

Regression (SS3859A/SS9859A) Course Outline (Fall 2022)

1. Course Information

Course Information

Course Name: Regression (SS3859A/SS9859A)

Lecture Hours: Monday, Wednesday, Friday 1:30 – 2:30 PM (NSC-7)

Tutorial Hours: Monday 2:30 – 3:30 PM

(Note: Tutorial hours will be used for two midterm tests.)

List of Prerequisites

A minimum mark of 60% in Statistical Sciences 2858A/B. Pre- or Corequisite(s): Statistical Sciences 2864A/B.

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 in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Instructors	Email	Office	Phone	Office Hours
Dr. Hyukjun (Jay) Gweon (Course Coordinator)	hgweon@uwo.ca	WSC 211	519-661-2111 x87792	TBA
TA:				
TA:				

Students must use their Western (@uwo.ca) email addresses when

3. Course Syllabus, Schedule, Delivery Mode

Simple and Multiple linear regression models and their use to model data using computing including model specification and assumptions, inference and estimation, use of indicator variables, regression diagnostics, model building and selection. Introduction to forecasting and time series.

Upon successful completion of this course, students will be able to:

remedial measures as needed.

Lecture Hours: Monday, Wednesday, Friday 1:30 - 2:30 PM (NSC-7)

Tutorial Hours: Monday 2:30 - 3:30 PM

All lectures are delivered in person.

Below is the tentative weekly schedule.

Week	Topic
1	Basics of R, Review of hypothesis testing
2	SRS -

Contingency plan for an in-person class pivoting to 100% online learning

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for

Midterm Tests

There will be **two written midterm tests** that cover the course material. The dates of the tests are **Oct 3rd (Midterm 1) and Nov 14th (Midterm 2)**. Each midterm test will be worth 20% (SS3859A) or 15% (SS9859A) of your final grade. The topics covered for each test will be announced later.

Data Analysis Project (SS9859A students only)

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

Final Exam

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

Notes

All tests are closed book.

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

Accommodated Evaluations

Late assessments will be subject to a late penalty of 20%/day, and assessments that are submitted 5 or more days late will not be graded. The weight for a missed assignment is not transferrable.

There are no make-up exams for midterms. The weight is 20% (SS3859A) or 15%

If you fail to meet the deadline of an assignment due to a legitimate reason (**to be determined by academic counsellors**), you must contact the instructor within 24 hours of the assignment deadline. A one-

Assessments worth 10% or more of the overall course grade:

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the U

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

The Student Medical Certificate is available at

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

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

e.g., more

than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

Note: missed work can *only* be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is **not** sufficient on its own.

7. University Accreditation Program – Canadian Institute of Actuaries (CIA)

Honours Specialization Program in Actuarial Science

If you are in 2nd or 3rd year

If you graduate from with an HSP in Actuarial Science, this course will be one of the courses that you will take in your program that will allow you to be exempt from the preliminary exams of the Society of Actuaries (SOA). This is under the new CIA program accreditation program. If your plan is to become a fully qualified actuary working in Canada, then all you would need to do is graduate from your HSP in actuarial science. You would then be eligible for the CIA Capstone Exam. Taking and passing this exam, along with an online module and a practice education course, would make you eligible to become an ACIA (associate of the Canadian Institute of Actuaries).

If you are in 4th year

This course is accredited under the Canadian Institute of Actuaries (CIA) University Course Accreditation Program (UAP) for the 2022-23 academic year. Achievement of the established exemption grade in this course may qualify a student from exemptions from writing certain preliminary exams. This is the last year of the CIA course accreditation program.

Major in Actuarial Science

If you are a student in a major in Actuarial Science, the CIA program accreditation program will not apply to you. If your plan is to become a fully qualified actuary, you will need to continue to write and pass the preliminary exams of the SOA. However, for 2022-23 this course is still accredited under the Canadian Institute of Actuaries (CIA) University Course Accreditation Program (UAP) for the 2022-23 academic year. Achievement of the established exemption grade in this course may qualify a student from exemptions from writing certain preliminary exams. **This is the last year of the CIA course accreditation program.**

Please see the following link for full details:

<http://www.cia-ica.ca/membership/university-accreditation-program---home>

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be their official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

For all exams, students are allowed to use non-programmable calculators.

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.

10. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.