

SS3859A/SS9859A: Regression

1. General Course Information

Course Information

Course Name Regression (STATS 3859A/9859A)
Lecture Hours Monday, Wednesday, Friday 1:30 – 2:30 PM, FNB-3210 (M), FNB-1240 (WF)
Tutorial Hours Monday 2:30 – 3:30 PM, FNB-3210

(Note: Tutorial hours will be used for two midterm tests and roughly four tutorials.)

List of Prerequisites (applied to undergraduate students)

Prerequisite(s): A minimum mark of 60% in Statistical Sciences 2858A/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

Hyukjun (Jay) Gweon

Office: WSC 270

E-mail: hgweon@uwo.ca

Phone: 519-661-2111 ext 87792

Office hours: TBA

3. Course Description/Syllabus

Simple and Multiple linear regression models 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.

4. Course Materials

I will follow my own course notes and R examples.

Textbook (**not required**):

(a) Introduction to Regression Modeling by B. Abraham and J. Ledolter

(b) Regression Modeling with Actuarial and Financial Applications by Jed Frees

Software: We will use **R** for this course. Laptop or personal computer with R/RStudio installed is highly recommended. Computers are also available in the Statistics Department Computing Lab (WSC 258).

Students should check OWL (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Students are responsible for checking OWL on a regular basis.

5. Methods of Evaluation

The overall course grade will be calculated as listed below:

Assignments	20%
Midterm Tests	40%
Final Exam	40%

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 100-minute “in-class” (written) tests** that cover the course material. The dates of the tests are:

- **Oct 7 (1:30 pm – 3:10 pm)**
- **Nov 18 (1:30 pm – 3:10 pm)**

Each midterm test will be worth 20% of your final grade. The topics covered for each test will be announced later.

Final Exam

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

Note: in each test/exam, there will be additional problems for graduate students.

6. Canadian Institute of Actuaries Actuarial Exam Accreditation

This course is accredited under the Canadian Institute of Actuaries (CIA) University Accreditation Program (UAP). Achievement of the minimum required grades in accredited courses may provide credit for preliminary exams. Please note that a combination of courses may be required to achieve exam credit. Details of required courses and grades at Western University are available at:

<https://www.cia-ica.ca/membership/university-accreditation-program---home/accredited/uwo>.

In addition to the university’s internal policies on conduct, including academic misconduct, candidates pursuing credits for writing professional examinations shall also be subject to the Code of Conduct and Ethics for Candidates in the CIA Education System and the associated Policy on Conduct and Ethics for Candidates in the CIA Education System. For more information, please visit Obtaining UAP Credits and the CIA FAQ.

7. Accommodation and Accessibility

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the Academic Counselling Office of your home faculty as soon as possible. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in NCB 280, and can be contacted at scibmsac@uwo.ca.

For further information, please consult the university’s medical illness policy at http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

If you miss the Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).

8. Academic Policies

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. 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.

9. Support Services

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 Student Accessibility Services (SAS) at 661-2147 if you have any questions regarding accommodations.

The policy on Accommodation for Students with Disabilities can be found here:

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

The policy on Accommodation for Religious Holidays can be found here:

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

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

Additional student-run support services are offered by the USC, <http://westernusc.ca/services>.