams)
absence of a duration greater than 48 hours,
assessments worth more than 30% of
if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs, see:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf

and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar:

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>

e-mail received from the University at his/her official university address is attended to in a timely manner.

All of the remote learning sessions for this course will be recorded.

The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

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.

Tests and examinations in this course will be conducted using the remote proctoring service, such as Proctortrack. By taking this course, you are consenting to the use of this software

All recorded sessions will remain within the course site or unlisted if streamed

Copyright Statement

Please be aware that all course materials created by the instructor(s) are copyrighted and cannot be **sold/shared**. Those include materials used in tests/quizzes, midterms, and finals. Content is considered as violation of the Copyright Act and will be considered as a scholastic offence.

In addition, online services such as Chegg are actively monitored. Any questions that are coming out during midterms and finals and are posted to an online service will be searched. Such an activity will be considered as a scholastic offence and will result in academic penalty.