

Economics 2223B, Section 550 Intermediate Econometrics II Department of Economics, Huron University College

COURSE INFORMATION

Huron University College, Winter 2023

Economics 2223B Section: 550

Scheduled Class Time:

Classroom: 550: HC-H112 Class Time:

550 Monday 8:30-10:30am, Wednesday 8:30-9:30am

INSTRUCTOR'S INFORMATION

Michael Kottelenberg E-Mail: mkottele@uwo.ca Phone: (519) 438-7224 ext. 603

Office: V132

Office Hours: Thursday 11:30-1:30

Prerequisites: Economics 2222A/B or Statistical Sciences 2035 with a minimum mark of 70%; 0.5 from Mathematics 1225A/B, Mathematics 1230A/B, Calculus 1000A/B, and 0.5 from Mathematics 1229A/B,

Mathematics 1600A/B, Calculus 1301A/B or Calculus 1501A/B.

Antirequisite(s): Economics 2123A/B.

Please use your UWO email when communicating with the instructor. This prevents your email from going to spam. Please also include the course code in the subject line.

COURSE DESCRIPTION

An introductory course in regression analysis which covers: multivariate probability distributions; the classical linear regression model; heteroskedasticity; autocorrelation; introduction to time series; unit roots and cointegration; dynamic linear models; diagnostic testing; instrumental variables; nonlinearities and limited dependent variables.

COURSE OBJECTIVES

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

- Use regression models to analyze economic relationships
- Interpret regression coefficients and know when they can inform about causal relationships
- Understand assumptions of the linear model and how they can be relaxed
- Answer basic statistical questions using statistical software

CLASS METHODS

Classes will be primarily lecture based. In-class time will also be devoted to showcasing econometrics techniques through statistical software.

TEXTBOOK

Woolridge, Jeffrey M., <u>Introductory Econometrics: A Modern Approach</u>, 7th Edition, Cengage, 2019.

COURSE EVALUATION

20% 4 Assignments	Tentative Due Dates: Jan 26, Feb 9, Mar 16, and Mar 30
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35% Midterm Test Section 550: In Class February 13th

45% Final Exam During the Exam Period (April 13 - 30, 2023)

<u>Note</u>: There will be <u>no make-up tests for missed mid-term examinations</u>. If you fail to write a mid-term examination you will receive the mark of zero. Should you miss a mid-term examination for a legitimate reason, such as a serious illness, the marks allotted to the missed examination can be reallocated to the final examination in this course subject to approval by the Dean's Office. It is your responsibility to request such a reallocation and to provide appropriate documentation to support the request. This documentation must be taken to an Academic Advisor in the Academic Counseling Office for approval by the Office of the Dean.

TENTATIVE COURSE SCHEDULE

- 1. Review Probability Theory
- 2. Statistical Testing
- 3. Linear Regression (One Variable)
- 4. Hypothesis Testing and Confidence Intervals
- 5. Multiple Variable Linear Regression
- 6. Binary Dependent Variables
- 7. Regression with Panel Data
- 8. Experiments and Quasi-Experiments
- 9. Instrumental Variables Regression
- 10. Introduction to Time Series Regression



Appendix to Course Outlines: Academic Policies & Regulations Fall/Winter 2022-2023

Huron will continue to follow the guidance of public health and government officials. It is anticipated that there will be no disruptions to in-person instruction. This is subject to change.

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:

 $\frac{https://huronatwestern.ca/sites/default/files/Res\%20Life/Student\%20Code\%20of\%20Conduct\%20-\%20Revised\%20September\%202019.pdf.$

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: <u>Academic Calendar - Western University (uwo.ca)</u>

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: <u>Academic Calendar - Western University (uwo.ca)</u>. 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, tablets, 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

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 <u>Medical Grounds</u> 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, 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.

<u>b)</u> <u>Medical Grounds</u> for assignments <u>worth 10% or more of final grade</u>: Go Directly to Academic Advising

University Senate policy, which can be found at <u>Academic Calendar - Western University (uwo.ca)</u> requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the "home faculty" is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

The documentation is submitted in confidence and will not be shown to instructors. 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. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor's decision is appealable to the Dean.

<u>c)</u> Consideration on <u>Non-Medical</u> Grounds: Consult Huron Support Services/Academic Advising, or email <u>huronsss@uwo.ca</u>.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation. All consideration requests must include a completed <u>Consideration Request Form</u>. 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: accommodation_medical.pdf (uwo.ca). Consult Huron Academic Advising 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

<u>huronsss@uwo.ca</u>. 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-

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

Student Quick Reference Guide: https://huronatwestern.ca/student-life/student-services/#1 Academic Support & Engagement: https://huronatwestern.ca/student-university College Student Council: <a href="https://huronatwestern.ca/student-uni

<u>life/beyond-</u> <u>classroom/hucsc/</u>

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

Wellness and Health Supports 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. All Huron staff and faculty have received training on responding to disclosures of Gender-Based Sexual Violence (GBSV); students should know that the Community Safety Office is a resource for survivors, providing support and, if desired, guidance while referring them to the further supports that they may require. Please visit https://huronatwestern.ca/student-life-campus/student-services/wellness-safety for more information or contact staff directly:

Wellness Services:

<u>huronwellness@huron.uwo.ca</u> Community

Safety Office: safety@huron.uwo.ca

Additional supports for Health and Wellness may be found and accessed at Western

through, https://www.uwo.ca/health/.

Western Calendar - Policy Pages -

Academic Calendar - Western University (uwo.ca)