

Kansas State University – Department of Economics

**ECON 640 – Industrial Organization and Public Policy**

Spring 2016

Instructor: Dr. Philip Gayle

Office: Waters 322

Class Web Page: Go to [online.ksu.edu](http://online.ksu.edu) and log in.

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**Office Hours:** Tuesdays & Thursdays, 10:00am to 11:00pm, and by appointment

**Lecture Times:** Tuesdays & Thursdays, 8:05am to 9:20am

**Lecture Room:** DUR 1052

**Final Exam:** Friday, May 13 from 2:00pm to 3:50pm, in our usual lecture room

**HELP:** I encourage you to come and visit me in my office or after class to discuss any problems you might be having with the course. My office hours are listed above but if these times are not convenient for you please feel free to e-mail me so that we can arrange a mutually convenient time to meet.

**REQUIRED TEXTBOOK:** Industrial Organization: Contemporary Theory and Empirical Applications by, Pepall, Richards and Norman, 5th edition, ISBN: 978-1-118-25030-3.

**PREREQUISITE:** ECON 120 - Principles of Microeconomics. Before taking this class it is **highly recommended** that students take ECON 520 - Intermediate Microeconomics as well as MATH 205 - General Calculus and Linear Algebra, or an equivalent introductory calculus course.

**GRADING:** Grades are based on homework assignments (20%), Exam 1 (20%), Exam 2 (20%), and a Comprehensive Final Exam (40%). You are required to attend all classes. You are encouraged to form study groups to discuss homework and lecture materials. Letter grades are based on a curve, but cutoffs will be no higher than 90% for an “A”, 80% for a “B”, 70% for a “C”, and 60% for a “D”. The dates of exams, and due dates for homework assignments will be announced in class. You will typically be given 7 days to complete a homework assignment.

**BRIEF COURSE DESCRIPTION:** Industrial Organization studies the functioning of markets. It is concerned with business behavior and strategy, as well as their implications for economic efficiency. It also studies the role of public policies in promoting efficiency. The topics that we intend to cover are listed below in the course schedule. Each topic is usually covered over several classes.

The following course schedule is tentative. There can be changes to this schedule during the semester, which will be announced in class. It is your responsibility to update your information about the course according to announcements made in class. The listed chapters and page numbers refer to those in our required textbook.

## Course Schedule:

### 1. Introduction

Readings: Chapter 1

### 2. Some Background Mathematical Concepts: Functions, Slopes and Derivatives

Readings: Lecture notes

Homework 1. Problems will be posted on class website.

### 3. Basic Microeconomic Tools

Readings: Chapter 2

Homework 2. pages 44 - 45: Problems #2, #3, #4.

### 4. Market Structure and Market Power

Readings: Chapter 3

Homework 3. pages 62 - 63: Problems #1, #4.

### 5. Monopoly Pricing

- Price for a single product
- Prices for multiple products
- Group-pricing
- Nonlinear pricing

Readings: Chapter 5, Chapter 6

Homework 4. pages 116 - 117: Problems #1, #2, #3, #4. Question 3 is text has a few typos. Please make the following edits to question 3 before writing your answer: Group 2 demand should be:  $P = 100 - 2X$ . Second, the last equation in part (a) should be:  $X = 250 - (3/2)P$ .

Homework 5. pages 140 - 141: Problems #1, #2, #3, #4, #5.

## Exam 1

### 6. Game Theory and Oligopoly Markets

- Cournot Competition
- Price Competition

Readings: Chapter 9, Chapter 10

Homework 6. pages 239 - 240: Problems #1, #3a, #4, #6, #7.

Homework 7. pages 261 - 262: Problems #1, #2, #3, #4.

7. Dynamic Games and Competition

- The Stackelberg Model
- Sequential price competition

Readings: Chapter 11

Homework 8. pages 281 - 282: Problems #1, #2, #3, #4.

8. Entry Deterrence and Predation

- Limit Pricing within a Stackelberg framework
- Predatory Conduct

Readings: Chapter 12 and Chapter 13

Homework 9. page 310: Problems #1, #2

9. Price-Fixing, Repeated Games, and Collusion

- Price Fixing
- Repeated Bertrand Duopoly
- The number of firms and collusion
- Other factors facilitating or hindering collusion

Readings: Chapter 14

Homework 10. pages 381 - 382: Problems #1, #2, #3, #4.

Homework 11. page 382: Problems #5, #6, #7, #8.

**Exam 2**

10. Horizontal Mergers

- Merger analysis in the Cournot model
- Merger and Cost savings
- The merged firms as Stackelberg leaders
- Horizontal merger and price competition
- Public policy towards horizontal mergers

Readings: Chapter 15

Homework 12. pages 418 - 419: Problems #1, #2, #3, #4.

11. Vertical Mergers

- The foreclosure theory
- Efficiency arguments
- Post-Chicago Approach
- Public policy towards vertical mergers

Readings: Chapter 16

Homework 13. page 456: Problems #1, #2, #3.

12. Vertical Price Restraints

- Bilateral Monopoly
- Competitive downstream
- Resale price maintenance: theory and public policy
- Upstream competition

Readings: Chapter 17

Homework 14. pages 481 - 482: Problems #1, #2, #3, #4.

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**ACADEMIC ACCOMMODATIONS:** Any student with a disability who needs an accommodation or other assistance, please make an appointment to speak with me as soon as possible.

### **University General Education (UGE)**

This course carries the designation of University General Education (UGE). UGE courses are designed to include 3 elements in content delivery: active learning environment, experiential context, and opportunity to connect ideas across disciplines. The intent of the course is to expand students' breadth of education at KSU. Students' UGE experiences should inspire them to appreciate differing viewpoints, consider openly new and divergent thinking, weigh ideas with careful skepticism, challenge conventional wisdom, and explore for more accurate and more useful knowledge.

**HONESTY:** K-State has an Undergraduate Honor System based on personal integrity which is presumed to be sufficient assurance in academic matters one's work is performed honestly and without unauthorized assistance. Undergraduate students, by registration, acknowledges the jurisdiction of the Undergraduate Honor System. The policies and procedures of the Undergraduate Honor System apply to all full and part-time students enrolled in undergraduate courses on-campus, off-campus, and via distance learning.

### **Syllabus Campus Safety Statement 08-14-08**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button.