

RES EC 452
INDUSTRIAL ORGANIZATION: REAL MARKETS IN IMPERFECT COMPETITION
3 credits

Spring 2020
TuTh 4:00 to 5:15 pm
Stockbridge 124
Updated 01/26/20

Professor: Dr. Nathalie Lavoie (please feel free to call me Nathalie – “h” not pronounced)
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Phone: 545-5713
E-mail: lavoie@resecon.umass.edu
Office hours: Monday and Friday, 1:30 – 2:30 pm, by appointment.
Please come prepared with a list of specific topics you’d like to discuss.

Teaching Assistants: Mr. Jing Gan (jinggan@umass.edu)
Office hours in Flint 210: Mon, 4:00 pm – 5:15 pm, Wed, 9:05 am – 9:55 am.

Course Web Page: Most information relevant for this course will be posted on *Moodle*, please check regularly. Not everything will be posted on the course page and it is your responsibility to find out what has been said in class if you are absent. I will use the News Forum to post all significant news about the class. Updates will be automatically sent from Moodle to your official UMass email. You are responsible for reading these announcements.

Course Description:

This course examines markets: their structure, the strategies used by firms involved in the markets, and the overall economic performance of markets. Markets in the real world depart from the economist’s simplified setting of perfect competition and these differences vary from minor to major factors affecting a market’s performance. Although all markets can be analyzed with the methods learned in this course, our primary emphasis will be on consumer goods markets. The analysis is from an industrial organization perspective and assumes knowledge of intermediate microeconomics. Topics included are: competition, market power, product differentiation, advertising, barriers to entry and exit, mergers, firm rivalry, competitive strategies including pricing and nonprice strategies, and market performance including prices, costs, labor issues, progressiveness, and product quality.

Students typically take RES EC 453 in the following semester, where the attention turns to public policy’s role in market performance, covering such issues as competition policies (e.g., the antitrust laws) and industry regulations (e.g., nutrition labeling).

Learning Objectives:

- To express yourself in written and spoken form using appropriate economic and industrial organization (IO) terminology.
- To know, understand and use correctly the Structure-Conduct-Performance (SCP) paradigm to analyze market/industry events and situations.
- To understand and apply IO models and theories verbally, graphically and algebraically.

Integrative Experience:

This course will satisfy the General Education Integrative Experience requirement for Resource Economics majors when taken with ResEcon 394.

“The integrative Experience (IE) requirement at UMass Amherst addresses the challenges associated with educational fragmentation. Positioned in the upper-division, the IE provides students with a structured opportunity to look back on their early college learning experiences, reflect upon and make connections between those earlier experiences and the more advanced work in their major, and use their integrated learning to prepare for the demands of the world beyond the University.”

In this course, you will have the opportunity to reflect on prior GenEd and Resource Economics courses by engaging with current issues presented in Wall Street Journal articles in class and in the context of two course assignments (I.O. in the WSJ and the Industry Study). Rely on your past courses and experiences as well as the analytical framework in this course to analyze the articles.

In this class, you will practice the following two criteria of IE:

- The group project “I.O. in the WSJ” will offer you a shared learning experience with your project teammates for applying your prior learning here at UMass Amherst to a real-world issue related to the structure-conduct-performance of markets and presenting your analysis to class to stimulate discussion.
- You will have the opportunity to practice GenEd learning objectives of critical thinking, collaboration, and interdisciplinary perspective-taking by completing research on an industry of your choice.

Required Material:

- 1- Book: *Industrial Organization: Theory and Practice*, Waldman and Jensen, 5th edition, Addison-Wesley, 2019. (The 4th edition is also fine, as is the 3rd, but you will have to look up page numbers yourself if you use the 3rd edition)
- 2- *The Wall Street Journal*: Daily reading of relevant articles is required and, hence, may be referenced on exams. The WSJ will also be used for *I.O. in the WSJ*, *Industry Study*, homeworks, clicker questions, and exams. Reading the *WSJ* allows us to use and challenge the economic theory we are learning. Student rate = \$4 per month using this URL: <https://r.wsj.com/PROFn2a2>
- 3- *iClicker2*. A personal response system you will use in class to respond to questions in class. **Clickers start counting towards your grade on Thursday, January 23.**
- 4- *Basic Lecture Notes*: Available on Moodle and at Campus Design and Copies.

Course Work:

Homework: There will be approximately 12 assignments focusing on application of concepts. They will be assigned weekly and will alternate between *written homework* submitted in class, and *OWL homework* completed and submitted in OWL. Late homework will be assessed a 20% penalty per day. Homeworks are worth 18% of your grade. The two lowest homework scores will be dropped (one from each set, i.e., *written* and *OWL*). Important notes:

- 1) **Late written homework must be dated and signed** by a member of the department (faculty or staff) if I am absent when it is dropped off. Otherwise, it will get dated at the time it is found.
- 2) You can do the *written homework* jointly with one other student (**maximum two students per team**). If you make use of this option just put both names on your submission. Both partners will receive the same score. Working in teams is allowed to foster discussions of problems and solutions among students, not as a way to reduce workload. I do not believe that splitting work among students is conducive to the goal of the assignments, namely to give you an opportunity to practice and think about materials covered in class and the book. While I have no way of enforcing you handle your homework this way, it is **your personal responsibility to make sure your team submits a complete homework on time**. Hence, under no circumstance will you receive a better grade or even the opportunity to turn in parts of the homework late because “your partner did not do their share of the work.” Late or incomplete submissions will penalize both members.
- 3) OWL is an online learning system that allows you to do problems and immediately receive feedback on your work. OWL homework has to be done individually and questions will vary across students. To access OWL, go to owl.umass.edu, click on Resource Economics, and log in with your UMass

NetID. Click on My Courses on the left and select Res-Econ 452: Spring 2020 (Lavoie). There is a button on the top right that allows you to go to the Assignment List, where the assignments will appear when they are ready.

Reflections: As part of the Integrative Experience component of the course, you will be asked to reflect on your learning experience. The goal is to help you reflect on what you know, what you need to learn, how you learn it, and then reflect on what you have learned and how this is applicable beyond this course. The four reflections are worth 2% of your grade.

I.O. in the WSJ: We will have *Industrial Organization (I.O.) in the Wall Street Journal (WSJ)* on Thursdays. We will spend part of these Thursdays discussing recent articles in the context of the Structure-Conduct-Performance (SCP) Paradigm. More details will follow. Most of your work will be done **in a team** and this is worth 10% of your grade.

Industry Case Study: Pick an industry you are interested in studying this semester. Over the course of the semester, you will study its Structure, Conduct, and Market Performance. More details will follow. This study is done **in a team** and is worth 20% of your grade.

Exams: One two-hour midterm exam is given during the evening and is worth 20% of your course grade. The comprehensive final exam is worth 25% of your course grade. No make-up exam will be given without prior arrangement. Be prepared to document the reason of your absence and advise me ahead of time if possible **by phone** (413-545-5713, please leave a message with your phone number) **and e-mail**.

i>clicker Response System:

- *i>clicker* is an in-class communication system. It uses “clickers” to allow students to send answers in response to questions that I will pose during class. It will allow me to find out how the class grasps the material as a group and generate classroom discussions. It will allow you to check your understanding of the concepts during class.
- We will use this system every class period. Each class period is worth the same number of points regardless of the number of clicker questions.
- For survey-type questions (blue Powerpoint background), you will earn full credit for participating. For other questions (orange Powerpoint background), you will earn 50 percent of the points for the correct answer, and 50 percent to participate. In other words, you earn at least 2.5 percent of your grade just for participating.
- Clickers are used to help you learn and should improve your grade. However, if your clicker score is less than your Final Exam score, the clicker score will be removed from your grade and its weight will be added to the final exam's weight.
- I will drop your three lowest clicker scores. These “free passes” are to be used for **absolutely any** reason you have to miss class, forget clicker, etc.
- To get clicker credits, you must be present in class with your clicker and send your response to each question before the time expires (about 30 seconds). Given the nature of these assignments and the weight of each question on your final grade, under no circumstance you will be able to make-up clicker questions, including for technical problems with your clicker (it is your responsibility to monitor the life of your batteries and carry extra ones).
- The **purpose of clicker in this course is not to take attendance**, thus should you forget to bring your clicker you will not receive clicker participation credits.
- To obtain clicker credits, you must register your clicker in *Moodle*.
- **Using a classmate's clicker is cheating** and will be treated as such (see Academic Honesty section).

Practice Problems:

For students who want extra practice, there are two options besides the mandatory homeworks. The textbook has problems at the end of each chapter and provides solutions for the odd ones. Additionally, there are Practice Problems and Solutions in Moodle. These are voluntary and not graded (though of course you are welcome to discuss them with me or the TA). They provide an opportunity to get yourselves more comfortable with the course material and should be helpful when studying for the exams.

Grades:

Grades will be calculated according to the following percentages:

	<i>Percentage</i>	<i>When</i>
Homework	18%	Two lowest scores dropped, one from <i>written</i> set, one from <i>OWL</i> set. Nearly every week.
Reflections	2%	Four times during the semester.
I.O. in the <i>WSJ</i>	10%	One team posting and presentation. One evaluation.
Industry Study	20%	Six installments during the semester.
<i>iClicker</i>	5% (or 0% if <i>iClicker</i> <Final)	Every lecture.
Midterm Exam	20%	Tuesday, March 10 th , 7-9 pm, South College room W245
Final Exam	25% (or +5% if PRS<Final)	Friday, May 1 st , 3:30 pm to 5:30 pm, Hasbrouck Lab Add room 126

Note: No extra credit will be given under any circumstance.

The *minimum* percentages needed for course grades are as follows:

	F	D	D+	C-	C	C+	B-	B	B+	A-	A
Course grade	-	60	63	67	70	73	77	80	83	87	90
Grade points	-	1	1.3	1.7	2	2.3	2.7	3	3.3	3.7	4

Quality participation and professionalism is expected and will affect borderline grades.

Students with Special Needs:

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements.

Academic Honesty:

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent (http://www.umass.edu/dean_students/codeofconduct/acadhonesty/).

Sharing of Material

As a student in this class you will have access to relevant materials including, but not limited to, homework and exam questions and solutions, lecture slides, the instructions and examples for IO in the *WSJ* and the Case Study, and this syllabus. Those materials as well as your notes taken off them are for your personal use only. You are welcome to share them with other students in this class, but any sharing with outside entities without prior permission would be a violation of copyright law.

Important Dates – RESEC 452 Spring 2020 (Case Study and Homework due dates are tentative)

January 23	Clicker questions start counting towards your grade.
January 29	Teams due by 5 pm (send an email if you did not sign up in class) for <i>I.O. in WSJ</i> and the <i>Industry Case Study</i> .
January 30	Homework (HW) #1 – written – due in class.
February 3	Last day to Add or Drop with no record. Case Study installment 1 due by 9 pm.
February 6	HW #2 – completed and submitted in OWL – due.
February 12	Case Study (CS) installment 2 due.
February 13	HW #3 – written – due in class.
February 18	No class (Monday class schedule is followed.)
February 20	HW #4 – completed and submitted in OWL – due.
February 27	HW #5 – written – due in class.
February 28	CS installment 3 due.
March 5	HW #6 – completed and submitted in OWL – due.
March 6	CS installment 4 due.
March 10	Class canceled, optional Question Session. Midterm exam, 7-9 pm, South College W245
March 24	Last day to drop with “W.”
March 25	CS installment 5 due.
March 26	HW #7 – written – due in class.
April 2	HW #8 – completed and submitted in OWL – due.
April 9	HW #9 – written – due in class.
April 16	HW #10 – completed and submitted in OWL – due.
April 22	CS installment 6 due.
April 28	HW #11 – written – due in class, and HW #12 – completed and submitted in OWL – due.
May 1	Final Exam, 3:30 pm to 5:30 pm, Hasbrouck Lab Add room 126.

Tentative Course Outline

I. The Basics of Industrial Organization

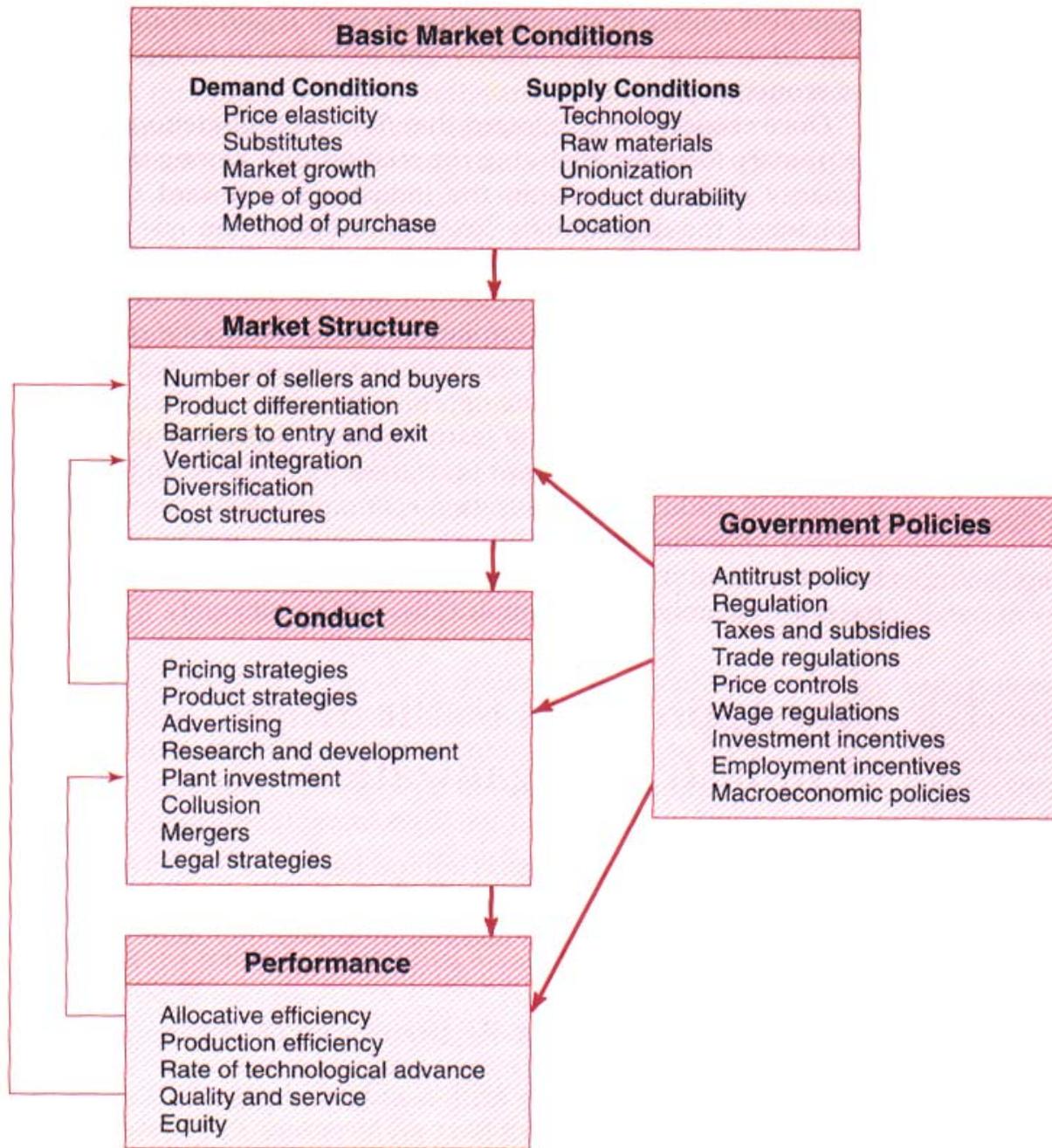
- A) Introduction (W&J, Chapter 1)
- B) Basic Theory
 - 1. Costs (W&J, Chapter 2)
 - 2. Relevant Market (W&J, p. 81-84)
 - 3. Perfect Competition and Monopoly (W&J, Sections 3.1-3.4)
 - 4. Monopolistic Competition (W&J, p. 266-267)
- C) Market Concentration (W&J, Section 4.1 & Chapter 5)
- D) Entry and Exit (W&J, Section 4.2)

II. Modern Industrial Organization: Game Theory and Strategic Behavior

- A) Game Theory: A Framework for Understanding Oligopolistic Behavior (W&J, Chapter 6 except 6.5)
- B) Oligopoly Theories of How Firms Compete (W&J, Chapter 7, except 7.1.3 and 7.3.1)
- C) Collusion: The Great Prisoner’s Dilemma (W&J, Sections 13.1, 13.2, 13.4)
- D) Oligopoly Behavior: Entry and Pricing to Deter Entry (W&J, Section 14.1)
- E) Oligopoly Behavior: Entry and Nonpricing Strategies to Deter Entry (W&J, Chapter 15)

III. Business Practices (time permitting)

- A) Product Differentiation and Advertising (W&J, Chapters 10 & 11)
- B) Price Discrimination (W&J, Chapter 9)



The Structure-Conduct-Performance Paradigm

Source: Waldman and Jensen, 2013, p.4.

Academic Honesty Guide for Students

Plagiarism & Academic Dishonesty

What is it? Some examples are:

- Copying 4+ words consecutively without using quotation marks or citing the source
- Summarizing or paraphrasing ideas or opinions without giving credit to the source
- Turning in the same work for more than one course without the consent of both instructors
- Purchasing, downloading, borrowing, reusing or hiring someone to do your work
- Signing in for another student or using another student's i-clicker
- Using unauthorized materials or copying from another person during an exam
- Collaborating on work when you have been instructed to work independently
- Facilitating the academic dishonesty of another person

Good practices:

- Read your syllabus carefully
- Ask for help or clarification if you have any questions or concerns
- Be clear on what is acceptable collaboration and what is not
- Do your own work and cite your sources
- Protect your work



Helpful Campus Resources

Learning Resource Center • Library 10th floor • 413-545-5334 • www.umass.edu/lrc

Offering peer-tutors trained to assist you in meeting academic challenges and achieving academic success.

Writing Center • Library Lower Level • 413-577-1293 • www.umass.edu/writingcenter

Knowledgeable tutors are available to work with you on your writing. Tutors offer 45-minute consultations where they ask questions about the assignment, offer tips and advice.

Resource Librarians • Library Main Level • 413-545-0150 • www.library.umass.edu/liaison

Subject-specialist librarians are available to help find the right sources, databases and strategies for your research needs.

University Ombuds Office • 823 Campus Center • 413-545-0867 • www.umass.edu/ombuds

Resources and confidential advice related to the university's academic honesty policy and procedures.

If you are charged with Academic Dishonesty...

Your instructor should notify you within 10 business days if they suspect academic dishonesty. You cannot drop a class to avoid a charge - nor can an instructor throw you out of a course due to suspected academic dishonesty.

Informal Resolution - versus - Formal Charge

Be sure that you know what you are agreeing to!

Informal Resolution: After discussing the matter with the instructor you may agree on an informal resolution. This signed document will be recorded in the Academic Honesty Office but not on your disciplinary records.

- There is no appeal process
- The record will be expunged upon graduation
- You may repeat the course in accordance with the university's Academic Regulations
- If you acquire 2 additional charges you will face the possibility of suspension or expulsion

Formal Charge: If there is no informal resolution the instructor may file a formal charge. You have the right to appeal a formal charge and go to a hearing before the Academic Honesty Board. At the hearing you can give testimony and present evidence to refute the charge. If the Board finds in your favor the charge will be dropped and the faculty member will be instructed to grade you without prejudice. If the Board decides to uphold the charge, a sanction will be implemented and it will become part of your disciplinary record with the Dean of Students Office.

- The record will be expunged upon graduation
- A formal charge is reported to the Registrar's Office and the grade you received in the course cannot be replaced in your GPA through repeating the course
- If you acquire 2 additional charges you face the possibility of suspension or expulsion

Policies and Resources:

Academic Honesty Policy and Procedures: www.umass.edu/honesty
Code of Student Conduct: www.umass.edu/dean_students/codeofconduct
Academic Regulations: www.umass.edu/registrar/sites/default/files/academicregs.pdf

If you have any questions about academic honesty - please give us a call. We can talk with you confidentially and help you understand the standards and the policy.

**University Ombuds Office
823 Campus Center
413-545-0867
ombuds@ombuds.umass.edu
www.umass.edu/ombuds**

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