### **HURON UNIVERSITY COLLEGE**

## ECONOMICS 3313E RESEARCH METHODS FALL/WINTER 2021-2022

#### **COURSE OUTLINE**

Instructor: Dr. Özden Sungur

Office: A215

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Class Schedule: Tuesday 1:30-2:30pm and Thursday 12:30-2:30pm

**Room:** V210

Office hours: By appointment.

**Course Description:** Economics 3313E is a full-year course designed to cultivate students' technical and quantitative abilities for applied economic research. First term will start with a review of linear regression techniques and their application to real-world problems. A number of nonlinear regression functions will also be discussed. The first part of the course will conclude with a discussion of issues pertaining to the assessment of econometric analysis based on multiple regression. The second portion of the course will introduce students to further topics in regression analysis.

**Course Objectives:** This course aims to help students to relate econometric theory to practice through use of real-world problems and data. By the end of this course, students should have good knowledge of the tools of regression analysis and the ability to apply them to economic data. They should be able to critically evaluate empirical research and be able to communicate research results through project reports as well as oral presentations.

**Class Methods:** The class time will be divided between a lecture and a computer lab component. Lectures will provide theoretical background on the topics while computer lab classes will focus on application of theory to real-world data using STATA statistical software.

**Textbook:** Stock, James H. and Mark W. Watson, <u>Introduction to Econometrics</u> (Fourth Edition), Addison-Wesley, 2019, (hereafter SW).

**Software:** STATA statistical software is available for use in Huron Computer Lab. Please note that the software used on University facilities is provided under license agreements with various vendors. Unless explicitly stated otherwise you must assume that all software on all systems is protected by copyright.

**Evaluation:** Assessment in the course will be based on:

### **Fall Term**

Exam I: Thursday, November 11, 2021 - In class (20%)

**Empirical Project I**: Details will be provided later in class with a separate distribution.

Proposals due on Thursday, October 21, 2021 (10%)

Written report due on Tuesday, December 7, 2021 (20%)

### **Winter Term**

Exam II: Thursday, March 10, 2022 - In class (20%)

Empirical Project II: Details will be provided later in class with a separate distribution.

Proposals due on Thursday, February 3, 2022 (10%)

Written report due on Thursday, March 31, 2022 (25%)

### **Tentative Course Schedule\*:**

### **Fall Term**

Week 1	Course Introduction
Week 2	Linear Regression with One Regressor (SW Ch 4)
Week 3	Hypothesis Tests and Confidence Intervals: Regression with a Single Regressor (SW Chapter 5)
Week 4	Presentation on data resources available at Western Computer lab class on data search
Week 5	Linear Regression with Multiple Regressors (SW Chapter 6)
Week 6	Hypothesis Tests and Confidence Intervals: Multiple Regression (SW Chapter 7)
Week 7	Nonlinear Regression Functions (SW Chapter 8)
Week 8	Assessing Studies Based on Multiple Regression (SW Chapter 9)

Week 9	Fall Reading Week - No Classes
Week 10	Midterm I – Thursday, November 11, 2021
Week 11	Internal and External Validity (SW Chapter 9)
Week 12-14	Presentations

# **Winter Term**

Week 1	Regression with Panel Data (SW Chapter 10)
Week 2	Fixed Effects Regression
Week 3	Regression with Time Fixed Effects
Week 4	Regression with a Binary Dependent Variable (SW Chapter 11) The Linear Probability Model
Week 5	Probit and Logit Regression
Week 6	Estimation and Inference in Probit and Logit Models
Week 7	Instrumental Variables Regression (SW Chapter 12)
Week 8	Winter Reading Week - No Classes
Week 9	IV Estimator - Single Regressor and Single Instrument General Instrumental Variables Regression Model Instrument Validity
Week 10	Midterm II – Thursday, March 10, 2022
Week 11-13	Presentations

<sup>\*</sup>The course will follow approximately this schedule. This is tentative list of topics. Some topics may be added or deleted as the course progresses.



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

### **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.

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

#### **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: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf</a>. The appeals process is also outlined in this policy as well as more generally at the following website: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appeals/appealsundergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appeals/appealsundergrad.pdf</a>.

#### 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 <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf</a>.

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: <a href="http://academicsupport.uwo.ca/">http://academicsupport.uwo.ca/</a>.

#### 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, 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 <u>Student Medical Certificate</u>. The instructor may <u>not</u> 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 <a href="mailto:huronsss@uwo.ca">huronsss@uwo.ca</a>.

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 <a href="Consideration Request Form">Consideration Request Form</a>. 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: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_illness.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_illness.pdf</a>. Consult <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/academic\_polici

### **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 <a href="https://huronatwestern.ca/student-life/student-services/">https://huronatwestern.ca/student-life/student-services/</a>.

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: <a href="https://huronatwestern.ca/contact/faculty-staff-directory/">https://huronatwestern.ca/contact/faculty-staff-directory/</a>.

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, <a href="https://huronatwestern.ca/student-life/student-services/academic-advising/">https://huronatwestern.ca/student-life/student-services/academic-advising/</a> or review the list of official Sessional Dates on the Academic Calendar, available here: <a href="http://www.westerncalendar.uwo.ca/SessionalDates.cfm">http://www.westerncalendar.uwo.ca/SessionalDates.cfm</a>.

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: <a href="http://academicsupport.uwo.ca/">http://academicsupport.uwo.ca/</a>

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

Western USC: <a href="http://westernusc.ca/your-services/#studentservices">http://westernusc.ca/your-services/#studentservices</a>

# 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 <a href="https://huronatwestern.ca/student-life-campus/student-services/wellness-safety">https://huronatwestern.ca/student-life-campus/student-services/wellness-safety</a> for more information or contact staff directly:

Wellness Services: <a href="mailto:huron.uwo.ca">huron.uwo.ca</a> Community Safety Office: <a href="mailto:safety@huron.uwo.ca">safety@huron.uwo.ca</a>

Chaplaincy: gthorne@huron.uwo.ca

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