ADVANCED MICROECONOMICS I ECONOMICS EC3382A-001

Department of Economics Western University

September 2021

Instructor: Gregory Pavlov

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Office hours: Wednesday 10:00am-12:00pm

Delivery mode: In-person

Meeting time(s): Tuesdays 12:30-2:30pm, Thursdays 12:30-1:30pm

Classroom: SSC 3006

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

Undergraduate inquiries: 519-661-3507or 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 prerequisite(s) for this course is (are) **Economics 2261A/B**; and **Economics 2210A/B**, OR both of **Mathematics 1600A/B** (the former **Linear Algebra 1600A/B**) and Calculus 1501A/B (**Calculus 1301A/B** with a mark of at least 85% will be allowed as a substitute for **Calculus 1501A/B**.)

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 course is an introduction to game theory, which studies strategic interactions between rational agents. The focus of the course will be on non-cooperative static and dynamic games with complete and incomplete information.

Course Learning Outcomes:

As a result of taking this course the students will gain a deep understanding of the gametheoretic concepts and methods. The students will be able to apply these concepts and tools to analyze real life economic and social situations that involve strategic interaction. The students will also be well prepared to take more advanced courses in modern microeconomic theory, to take applied courses where game-theoretic methods are used, and to develop game-theoretic models for their senior thesis projects.

Textbook(s) and Course Materials:

Required textbook for this course:

Steven Tadelis (2013): Game Theory: An Introduction, Princeton University Press. For more information on this textbook see http://press.princeton.edu/titles/10001.html Solution manual to selected problems: http://press.princeton.edu/chapters/sm10001.pdf

Topics Covered and Readings:

- 1. Rational decision making (Chapters 1-2).
- 2. Static games of complete information (Chapters 3-6).
- 3. Dynamic games of complete information (Chapters 7-11).
- 4. Static and dynamic games of incomplete information (Chapters 12-13, 15-16).

Assessments and Grading:

Problem sets (total of 7; due dates are below): 35%

Participation in experiments: 5%

Short essay (due Friday December 3 at 4:00pm ET): 5%

Midterm (tentatively scheduled for Tuesday October 26 at 12:30pm ET in class): 20%

Final (TBA): 35%¹

Problem sets

Problem sets will be posted in advance on the course information website. They will be due on the following dates by 4:00pm ET (electronic submission):

Problem set	Due date
1	Thursday September 23
2	Thursday October 7

¹ As explained below, winning in experiments can earn marks and reduce the weight of the final exam.

3	Thursday October 14
4	Thursday October 21
5	Thursday November 18
6	Thursday November 25
7	Thursday December 2

- No late problem sets will be accepted.
- You can work on the problem sets in groups. However, each student is supposed to submit an individual problem set and list the names of the people in his/her study group.
- Problem set with the worst score will not count for the calculation of the final mark.
- Each problem set should be submitted on OWL as a single file (PDF format).
- Marked problem sets will be returned electronically through OWL.

Experiments

- There will be several experiments conducted that require making choices in strategic situations.
- All experiments will be on OWL and have to be completed within a required time period in order to earn marks for participation.
- Some experiments will be games for which a class winner will be determined. For each won game you will receive a prize of 2% of the total course mark, and the weight of the final exam will be reduced by 2%. If there are multiple winners, then the prize will be evenly split.

Short essay

- You will be asked to write a short essay a reflection on the results of the experiments conducted in the class and their relation to the theories covered in the course.
- Maximum 600 words. Please make it double spaced and 12pt font.
- The essay is due by Friday December 3 at 4:00pm ET (electronic submission).
- The essay grade will be based on both content and on quality of writing (grammar, organization, and style).
- Penalty for late submission is 1% of the total course mark per day (including weekends).

Midterm and Final exams

- Midterm exam is tentatively scheduled for Tuesday October 26 at 12:30pm ET in class. It will be 110 minutes long.
- Final exam will be scheduled by the registrar. It will be 120 minutes long.
- During exams students are forbidden to communicate with any person other than an examination proctor or the instructor.
- 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.
- Missed tests 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, then the weight of the midterm exam will be transferred to the final exam.

Note

- The first class is on Thursday September 9.
- There will be no classes on Tuesday November 2 and Thursday November 4 (Fall Reading week).
- The last class is on Thursday December 2.
- There will be a review session scheduled a few days before the final exam.

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.

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. Claiming that "you didn't know what to do" is not an acceptable excuse for not following the stated policies and procedures.
- 2. Students must familiarize themselves with the "Rules of Conduct for Examinations" http://www.uwo.ca/univsec/pdf/academic_policies/exam/administration.pdf.
- 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).

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. **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.ht ml#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 <u>add</u> a first term half course: Thursday September 16, 2021
Deadline to <u>drop</u> 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.
- 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), 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.
- 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 an 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.
- **Student Medical Certificate (SMC):** This form is available here: 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 <u>reasonable notice in writing</u>, <u>prior to the holiday</u>, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the <u>Western Multicultural Calendar</u>.

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/ for more information and a complete list of resources on how to obtain help.