

Huron University College
Department of Economics
ECONOMETRICS II
ECONOMICS 2223B-550/551

Course delivery with respect to the COVID-19 pandemic

Although the intent is for this course to be delivered in-person, the changing COVID-19 landscape may necessitate some or all of the course to be delivered online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any assessments affected will be conducted online as determined by the course instructor.

January 2022

General Information:

Instructor: Glen Stirling
E-mail: stirling@uwo.ca
Office Hours Monday 10:30 – 11:30, Tuesday 10:30 – 11:30

Scheduled class times

Section 551 Monday 8:30 – 10:30, Wednesday 8:30 – 9:30
Section 550 Tuesday 8:30 – 10:30, Thursday 8:30 – 9:30

Course website: <https://owl.uwo.ca/portal>

Prerequisite Note:

The prerequisites for this course are **Economics 2222A/B**; and 0.5 from **Mathematics 1225A/B**, **Calculus 1000A/B**, **Calculus 1500A/B** or the former **Calculus 1100A/B**

Students are responsible for ensuring that they have successfully completed all course prerequisites. If you do not have the prerequisites for this course, and you do not have written special permission from your Dean to enroll in this course, you will 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.

Course Objectives:

This class will examine in detail the linear, single equation regression model. We will first review the simple linear regression model, and the properties of the Least Squares regression estimates. Then we will examine the multiple regression model and the properties of the estimates. We will then relax the basic assumptions one at a time to

determine the effect this has on the properties of the estimates, and what can be done to correct any problems that arise. We will then examine extensions to the regression model.

Course Learning Outcomes:

Students will be able to identify what a linear regression model is revealing about an economic relationship.

Students will be able to analyze the properties of the linear regression model.

Students will be able to interpret quantitative results and make valid statistical conclusions.

Students will be able to identify when the underlying assumptions have been violated, through testing and interpreting results, and how violations affect conclusions.

Students will be able apply the proper estimation approach to correct for various violations for the underlying assumptions.

Textbook:

Stock, James and Watson, Mark: *Introductions to Econometrics*, 4th edition. Pearson

Description of Class Methods

Lectures will be posted on the Owl site a week in advance, then taken up on the Monday and Tuesday classes. Homework questions will be assigned with the lectures and then solutions posted on the Owl site.

Grading:

There will be a midterm worth 40% each, and a final exam worth 60%.

Midterm Saturday February 12, 2022

Final examination, Set by Registrar

Course Outline

The Chapter references in the outline of topics below refer to the textbook. Some material in some chapters will be omitted from the course,

1. Introduction – Introduction and Review
 - What is Econometrics.
 - Methodology of Econometrics

2. Linear Regression Model – Ch.4,5
 - Population regression function
 - Error term
 - Ordinary least squares
 - Goodness of fit
 - Properties of estimates
 - Hypothesis testing
 - Use of Dummy variables
 - Estimation in the presence of Heteroscedasticity
 - Generalized Least Squares – Ch.17
 - Extensions to linear regression

3. Multiple Regression Analysis – Ch. 6,7
 - Meaning of estimated Coefficients
 - Goodness of fit measures
 - Properties of Estimates
 - Hypothesis testing
 - Effects of leaving a variable out of the regression
 - Testing linear restrictions

4. Autocorrelation – Ch. 10
 - Estimation in the presence of Autocorrelation
 - Correcting for Autocorrelation

5. Distributed lag Models – Ch. 14
 - Lagged models
 - Distributed lags

Tentative Schedule of Classes

Week 1	Section 1
Week 2,3,4	Section 2
Week 5	Midterm
Week 6	Section 3
Week 7,8	Section 3 continued
Week 9,10	Section 4
Week 11,12	Section 5

Plagiarism is an academic offense and will be treated as such. Students who are in doubt as to the nature of this offence should consult their instructor, Department Chair, or Dean’s Office, as well as the Huron University

College Statement on Plagiarism, available at the Reference Desk in the Huron University College Library and at www.huronuc.on.ca. In addition, students may seek guidance from a variety of current style manuals available at the Reference Desk in the Huron University College Library. Information about these resources can be found at www.huronuc.on.ca/library&computing~styleguides



Appendix to Course Outlines: Academic Policies & Regulations 2021 - 2022

Mandatory Use of Masks in Classrooms

Students will be expected to wear triple layer non-medical masks at all times in the classroom as per Huron policy and public health directives. Students are now permitted to drink water in class by lifting and replacing the mask each time a drink is taken. Students will be able to eat and drink outside of the classroom during scheduled breaks.

Students unwilling to wear a mask as stipulated by Huron policy and public health directives will be referred to the Dean's Office, and such actions will be considered a violation of the Huron Student Code of Conduct.

Pandemic Contingency

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, typically using a combination of synchronous instruction (i.e., at the times indicated in the timetable) and asynchronous material (e.g., posted on OWL for students to view at their convenience). Any remaining assessments will also be conducted online at the discretion of the course instructor. In the unlikely event that changes to the grading scheme are necessary, these changes will be clearly communicated as soon as possible.

Student Code of Conduct

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at:

<https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf>.

Prerequisite and Antirequisite Information

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. 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.

Attendance Regulations for Examinations

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here:

https://www.uwo.ca/univsec/pdf/academic_policies/exam/attendance.pdf.

Statement on Academic Offences

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 website:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf. The appeals process is also outlined in this policy as well as more generally at the following website:

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

Turnitin.com

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Statement on Use of Electronic Devices

It is not appropriate to use electronic devices (such as, but not limited to, laptops, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

Statement on Use of Personal Response Systems (“Clickers”)

Personal Response Systems (“clickers”) may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional.

Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else’s clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

Academic Consideration for Missed Work

Students who are seeking academic consideration for missed work during the semester may submit a self-reported absence form online provided that the absence is **48 hours or less** and the other conditions specified in the Senate policy at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf are met.

Students whose absences are expected to last **longer than 48 hours**, or where the other conditions detailed in the policy are not met (e.g., work is worth more than 30% of the final grade, the student has already used 2 self-reported absences, the absence is during the final exam period), may receive academic consideration by submitting a Student Medical Certificate (for illness) or other appropriate documentation (for compassionate grounds). The Student Medical Certificate is available online at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. **Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.**

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine appropriate forms of accommodation. Further details concerning policies and procedures may be found at: <http://academicsupport.uwo.ca/>.

Policy on Academic Consideration for a Medical/ Non-Medical Absence

(a) Consideration on Medical Grounds for assignments worth *less than 10%* of final grade: Consult Instructor Directly and Contact Academic Advising

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, and if the student has exceeded the maximum number of permissible Self-Reported absences, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the [Student Medical Certificate](#). The instructor may **not** collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

(b) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email huronsss@uwo.ca.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation where the conditions for a Self-Reported Absence have not been met, including where the student has exceeded the maximum number of permissible Self-Reported. All consideration requests must include a completed [Consideration Request Form](#). Late penalties may apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf. Consult [Huron Academic Advising](mailto:huronsss@uwo.ca) at huronsss@uwo.ca for any further questions or information.

Support Services

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron's Student Support Services at huronsss@uwo.ca. An outline of the range of services offered is found on the Huron website at: <https://huronatwestern.ca/student-life/student-services/>.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: <https://huronatwestern.ca/contact/faculty-staff-directory/>.

If you think that you are too far behind to catch up or that your workload is not manageable, you should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, <https://huronatwestern.ca/student-life/student-services/academic-advising/> or review the list of official Sessional Dates on the Academic Calendar, available here: <http://www.westerncalendar.uwo.ca/SessionalDates.cfm>.

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: <https://huronatwestern.ca/student-life/student-services/>

Office of the Registrar: <https://registrar.uwo.ca/>

Student Quick Reference Guide: <https://huronatwestern.ca/student-life/student-services/#1>

Academic Support & Engagement: <http://academicsupport.uwo.ca/>

Huron University College Student Council: <https://huronatwestern.ca/student-life/beyond-classroom/hucsc/>

Western USC: <http://westernusc.ca/your-services/#studentservices>

Mental Health & Wellness Support at Huron and Western

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. Please visit <https://huronatwestern.ca/student-life-campus/student-services/wellness-safety> for more information or contact staff directly:

Wellness Services: huronwellness@huron.uwo.ca

Community Safety Office: safety@huron.uwo.ca

Chaplaincy: gthorne@huron.uwo.ca

Additional supports for Health and Wellness may be found and accessed at Western through, <https://www.uwo.ca/health/>.