

The University of Western Ontario
London Canada

Department of Economics

Economics 3395B-001

Special Topics: Economics of Information
Course Outline

Prof. Gregory Pavlov

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Lectures: Mon, Wed and Fri 11:30 a.m. – 12:30 p.m. at P&AB 34

Office Hours: Tue 2:00 p.m. – 4:00 p.m. at SSC 4017

Undergraduate Enquiries: 519-661-3507, SSC 4075 or jchamb@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 your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <https://studentservices.uwo.ca/secure/index.cfm>.

If you notice a problem, please contact your faculty academic counsellor right away.

Prerequisite Note The prerequisite for this course is **Economics 2261A/B**. Some knowledge of game theory and probability theory is helpful but not required.

You are responsible for ensuring that you have successfully completed all course requisites, and that you have not taken an anti-requisite course. 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.

Evaluation

Problem sets (a total of 5): 30%

Midterm (February 10 in class): 30%

Final (TBA): 40%

Course Description

This course is an introduction to the field of economics of information, which studies a wide range of settings where the economic agents are asymmetrically informed. The course will cover the following topics: (i) single person decision problem under uncertainty; (ii) games with incomplete information; (iii) contract theory and mechanism and market design.

Text

There is no required textbook for this course. The lectures will be self-contained and sufficient for the problem sets and the exams.

The students may find it useful to have some introductory game theory textbook similar to: Gibbons, Robert (1992): *Game Theory for Applied Economists*, Princeton University Press.

Problem Sets

There will be five problem sets for this course. They will be posted in advance on the course information website.

Problem set 1 is due on January 20 in class, Problem set 2 is due on February 3 in class, Problem set 3 is due on March 10 in class, Problem set 4 is due on March 24 in class, Problem set 5 is due on April 7 in class. 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.

Makeup exams

There will be no makeup exams. If you miss the exam then you get a zero on the exam. The only exceptions are medical emergency and out-of-town athletic or academic duty at the time of the exam. In cases of medical emergency, the student should follow University procedures and provide medical documentation to the Dean's office as explained under "Medical Documentation" on the website <http://studentservices.uwo.ca>. In other cases, you should contact me at least two weeks prior to the date of the exam to schedule a makeup exam.

COURSE OUTLINE

1. Introduction
 - 1.1. Poker games
2. Single person decision problem
 - 2.1. Review of probability theory (probability and probability distribution; random variables and expectations; conditional probabilities and Bayes' rule)
 - 2.2. Static choice under uncertainty (expected utility; risk aversion; portfolio choice problem; value of information)
 - 2.3. Dynamic choice under uncertainty (decision trees and backward induction; consumption and saving under uncertainty; optimal search)
3. Games with incomplete information
 - 3.1. Review of game theory (static and dynamic games with complete and incomplete information)
 - 3.2. Applications (signaling and "cheap talk"; auctions; "market for lemons" model; "career concerns" model)
4. Contract theory and mechanism design
 - 4.1. Contract theory (adverse selection; moral hazard)
 - 4.2. Mechanism design (optimal auctions; bargaining; matching markets)

Please Note

Remember that the University expects all students to take responsibility for their own academic programs. Also remember to check your registration to make sure you are enrolled in the correct courses.

1. Guidelines and policies for the Faculty of Social Science and the Department of Economics are posted in the glass case near Social Science Room 4071.
2. Students must familiarize themselves with the “Rules of Conduct for Examinations”.
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 behaviour. 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 a notation on your official academic transcript, suspension or expulsion.
4. **Plagiarism:** Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge it by using quotation marks where appropriate and referencing with footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the current UWO Academic Calendar).

The University of Western Ontario uses software to check for plagiarism and students may be required to submit their written work in electronic form. Those found guilty will have penalties imposed as noted in point 3.

5. It is Department of Economics policy that **NO** assignments be dated, stamped or accepted by staff. Students are responsible for submitting assignments in class or to the instructor during office hours.
6. When appealing a mark, students should refer to the Departmental Procedures (<http://economics.uwo.ca/undergraduate/Appeal.pdf>) which is also in the current UWO Academic Calendar. Please note deadlines.

The Department Chair will not consider an appeal unless an attempt has been made to settle the matter first with your instructor. If, after discussion, you remain dissatisfied with a grade, you may proceed with a written appeal (e-mails are not acceptable) to the Department Chair stating reasons.

7. Systematic adjustments of the entire grade distribution can occur either up or down in Economics courses. The fact that grades have been adjusted is **not** a reason to appeal.
8. Note the following add and drop deadlines:

Last day to add a second term half course:

Tuesday, January 12, 2010

Last day to drop second term half course:

Friday, February 12, 2010

9. Faculty of Social Science policy states that oversleeping or misreading an exam schedule is not an excuse for a make-up. This rule applies to all mid-term tests and final exams in the Department of Economics.

Policy Regarding Makeup Tests and Final Examinations

*Academic Accommodation will **not** be granted automatically on request. You **must** demonstrate to your instructor by documentation that there are **compelling** medical or compassionate grounds before academic accommodation will be considered.*

Students who seek a makeup test or examination must provide medical or other relevant verification that their absence from a regularly scheduled test or examination is beyond their control. Students are directed to fill out the Student Medical Certificate found here https://studentservices.uwo.ca/secure/medical_document.pdf If you decide to write a test or an examination, you must be prepared to accept the mark you earn. Rewriting tests or examinations, or having the value of the test or examination reweighted on a retroactive basis, is **not** permitted. Book airline flights after you know the dates of your final examinations. Airline flights must not conflict with test or final exams.

If you are requesting a makeup test or exam, unless medically incapable, notify your instructor by email or phone within **48 hours** of the date of the test or exam. Set up an appointment as soon as possible to meet personally with your instructor and provide documentation regarding the missed test or exam. **Notifying your instructor of a missed test or exam does not automatically entitle you to a makeup test.** Documentation must support your reasons. Failure to follow this procedure, or to provide supporting documentation, may result in denial of a request for academic accommodation or result in a grade of zero.

Midterm Tests: Documentation should be given to your instructor **prior** to the scheduled date of the test if at all possible. If the instructor is not available, you may leave a message with the Undergraduate Office (Social Science Room 4075). If your documentation is not acceptable, you will be given a zero for the missed test.

Final Examinations: Documentation should be given to the Academic Counselling Office of your *home* Faculty **as soon as possible (preferably within 48 hours)** if you know you may not be able to write your final examination on the scheduled day and time. Until you receive permission from your *home* Faculty Counsellor, your instructor, and the Department Chair, you will not be allowed to write a makeup examination. Failure to follow this procedure may result in an examination grade of zero.

NOTE – Even if approved from your *home* faculty Academic Counsellor, your instructor or Department Chair can deny your request if s/he does not agree that your reason for missing the examination is valid. Make-up final examinations, if permitted, will be written within one month of the end of the exam period.

Policies Regarding Academic Accommodation

Information about the Faculty of Social Science's policies regarding academic accommodation is found on its website at <http://counselling.ssc.uwo.ca/> (choose "having problems?") or in Social Science Room 2105. Your "Academic Rights and Responsibilities" are also outlined in the current UWO Calendar. Claiming that "you didn't know what to do" is not an acceptable excuse.

Policy Regarding Class Attendance

If your instructor views your class attendance as unsatisfactory, you can be debarred from writing the final examination. If there is intent to make use of this University policy, you will be warned in writing.