Intermediate Econometrics I
ECONOMICS EC2222A-001/002
Department of Economics
Western University

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Office hours:
- Group office hours will be held online using Zoom (access through OWL) every Friday from 1:00 – 3:00pm. Group office hours will not be recorded.
- Students can sign up for individual in-person or online appointments (sign up on OWL).

Delivery mode: In-person
Meeting time(s) & Classroom:
Section 001 – Tu: 9:30 - 10:30am; Th: 9:30 - 11:30am @ UCC 41
Section 002 – Tu: 2:30 - 3:30pm; Th: 1:30 – 3:30pm @ UCC 41

Course website: https://owl.uwo.ca/portal
Undergraduate inquiries: 519-661-3507 or SSC Room 4075 or econugrd@uwo.ca

Registration:
You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at https://student.uwo.ca. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

Prerequisite/Antirequisite Note:
The prerequisites for this course are: (i) Economics 1021A/B and 1022A/B; or (ii) Economics 2001A/B and Calculus 1000A/B (with a mark no less than 60%), Calculus 1500A/B (with a mark no less than 60%) or the former Calculus 1100A/B (with a mark no less than 60%). This course cannot be taken concurrently with or prior to taking Statistical Sciences 1024A/B as they will become antirequisites to one another in these sequences.

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record, but will ensure that spaces become available for students who require the course in question for graduation.
Course Description:

This is an introductory course in probability and statistics. The main goal is to teach students how to use statistics and basic economic theory to read and interpret data. This knowledge is paramount to learn how to use math and economics to understand the real world.

Course Objectives:

At the end of this course students should be able to: (i) interpret tables, graphs, and statistics used for describing data; (ii) apply probability theory to model random variables; (iii) estimate population parameters using point and interval estimators; (iv) evaluate and describe the properties of an estimator; and (v) test theories about population parameters (determine an appropriate test statistic; implement a formal hypothesis test and interpret the outcomes)

Course Learning Outcomes:

At the end of this course students should be able to: (i) interpret tables, graphs, and statistics used for describing data; (ii) apply probability theory to model random variables; (iii) estimate population parameters using point and interval estimators; (iv) evaluate and describe the properties of an estimator; and (v) test theories about population parameters (determine an appropriate test statistic; implement a formal hypothesis test and interpret the outcomes)

Textbook(s) and Course Materials:


Communication:

- Students should check the course OWL site every 24-48 hours
- Updates will be provided on OWL announcements
- Emails will be monitored daily; students will receive a response in 24 – 48 hours. Please, use your uwo/ivey email and add “Econ 2222” to the subject.
- Students are encouraged to post all course-related content on the OWL discussion forum so that everyone can access answers to the questions
- The discussion forums will be monitored daily by the instructor or teaching assistants

Technical Requirements

- Laptop or computer
- Stable internet connection
- Microphone
- Webcam

For technical support, see the OWL help page or contact Western Technology Services Helpdesk (https://wts.uwo.ca/about-wts/contact.html). Google Chrome or Mozilla Firefox are the preferred browsers for OWL; update your browser frequently.
Assessments and Grading:

Your grade in this course will be determined by a combination of online quizzes, two midterms and a final exam. The following table provides the weights attributed to each assessment. It also provides the tentative schedule for the quizzes and exams.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Tentative Date</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Quizzes</td>
<td>Sep 18; Oct 2; Oct 16; Oct 30; Nov 13; Nov 27</td>
<td>25%</td>
</tr>
<tr>
<td>Mid-term 1</td>
<td>Oct 7</td>
<td>25%</td>
</tr>
<tr>
<td>Mid-term 2</td>
<td>Nov 11</td>
<td>25%</td>
</tr>
<tr>
<td>Final</td>
<td>TBD</td>
<td>25%</td>
</tr>
</tbody>
</table>

Here is how each assessment will work:

(1) Online Quizzes: This assessment will be applied on OWL, no virtual proctoring will be used, and it will consist of a short set of mixed format questions (multiple-choice, true-false, fill-in-the-blank, short answer). **Only the *four* best grades out of the six quizzes will be considered to compute students course grade.** The quizzes will be available from 8am until 10pm of the dates displayed in the table. Once you start the quiz, you will have *45 minutes* or *until closing time* – whichever is shorter - to complete the activity. Students are forbidden from using any books, notes, study guides, diagrams, communication equipment such as a cell phone, computer programs or software, online resources or websites, or other aids unless authorized by the instructor; such authorization must be stated explicitly during the examination.

(2) Mid-terms and Final: These are closed book exams and students are forbidden to communicate with any person other than an examination proctor or the instructor. The midterms will be taken in class and are cumulative until the date of its application. The final exam is also cumulative and can contain questions from any topic covered during the semester. More information regarding the structure of each exam will be provided closer to the date.

Policy Regarding Missed Quizzes and Exams:

There will not be make-up quizzes. In order to account for possible unexpected events, *only the best four grades out of the six grades will be considered*. It is worth noting that independent of self-reports or approved, documented official accommodation, there will not be the reweighting of quizzes. For example, if you miss three quizzes then two will be dropped and one will have a mark of zero. If you miss four quizzes, then two will be dropped and two will have a mark of zero.

Missed exams without illness self-reports or approved, documented official accommodation will be given a mark of zero. If there has been an illness self-report or approved, documented official accommodation, a make-up test will be offered. The format, length and date of the make-up tests are at the discretion of the instructor. If a make-up assessment is missed, the student will receive a mark of *zero* in that assessment.
Topics Covered and Readings:

1) Introduction: descriptive statistics and probability theory (Chapters 1 – 3, SBE)

2) Probability distributions: discrete random variables and probability distributions; continuous random variables and probability distributions, random sampling and sampling distributions (Chapters 4 – 6, SBE)

3) Estimation: point estimations and confidence intervals (Chapters 7 – 8, SBE)

4) Hypothesis testing: general principles of testing hypotheses; test of hypotheses about population parameters (means, proportions, differences in means and proportions and variances); relation between hypothesis testing and confidence intervals (Chapters 9 – 10, SBE)

5) Simple regression (if time allows): estimation of linear models; least square methods and properties of the estimators; assumptions of the simple regression model and inference (Chapter 11, SBE)

Professionalism, Privacy and Copyright:

- Students are expected to follow the Student Code of Conduct.
- All lectures and course materials, including slides, presentations, outlines, and similar materials, are protected by copyright. Students may take notes and make copies of course materials for their own educational purposes only.
- Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, assessments, or any other course materials publicly and/or for commercial purposes without written consent of the instructor.
- Recordings (audio or video) are not permitted without explicit, written permission of the instructor. Permitted recordings may not be distributed or shared.
- Students are expected to follow online etiquette expectations provided on OWL (if applicable; otherwise delete this bullet point)
- Students will be expected to take an academic integrity pledge before some assessments (if applicable; otherwise delete this bullet point)
- Some sessions may be recorded by the instructor. Recorded sessions will remain within the course site or be unlisted if streamed (if applicable; otherwise delete this bullet point)

Tips on How to Be Successful in this Class:

Students in this class should understand the level of autonomy and self-discipline required to be successful.

- Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
- Follow weekly checklists created on OWL or create your own to help you stay on track.
• Take notes as you go through the lesson material and try to solve as many exercises as possible. Keeping handwritten notes will help you learn more effectively than just reading.
• Connect with others. Try forming a study group and meet on a weekly basis for study and peer support.
• **Do not be afraid to ask questions.** If you have questions or are struggling with a topic, check the online discussion boards or contact your instructor and or teaching assistant(s).
Please Note
Department & University Policies for Fall 2021

The University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

1. **Guidelines, policies, and your academic rights and responsibilities** are posted online in the current Western Academic Calendar at: [http://westerncalendar.uwo.ca](http://westerncalendar.uwo.ca). Claiming that “you didn’t know what to do” is not an acceptable excuse for not following the stated policies and procedures.


3. **Cheating as an academic offence:** Students are responsible for understanding what it means to “cheat.” The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as suspension or expulsion.

4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at [http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20)). Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

5. It is a Department of Economics policy that **NO** assignments be dated, stamped or accepted by staff. Students must submit assignments to the instructor.

6. **Appeals:** University policies and procedures for appealing a mark can be found in the Student Academic Appeals section in the current Western Academic Calendar at: [http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14). **Please note the relevant deadlines.**

Department of Economics procedures for appealing a mark can be found here: [https://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals](https://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals). The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed to submit an appeal to econugrd@uwo.ca. Please follow the instructions and use the appeal form shown in the above link.
7. **Systematic adjustments of a class grade distribution** (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.

8. Note the following **add and drop deadlines**:

   Deadline to **add** a first term half course: **Thursday September 16, 2021**  
   Deadline to **drop** a first term half course: **Friday November 12, 2021**

**Policy Regarding Makeup Tests and Final Examinations**

Faculty of Social Science policy states that oversleeping or misreading an exam schedule is **NOT** grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

**Policies Regarding Academic Accommodation**

- The Faculty of Social Science’s policies on academic accommodation are found at [http://counselling.ssc.uwo.ca/procedures/having_problems/index.html](http://counselling.ssc.uwo.ca/procedures/having_problems/index.html).

- **Accommodation for Students with Disabilities**: Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD, see [http://academicsupport.uwo.ca/accessible_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html)), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](http://academicsupport.uwo.ca/accessible_education/index.html).

- **Rewriting Exams and Retroactive Reweighting are NOT Permitted**: Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted. Self-Reported Absences cannot be used once a student has proceeded to start to write a test or exam.

- **Self-Reported Absences**: Students will have two opportunities during the fall and winter terms to receive academic consideration if they self-report a missed assessment using the online self-reported absence portal, provided the following conditions are met: the assessment is missed due to absence of no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student’s final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted otherwise on the syllabus. Students are not able to use the self-reporting option in the following circumstances:
  - for exams scheduled by the Office of the Registrar (e.g., final exams)  
  - absence of a duration greater than 48 hours  
  - assessments worth more than 30% of the student’s final grade  
  - if the student has opened or started the test or exam  
  - if a student has already used the self-reporting portal twice during the fall/winter terms
If the conditions for a Self-Reported Absence are not met, students will need to provide a Student Medical Certificate (SMC) if the absence is medical or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office for more information about the relevant documentation. It is strongly recommended that students notify the instructor as soon as possible, ideally before the assessment, when they become aware of an absence. University policy is that students must communicate with their instructors no later than 24 hours after the end of the period covered by the SMC or immediately upon their return from their documented absence. Failure to follow University policy and procedures may result in denial of academic accommodation and a grade of zero.

**Documentation for Accommodation:** Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons. All required documentation for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

**Western University policy on Consideration for Student Absence** is available here: [Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

**Student Medical Certificate (SMC):** This form is available here: [http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

**Religious Accommodation:** Students should consult the University's list of recognized religious holidays and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

**Policy Regarding Class Attendance and Engagement:** If the instructor deems a student’s attendance or engagement in the class to be unsatisfactory, that student may be prohibited from writing the final examination. Examples of unsatisfactory class engagement include frequent absences from an in-person or synchronous online class, lack of assignment submissions, and inadequate use of online course materials. Instructors who intend to make use of this policy will notify the student in advance.

**Statement on Mental Health and Support Services:** Students under emotional/mental distress should visit [http://uwo.ca/health/mental_wellbeing/](http://uwo.ca/health/mental_wellbeing/) for more information and a complete list of resources on how to obtain help.

**Statement on Remote Proctoring:** While Western intends to hold most classes, mid-terms and finals in-person, the London-Middlesex Health Unity may require Western to teach in a remote format. If this occurs, all assessments will be done remotely and may involve the use of remote proctoring software (i.e., Proctorio, ProctorTrack). Instructors will provide information on the details should the need arise.