

# INDUSTRIAL ORGANIZATION I ECONOMICS 3364A-001

Department of Economics  
Western University

‘I respect faith, but doubt is what gets you an education.’  
- Wilson Mizner

**Instructor:** Al Slivinski ([aslivins@uwo.ca](mailto:aslivins@uwo.ca))

**September, 2016**

Office: 4089SSC

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Course meets: Tuesday 9:30-11:20 and Thursday 9:30-10:20 in **TH 3154**

Office Hours: T, Th, 2:00 - 3:00, or by appointment

Undergraduate Enquiries: 519-661-3507, Room 4075 SSC, 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 prerequisite for this course is **Economics 2261A/B**.

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken an antirequisite 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 spaces become available for students who require the course in question for graduation.

## **Summary Description of Course**

Industrial Organization (IO, henceforth) is the field of economics concerned with understanding the strategic behavior of firms in a variety of different market structures. This puts IO in the centre of the legal, statutory and regulatory issues that make up ‘competition policy’, or ‘anti-trust’. The past 100 years has seen the passage of a variety of legislation intended to influence firms’ behaviour, and the creation of regulatory/judicial agencies designed to investigate that behaviour, determine when it is in some sense harmful, and deal with it appropriately. This aspect of government policy is largely carried out in Canada by the Competition Bureau, and actions taken by the Bureau typically come before the Competition Tribunal and – sometimes –

the federal courts. However, every developed country has some government agency devoted to the same issues; in the US it's the Federal Trade Commission as well as the Antitrust Division of the Federal Department of Justice, and in the EU it's the European Commission on Competition.

This course is concerned with the economic theory and principles of IO as well as their application to actual competition policy cases. Thus, you will be learning theory, reading analyses of past and ongoing competition cases, and learning a bit about antitrust law.

### **Course Learning Outcomes**

Upon successful completion of this course, students will

1. Be able to determine which model of a market featuring strategic interaction is most appropriate for understanding any actual market, and be able to explain the reasons for their determination.
2. Understand key legal principles used in the US, Canada and the EU to evaluate mergers, price-fixing, predatory pricing and other anti-trust issues, as well as the economics that underlies those legal principles.
3. Have said at least three times 'I never realized that'.
4. Be able to construct and defend a legal and economic argument for either side of an anti-trust case that they have never before seen.

### **Assessment:**

Your mark in this course will be based on your performance on the following evaluations:

1. Two in-class quizzes, to be given on **Thursday, September 15**, and **Tuesday, November 1**. The first will count for 10% of your mark, and the second for 20%, and both will be open book, which means: you can have anything *on paper* on your desk when you write. However - *No electronic devices can be on your desk*. There will be no make-up quizzes. If you miss either quiz for an approved reason, that extra weight will be transferred to your Final Exam mark. This does not mean the quizzes are *optional*; if you miss one without my approval you will get a 0 which will count toward your final mark. If you miss both quizzes, you will get a zero for the quiz part of your mark.
2. Two Assignments, to be handed out during the **weeks of October 10, and November 14**, each of which will be due at the **start** of class, typically one week after being handed out. Each is worth 15% of your total mark. No late assignments will be accepted. You are encouraged to talk with one another about the assignments, and *most importantly*, to talk to me about them. However, each of you must submit an independent set of answers; turning in answers that are someone else's will be treated as plagiarism.
3. A Final Exam, to be scheduled by the Registrar, worth 30% of your mark. This exam will cover all of the material taught in the course.

The assignments, quizzes and exam will require written answers as well as problem-solving, so your ability to communicate in writing will be assessed along with the quality of your answers. **Note that** all work is marked entirely by yours truly: you can run, but you can't hide.

4. Class participation. As you will find out quickly, I run an interactive class, which includes asking questions of specified class members. This means you need to come to class having read what is expected of you, and be ready to **participate** in the class session. I will both take attendance at each class and keep track of your participation. This will count for 10% of your course mark and zero participation will get you a zero.

In addition:

*I reserve the right to refuse to allow any student to write the Final Exam if they miss more than **five** lectures.*

**Text:** J. Kwoka and L. White, Editors, *The Antitrust Revolution: Economics, Competition and Policy*, 6<sup>th</sup> Ed, Oxford University Press, 2013.

This is a book devoted to explaining actual antitrust cases from various countries, predominantly the US. Each chapter is devoted to a separate case, and is written by economists who were involved in those cases.

This text also provides some development of the specific economic concepts and theories that underlie each case – providing more than that will be my job. In general, the theoretical material used in the cases will be covered in separate lectures before they are needed, and available in notes posted on the course website.

I am arranging a set of **guest lectures** by individuals working in the competition policy field, subject, of course, to their availability:

- Mr. Michael Packer, Competition Law Officer, Competition Bureau, Ottawa.
- Dr. Andy Baziliauskas, Principal, Competition Economics, Charles Rivers Associates International, Toronto.
- Dr. Renée Duplantis, Principal, Brattle Group Consulting, Toronto

Dates and other details will be announced as they become available; the material in their lectures will be treated as regular class material in all ways.

### **Course Log:**

The course website includes a 'Course log'. After each class I will put an entry in the log for that date, containing a brief summary of what occurred during the lecture, and usually a heads-up on what will be covered in the next lecture. This will not include any notes, so it isn't a substitute for attending lectures, but if you do miss class it will tell you what material you missed, and where we're going.

### **Useful and Interesting Websites:**

The Competition Bureau:

<http://www.competitionbureau.gc.ca/epic/site/cb-bc.nsf/en/home>

The Competition Tribunal:  
<http://www.ct-tc.gc.ca/Home.asp>

Anti-Trust and Competition Policy Blog (the legal side):  
[http://lawprofessors.typepad.com/antitrustprof\\_blog/](http://lawprofessors.typepad.com/antitrustprof_blog/)

Competition Policy for the European Commission  
[http://ec.europa.eu/competition/index\\_en.html](http://ec.europa.eu/competition/index_en.html)

The US Federal Trade Commission's Bureau of Competition:  
<http://www.ftc.gov/bc/index.shtml>

US Department of Justice Antitrust Division:  
<http://www.justice.gov/atr/>

**Course Outline:** I don't expect to get through all of this, but at the same time, other material may be added if there are new developments or cases worth discussing.

Here KW refers to material in the Kwoka and White book. Readings that will be available for download from the 'Resources' section of the course website are indicated by (dl). We will surely cover the topics (although likely not every reading) in sections 1-4. After that I may change the order in which we cover remaining sections, depending on time and interest.

### **1. What are IO and Competition Policy?**

- 'Competition and Compliance Bulletin', Competition Bureau, Section 3 (dl)
- 'The FTC guide to the antitrust laws' (henceforth, FTCLG) pp. 1-2 (dl)
- KW: Introduction (pp. 1 – 6)

### **2. Strategic Interaction among Firms: Oligopoly Theory**

- Theory Notes I: Models of oligopoly (dl)

### **3. Cartels, Collusion, Price-fixing**

#### a) Theory and law

- KW: Horizontal Practices: The Economic and Legal Context, pp. 196 - 203
- FTCLG, pp.6-7 (dl)
- Theory Notes II: Cartels and collusive behavior (dl)
- Theory Notes IIa: Dynamic collusion (dl)
- Canadian Competition Bureau: *Competitor Collaboration Guidelines*, pp. 1 – 12 (dl)
- Stigler, George, 1964. 'A Theory of Oligopoly', *Journal of Political Economy*, 72:44–61 (dl)
- 'The Scam Busters' *Free Exchange*, *The Economist*, December, 2012 (dl)
- 'Guaranteed Profits' – *The Economist*, February, 2015 (dl)

#### b) Collusion cases:

- KW: Case 11 - The Lysine case
- KW: Case 8 – the DRAM case(s)

c) The Quebec gasoline price-fixing case

- Competition Bureau backgrounder on the Quebec gasoline case (dl)
- ‘Collusion with asymmetric retailers: Evidence from a gasoline price-fixing case’, Robert Clark and Jean-Francois Houde, *American Economic Journal: Microeconomics*, 2013, 5(3): 97–123 (dl)

#### **4. Mergers**

a) Theory and Law

- Theory Notes III: Horizontal Mergers (dl)
- KW: Horizontal Structure: The Economic and Legal Context, pp. 8-29
- FTCG: Mergers (pp. 32-40) (dl)
- Competition Bureau *Merger Enforcement Guidelines*, Parts 2 and 5 (dl)
- ‘Merger Review Guidelines, 2010 update, US DOJ and FTC (dl)
- ‘There is less competition among banks than first meets the eye’, *The Economist*, January, 2016 (dl)

b) Horizontal merger cases

- KW: Case 1 – The abandoned merger of AT&T and T-Mobile (2011)
- KW: Case 3 – Sirius/XM radio merger (2008)

c) Horizontal merger with vertical issues

- KW: Case 2 – Rockonomics (2010)

d) Retrospective merger analysis

- Kwoka, J., 2013, Does Merger Control Work? A Retrospective on U.S. Enforcement Actions and Merger Outcomes, *Antitrust Law Journal*, 78 (dl)
- Merger Review Performance Report, *Competition Bureau*, 2012 (dl)

#### **5. Predatory pricing**

a) General issues: abuse of dominance

- KW: Horizontal Practices: The Economic and Legal Context, pp. 209-216
- Competition Bureau: ‘Draft abuse of dominance guidelines’, Section 4.3 [Predatory conduct](dl)
- FTCG: Predatory Pricing, p.28 (dl)
- Theory Notes IV: Predatory Pricing (dl)

b) KW: Case 10 – Spirit Airlines vs. Northwest Air

#### **6. Bundling and Tying**

a) Law and Economics

- KW: Vertical and Related Market Issues: The Economic and Legal Context, pp. 352-362
- Competition Bureau ‘Draft abuse of dominance guidelines’, Appendix III (dl)
- Theory Notes V: Bundling and tying (dl)

b) KW: Case 15 – Trident vs Independent Ink

## 7. Resale Price Maintenance

a) Law and Economics

- FTCG: pp. 17-19 [producer requirements on retailers] (dl)

b) KW: Case 14 – Leegin vs KSPS

c) Competition Bureau case against MasterCard and Visa

- The Competition Bureau's case and the Tribunal decision – Summary (dl)

### Information for those interested in getting the most from Ec 3364:

My Basic Operating Principle in this course is - What happens in the classroom is part of an important joint enterprise into which everyone is expected to invest.

With that in mind, note the following -

1. It is your responsibility to keep yourself informed about the course: deadlines, assignments, readings and the dates for all tests. All of this information can be found on the course website and outline. My responsibility is to insure that information is accurate and up to date. If at any time you think any info isn't clear – ask me about it.
2. You are welcome to communicate with me via email. I will answer as promptly as possible, subject to the following constraints:
  - a. If you send an email with a question whose answer is clearly provided on the website or this document, I'll ignore the email; see Point 1 above.
  - b. If you ask a question about the course material that requires a long, detailed answer, my only reply will be 'comeseeme' - meaning you should come and talk to me about it after class or in my office.
  - c. The University's position on Ontario's *Freedom of Information and Privacy Protection Act* implies that I am not to respond to a student email in a way that could possibly be interpreted as conveying confidential academic or personal information, **unless** it is to a **UWO email address**. So, if you want to be sure to get an answer from me, write to me from your UWO email account.
3. No mark on anything will be changed unless you convince me that the original mark assigned was in some way mistaken. That you *need* a certain mark isn't relevant. If you are convinced that, none the less, some mark deserves to be changed, then your only chance to convince me of that is to do so in person, *not* via email. The **window of opportunity** to discuss your mark on an assignment or quiz is between *24 hours after and 7 days after* you receive that mark.
4. Courtesy and respect in the classroom are important. You may use a laptop/smartphone in class until the first time you are found to be doing something on it that is not class-related. Cell phones are not to be used in class; texting during class is rude, and is guaranteed to piss me off, so don't do it. If your cell or other device 'rings' during a lecture, I reserve the right to answer it. Conversely, if *my* cell phone rings in class, the first person to put their hand up can answer it.

There is now a growing body of social-scientific evidence that indicates students who take notes in class using a writing instrument do better than those who use a laptop, *ceteris paribus*. There are two reasons for this. One is that, as we all know, most students with their laptops open are mostly not taking notes. The other less obvious reason is that the act of deciding what to write down and how to write it helps students to understand and retain what is being taught.

5. I have no interest in helping students who don't come to class, or who regularly show up late or leave early. If you have to leave class early for a good reason, I expect to be notified ahead of time of the reason. If you feel you will have to do that regularly, then drop the class. If you have to arrive late, the same applies. Both of these behaviours are highly distracting and disrespectful to your colleagues and to me.
6. An important outcome from getting a University education is learning to communicate. Part of my job is to teach you to do that better, and to evaluate how well you do it. Everything you write for this course will be evaluated for how well it communicates.

**Please Note**  
**Department Policies for 2016 – 2017**

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/2016/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/2016/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 first term half course:

**Friday, September 16<sup>th</sup>, 2016**

Last day to **drop** first term half course without academic penalty:

**Monday, November 7<sup>th</sup>, 2016**

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 Counsellor. If your documentation is judged sufficient, the Academic Counsellor 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 Counselling 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/2016/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.