

**EMPIRICAL INDUSTRIAL ORGANIZATION**  
**ECONOMICS 3362B-001**  
Department of Economics  
Western University

**Instructor:** David Rivers

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**Office:** 4024 SSC

**Phone:** (519) 661-2111 ext. 80446

**E-mail:** [drivers2@uwo.ca](mailto:drivers2@uwo.ca)

**Office Hours:** Thursdays 2:00-4:00 and by appointment

**Classroom meeting times & location:** Monday 11:30-12:30 and Wednesday 11:30-1:30 in Weldon Library, Room 258

**Course website:** <http://owl.uwo.ca/portal>

**Undergraduate inquiries:** 519-661-3507 SSC Room 4075 or [econugrd@uwo.ca](mailto:econugrd@uwo.ca)

### **Registration**

You are responsible for ensuring you are registered in the correct courses. If you are not registered in a 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 Note**

The prerequisites for this course are **Economics 2223A/B and Economics 2260A/B**.

*Prerequisite(s) for your course found at:* <http://westerncalendar.uwo.ca/2017/pg904.html>

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

The aim of this course is to introduce you to the current research and methods used in the study of empirical questions in Industrial Organization. Answering these questions involves combining theory from microeconomics and tools from econometrics. Throughout this course you will have the opportunity to study real-world questions with real data using applied economics theory and methods. This course will cover a variety of topics, including: demand estimation, measuring market power, price discrimination, and production function analysis. Each lecture will be based on one or two papers from the academic literature. These readings will be challenging, and you will be expected to complete all required readings before each lecture. The grading will be primarily based on two empirical projects (5-7 pages each) that will require both empirical analysis and a written analysis of results. The first will be due on **February 28** and the second will be due on **March 28**. There will also be a written assignment (3-4 pages) in which you will be asked to critically discuss a paper from the literature (due **March 14**). You will be asked to present the results from this analysis to the rest of the class in a short presentation at the end of the term. There will be four short in-class quizzes after each of the four main topic areas. The lowest quiz score will be dropped, and your quiz scores will factor into your class participation grade. There will also be a short statistical programming assignment to help you learn to use Stata. **Late assignments will not be accepted.** Assignments turned in late will receive a mark of zero and **no makeup quizzes will be given**, except in cases with appropriate documentation and approvals as required by UWO's academic policies.

## Course Learning Outcomes

- Students will be able to read, interpret, and comprehend the main ideas from academic research papers.
- Students will be able to write critical analyses of academic research.
- Students will be able to apply statistical software to analyze large datasets.
- Students will learn some of the main empirical models in Industrial Organization.
- Students will be able to apply empirical techniques to analyze real-world questions in Industrial Organization and related fields.

## Textbook

There is no official textbook for this class. The lectures will be heavily based on the assigned readings in the form of papers from academic journals. It is important that you keep up with the readings. These are not papers that you can read once and absorb all of the material, and they will require careful attention.

## Grading

Your grade in this course will be based on your performance in the following areas:

Class participation (25%)

Two Empirical Projects (25% each)

Statistical Programming Assignment (5%)

Literature Review (10%)

Final Presentation (10%)

### Course Outline (a star (\*) indicates an optional reading)

#### 1. Introduction to Empirical Industrial Organization

Schmalensee (2012), "'On a Level with Dentists?' Reflections on the Evolution of Industrial Organization," *Review of Industrial Organization*.

#### 2. Production Function Estimation

Tintner (1944), "A Note on the Derivation of Production Functions from Farm Records," *Econometrica*.

Mundlak (1961), "Empirical Production Function Free of Management Bias," *Journal of Farm Economics*.

(\*) Griliches and Mairesse (1995), "Production Functions: The Search for Identification," NBER working paper 5067.

Bloom and Van Reenen (2007), "Measuring and Explaining Management Practices Across Firms and Countries," *Quarterly Journal of Economics*.

#### 3. Demand Estimation

(\*) Nevo (2010), "Empirical Models of Consumer Behavior," NBER working paper 16511.

Deaton and Muellbauer (1980), "An Almost Ideal Demand System," *American Economic Review*.

Hausman (1995), "Valuation of New Goods Under Perfect and Imperfect Competition," NBER working paper 4970.

Berry (1994), "Estimating Discrete-Choice Models of Product Differentiation," *RAND Journal of Economics*.

(\*) Berry, Levinsohn, and Pakes (1995), "Automobile Prices in Market Equilibrium," *Econometrica*.

#### 4. Market Structure/Measuring Market Power

Bresnahan (1982), "The Oligopoly Solution Concept is Identified," *Economics Letters*.

Genesove and Mullin (1998), "Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914," *RAND Journal of Economics*.

Wolfram (1999), "Measuring Duopoly Power in the British Electricity Spot Market," *American Economic Review*.

Porter (1983), "A Study of Cartel Stability: The Joint Executive Committee 1880-1886," *Bell Journal of Economics*.

#### 5. Price Discrimination

Graddy (1995), "Testing for Imperfect Competition at the Fulton Fish Market," *RAND Journal of Economics*.

Goldberg (1996), "Dealer Price Discrimination in New Car Purchases: Evidence from the Consumer Expenditure Survey," *Journal of Political Economy*.

(\*) Ayres and Siegelman (1995), "Race and Gender Discrimination in Bargaining for a New Car," *American Economic Review*.

Nevo, Aviv, and Catherine Wolfram (2002), "Why Do Manufacturers Issue Coupons? An Empirical Analysis of Breakfast Cereals." *RAND Journal of Economics*.

#### **Additional Information**

1. It is your responsibility to keep yourself informed about the course deadlines, assignments, and readings. All of this information can be found on the course website. If you miss a class, it is your responsibility to find out what you missed from one of your classmates.

2. You are welcome to communicate with me via email. I will answer as promptly as possible. However, if you send an email with a question whose answer is obviously on the website or course outline, I will not respond to the email.

3. Any request to have any mark changed will only be accepted in writing. If you believe that a mark is incorrect, you need to submit your request (along with a description of why you believe the mark should be changed) to me in writing.

4. Late assignments will not be accepted. All assignments must be turned in before the end of class on the day that they are due.

5. Please turn off your cell phones before entering the classroom. Use of laptops will be allowed for the purposes of taking notes in the class. Emailing, surfing the Internet, text messaging, social networking, etc. are prohibited in the classroom. If use of laptops in the classroom proves to be a distraction, I reserve the right to prohibit their use for the remainder of the term.

6. Everyone is expected to participate in class. Asking questions is good, and I encourage you to do so. You will often be surprised to find out that your classmates had the same question in mind, so please speak up if you have questions during (or outside of) class.

**Please Note**  
**Department Policies for 2017 – 2018**

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 online in the current Western Academic Calendar at <http://westerncalendar.uwo.ca>.
2. Students must familiarize themselves with the “Rules of Conduct for Examinations” <http://westerncalendar.uwo.ca/2017/pg136.html>.
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 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 at <http://westerncalendar.uwo.ca/2016/pg113.html>).

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 University's Procedures in the current UWO Academic Calendar (<http://westerncalendar.uwo.ca/2017/pg112.html>). Please note the relevant deadlines.

The Department will not consider any appeal unless an attempt has been made to settle the matter first with your instructor. If after this discussion you remain dissatisfied with a grade or other decision, you may proceed with a written appeal (e-mails are not acceptable) to the Undergraduate Director in Economics, stating the reasons for your appeal. A useful form and checklist is provided at ([http://economics.uwo.ca/undergraduate/program\\_counselling/responsibilities\\_policies.html#appeals](http://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals)).

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:

Last day to **add** a second term half course:  
**Tuesday, January 16<sup>th</sup>, 2018**

Last day to **drop** second term half course without academic penalty:  
**Wednesday, March 7<sup>th</sup>, 2018**

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 by documentation that there are **compelling** medical or compassionate grounds before academic accommodation will be considered.*

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 for a midterm or a final examination, unless medically incapable, notify your instructor by email or phone, preferably prior to the scheduled date of the test, but definitely within **24 hours** of the date of the test or exam. Failure to follow this procedure may result in denial of a request for academic accommodation or result in a grade of zero. Set up an appointment as soon as possible to meet personally with your instructor. If the instructor is not available, you may send an email message, copying the Undergraduate Coordinator at [econugrd@uwo.ca](mailto:econugrd@uwo.ca) (Social Science Room 4075). **Notifying your instructor of a missed test or exam does not automatically entitle you to a makeup test.**

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. Documentation must support your reasons. Medical documentation should be given to the Academic Counselling Office of your *home* Faculty **as soon as possible (preferably within 24 hours of the test)** if you know you may not be able to write your final examination on the scheduled day and time. 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. If your documentation is not acceptable, you will be given a zero for the missed test.

For personal illness, if you consult Student Health Services regarding your illness or personal problem, you should request a Student Medical Certificate from the physician. If you were seen by an off-campus doctor, obtain a certificate from his/her office at the time of your visit. The off-campus medical certificate form must be used and can be found at: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf). Notes stating "For Medical Reasons" are not considered sufficient.

For any other circumstances, if you are not sure what documentation to provide, ask your Academic Counselor. If your documentation is judged sufficient, the academic counselor will issue a Recommendation for a Special Examination (a single form for midterms or a triple color form for final examinations). Once you have this form, contact your instructor as soon as possible to make arrangements. Even if approved from your home faculty Academic Counsellor, there is no guarantee that you will be allowed to write the makeup test and exam.

For final examinations, you need permission from your *home* Faculty Counsellor, your instructor, and the Department Undergraduate Director. Failure to follow this procedure may result in an examination grade of zero. You must ensure that the Special Examination form has been signed by the instructor and Department Undergraduate Director and that the form is returned to the Academic Counseling Office for approval without delay. 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/procedures/havingproblems.asp> or in Social Science Room 2105. Your "Academic Rights and Responsibilities" are also outlined in the current UWO Calendar at <http://westerncalendar.uwo.ca/2017/pg111.html>. Claiming that "you didn't know what to do" is not an acceptable excuse for not following the stated procedures.

### **Policy Regarding Class Attendance**

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

## **Statement on Mental Health and Support Services**

If you or someone you know is experiencing emotional/mental distress, there are several resources here at Western to assist you. Please visit <http://www.uwo.ca/uwocom/mentalhealth/> for more information and a complete list of resources, as well as how to obtain help.