

Managerial Economics & Strategy

ECON 308.002, Spring 2019
Mondays & Wednesdays, 1:30pm—2:45pm
Innovation Hall 134

Instructor: Jay Cochran **Email:** jcochra1@gmu.edu
Office: Buchanan Hall **Website:** http://mason.gmu.edu/~jcochra1/index_files/ECON308.htm
Office Hrs: Tues/Thurs Noon to 1:15 pm **Phone:** (email is best)

Texts & Software (required)

[SM] William F. Samuelson and Stephen G. Marks (2014), *Managerial Economics 8th ed.*, New York: Wiley [ISBN-13: 978-1118808948]. Available in paperback (new and used) as well as in e-book format.

[JM] John McMillan (1992), *Games, Strategies, & Managers*, New York: Oxford University Press. [ISBN-13: 978-0-19-510803-3]. Available used for a few dollars or new for about \$30.

MobLab Student Account (\$18 student software license—semester). See MobLab below.

Important Articles (optional):

The following list contains some of the seminal articles in the economics literature on theory of the firm in date order. If you are an economics major, you should be familiar with these articles. You can access them for free through J-STOR (via Fenwick Library) using your GMU student login and password.

Ronald Coase (1937), "The Nature of the Firm," *Economica*, 4: 396-405.

Friedrich A. Hayek (1945), "The Use of Knowledge in Society," *American Economic Review*, 35: 519-530.

Fritz Machlup (1967), "Theories of the Firm: Marginalist, Behavioral, Managerial," *American Economic Review*, 57: 1-33.

Armen Alchian and Harold Demsetz (1972), "Production, Information Costs, and Economic Organization," *American Economic Review*, 62: 777-795.

Michael Jensen and William Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics*, 3: 305-360.

Oliver Williamson (1979), "Transactions-Cost Economics: The Governance of Contractual Relations," *Journal of Law and Economics*, 22: 233-261.

Harold Demsetz (1983), "The Structure of Corporate Ownership and the Theory of the Firm," *Journal of Law and Economics*, 26: 375-390.

Course Objectives

To analyze major strategic business situations including pricing strategy, incentives and contracts, game theory, and vertical and horizontal integration. Games and experiments are used to illustrate key concepts.

Course Prerequisites

Students must have earned at least a "C" in ECON 103 (Microeconomic Principles), ECON 104 (Macroeconomic Principles), and ECON 306 (Intermediate Micro Theory). *Do not attempt this course without successfully completing its prerequisites.*

Grading

Grades are based on (2) homework assignments, your participation in and performance during in-class experiments, two in-term exams, and a final exam (given during the time listed in the University's *Schedule of Classes*). These exercises and exams are weighted toward your final grade as follows:

(8) Best 8-of-10 Experiment/Game Scores (4% each)	32%
(2) Homework Assignments (4% each)	8%
(2) In-Term Exams (20% each)	40%
Final Exam	20%

Experiment/game write-ups due the class following the running of an experiment. Late submissions docked one letter grade penalty per calendar day (or fraction) late. If I have to print out your write-up(s), you are imposing a cost on me for which there is a one letter grade penalty each time you choose to impose this cost.

In-class Experiments & Games using MobLab

We will run (10) experiments/games during the class periods indicated on the schedule below. These experiments are designed to reinforce key course concepts. We'll see how a change in one or more variables (treatments) influences the results we observe. In short, MobLab experiments are live, real-time applications of the scientific method. Experiments/games run during class using MobLab will require you to have a "smart" device of some sort (e.g., smart phone, tablet, Kindle Fire, or laptop), and you will need to bring your preferred device with the MobLab app installed on it to class on experiment days. (Forgetfulness is an explanation, not an excuse.)

MobLab Signup: After January 29 (last day to add), I will send each enrolled student an email invitation to join our MobLab class with instructions for how to do so. You'll need to join our MobLab class from the web-based student console, NOT from their mobile app. Once you've joined, however, you will be able to use MobLab's mobile app in class to participate in experiments and answer questions.

MobLab Rules of the Game: Games and experiments will be conducted during class time and you MUST be physically present in class to receive points for the day's experiment. You may NOT participate in experiments remotely and any attempt to do so will result in loss of your MobLab points. *There are no make-up experiments.* If you miss class on an experiment day, that will simply be one of the experiment scores tossed out in the determination of your final grade. Do NOT email your post-experiment write-up (see below) unless you wish to incur a 1 point printing penalty for imposing printing costs on your instructor. (Arithmetic warning: repeatedly imposing the printing cost can cost you up to a semester's letter grade.)

MobLab Scoring: Your best (8) out of (10) experiment scores are worth 4 semester points each. You'll receive two points for participating in the experiment during class. At the beginning of the next class period following an experiment, each student participant submits a one page typed, double-spaced write up that briefly describes (1) the experiment, (2) its outcome, and (3) the economic reasoning that lead to the results seen in the experiment. Handwritten assignments will not be graded. This write-up should be brief, coherent, and no more than 125 words (or about ½ of a double-spaced, typed page). If you wish, you may also include hand-drawn graphs or other diagrams if such devices help illustrate your points. If you participate in and write up more than 8 experiments, you can earn 2 ½ points for each additional experiment you participate in beyond your best eight. There are no other extra credit assignments.

Homework

The (2) homework assignments are designed to help you understand and apply the important concepts of the course. You may work in groups to solve the homework, but each student must turn in his or her own copy of the assignment to receive credit. Typed homework assignments are preferred but not required.

Exams

Exams typically include true/false, multiple choice, and problems/short-answer, and will be based on the assigned readings, class lectures, and experiment results. You'll need a Scantron answer sheet, a calculator, and pencil for each exam. There are no make-up exams.

Disability Resource Center

If you are a student with a disability who needs academic accommodation, contact the Office of Disability Services at 703.993.2474 or <http://ods.gmu.edu>. Any accommodations must be arranged in advance through that office.

Attendance

Attendance is not mandatory (meaning, I do not take attendance); however, as an adult, you know you'll do better if you attend class regularly. Also, since you may not participate in MobLab experiments without being in class, poor attendance on experiment days will be especially damaging to your final grade. In addition, some material in class is either not found in or treated differently from the texts. For more tips on semester success, click the "Tips" link on the course webpage.

Honor Code

Students are expected to know, understand, and follow the George Mason University Honor Code. Electronic recording of class lectures and/or experiments is NOT permitted.

Course Outline & Schedule*

2019 Dates*	Topics	Text Chapters**	Experiment, Date	Write-Up Due Date
1.23	Course Overview	SM.1, JM.1		
<u>Part 1: Theory of the Firm, as viewed from Within the Firm</u>				
1.28	Theory of the Firm Revisited			
1.30	Review of Marginal Analysis	SM.2		
2.4—2.11	Demand Analysis and Optimum Pricing	SM.3	Pit, 2.4 2X-Auction, 2.6	2.6 2.11
2.13—2.18	Production	SM.5	Entry/Exit, 2.13	2.18
2.20—2.25	Cost Analysis [HW #1 Due 2.20]	SM.6	Labor Mkt, 2.20	2.25
2.27	1st IN-TERM EXAM	Last Day to Drop 2.25		
<u>Part 2: Strategic Firm Behavior Among Firms</u>				
3.4—3.6	Game Theory	SM.10, JM.2, JM.3	PD, 3.1	3.6
3.11—3.17	Spring Break!			
3.18—3.20	Risk & Uncertainty	SM.12, JM.4	Bomb Risk, 3.20	3.22
3.25—3.27	Information	SM.13, JM.6	Bank Run, 3.25	3.27
4.1—4.3	Asymmetric Information [HW #2 Due 4.1]	SM.14	Winners' Curse, 4.1	4.3
4.8	2nd IN-TERM EXAM			
<u>Part 3: Market & Government Failures and Potential Remedies</u>				
4.10—4.17***	Regulation & Public Goods	SM.11	Public Goods, 4.10	4.17
4.22—4.24	Bargaining, Externalities & Commons	SM.15, JM.5	Commons, 4.24	5.1
4.29—5.6	Auctions	SM.17, JM.11		
5.10	FINAL EXAM—1:30pm to 4:15pm			

* Schedule subject to change due to weather and/or other (possibly technological) factors.

** Text readings format = AuthorInitials.ChapterNo. For example, SM.3 is chapter 3 of the Samuelson & Marks text

*** Class will not meet on 4.15.18