# Intermediate Microeconomics Theory <br> Econ 303-Section 02, Spring 2020 <br> Tuesdays-Thursdays 2:00-3:20 PM <br> TYLER 123 <br> <div class="inline-tabular"><table id="tabular" data-type="subtable">
<tbody>
<tr style="border-top: none !important; border-bottom: none !important;">
<td style="text-align: left; border-left: none !important; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">Instructor</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">Safoora Javadi</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">E-mail</td>
<td style="text-align: left; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">sjavadi@wm.edu</td>
</tr>
<tr style="border-top: none !important; border-bottom: none !important;">
<td style="text-align: left; border-left: none !important; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">Office</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">Tyler Hall 441</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">Office Hours Wednesdays 1:30-4:30 pm</td>
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</tr>
</tbody>
</table>
<table-markdown style="display: none">| Instructor | Safoora Javadi | E-mail | sjavadi@wm.edu |
| :--- | :--- | :--- | :--- |
| Office | Tyler Hall 441 | Office Hours Wednesdays 1:30-4:30 pm |  |</table-markdown></div> 

NOTE: The scheduled office hours are times during which I will be available to meet with students on a walk-in basis.
Students are also invited to contact me to set up special appointments at other time (attendance mandatory).

## Course Description

Microeconomics is the analysis of decisions by individual consumers, workers, and firms and of equilibrium outcomes that result from them. This course will introduce the major concepts, models, and results from this field. Once students master these tools, they can apply them to a wide range of practical problems, real-world decisions, and public policy issues. The class thus forms a foundation (and is a pre-requisite) for most upper-level coursework in economics, including public finance, industrial organization and game theory, labor and health economics, economic development, international trade, and urban and environmental economics.

## Required Textbook

Perloff, Jeffrey M. 2018. Microeconomics, 8th edition. New York: Pearson.

## NOTE: It is NOT essential to use the most recent edition. Older editions are likely to be much less expensive, and they are equally good for the purposes of this class

## Requirements

Students should have completed Econ 101 or 151 . I will assume a basic vocabulary of economic terms and concepts. I will describe how to approach certain problems using calculus but will not assume you have a background in calculus. In situations on problem sets or exams where calculus may be helpful, I will provide assistance with taking derivatives or integrals.

## Course Evaluation

Your grade will be based on two midterm exams (each 25 percent), a final exam (30 percent), homework ( 15 percent), and class participation (5 percent).


| Components | Points | Notes |
| :--- | :---: | :--- |
| Midterm Exam1 | 250 | Tuesday March 3rd. The midterm examl will cover all topics that have been discussed in class prior <br> to that point. |
| Midterm Exam2 | 250 | Tuesday April $1 \mathbf{1}^{\text {th }}$. The midterm exam2 will emphasize the material that have been discussed in <br> class after the first exam. |
| Final Exam | Wednesday May $1 \mathbf{1}^{\text {th }} \mathbf{2 : 0 0 - 5 : 0 0 ~ P M . ~ T h e ~ f i n a l ~ e x a m ~ w i l l ~ n o t ~ b e ~ c u m u l a t i v e , ~ b u t ~ i t ~ w i l l ~ a l s o ~ i n c l u d e ~}$ <br> some questions on topics from the earlier materials covered in class; this is unavoidable because <br> the latter models build upon those presented earlier in the semester. |  |

## Expectations and General Orientation:

- Plan to spend about 2 hours on each homework assignment. If it is taking you much longer, consider coming to my office hours or making an appointment to see if there is any way to streamline the process.
- Most topics build upon other topics covered earlier in the semester, so it is important to maintain your effort throughout the semester so that you do not fall behind. To avoid stress, do not procrastinate and wait until the last night before the test.
- Students should come to class prepared. At the least, this means skimming over your notes from the last class session, but obviously it would be better to do more—read all assignments, study your notes, identify questions you have, etc.
- Please turn off and store cell phones before class. The material in this class is at times detailed and/or technical, so students are advised to give it their full attention.
- Please come to my office hours or make an appointment to resolve any concerns or difficulties you may have.


## Honor Code

You are expected to follow the William \& Mary Honor Code. If I discover any academic misconduct, I will initiate an Honor Council proceeding and recommend failure of the course. If you have any questions about how the Honor Code relates to this course, feel free to talk to me or refer to the Student Handbook and the William \& Mary Honor Council's website.

## Grade Distribution

| Your Score | Grade | Your Score | Grade | Your Score | Grade | Your Score | Grade |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $95 \%$ to $100 \%$ | A | $83 \%$ to $86 \%$ | B | $73 \%$ to $76 \%$ | C | $63 \%$ to $66 \%$ | D |
| $90 \%$ to $94 \%$ | A- | $80 \%$ to $82 \%$ | B- | $70 \%$ to $72 \%$ | C- | $60 \%$ to $62 \%$ | D- |
| $87 \%$ to $89 \%$ | B+ | $77 \%$ to $79 \%$ | C+ | $67 \%$ to $69 \%$ | D+ | Below $59 \%$ | F |

Important Dates to Remember

- Add/Drop deadline: Friday January 31 st
- Spring break: Saturday-Sunday March 7-15 ${ }^{\text {th }}$
- Withdraw deadline: Friday March 23rd
I. Introduction and review
A. Definitions of commonly-arising concepts

1. Elasticity
2. Marginal versus average
B. Baseline model: Supply and Demand (Chs. 2-3)
3. Supply and demand functions
4. Equilibrium
C. Fundamentals of welfare economics (Ch. 9)
5. Gains from trade: consumer surplus and producer surplus
6. Deadweight loss
II. Theory of Consumer Demand (Chs. 4-5)
A. Fundamentals
7. Budget constraints
8. Preferences and utility
B. Consumer demand: Choosing optimal bundles of goods
C. Individuals' demand curves
9. Price and income elasticities
10. Decomposing price elasticities: Income and substitution effects
III. Theory of Supply
A. Overview
11. Profit maximization (Ch. 8.1-8.2)
12. Marginal revenue (Ch. 11.1)
13. Costs and marginal cost (Ch. 7.1-7.2)
B. Production (Ch. 6)
14. Production functions and isocost lines
a. Isoquants and substitutability of inputs
b. Returns to scale
c. Isocost lines
15. Production decisions
a. In the short-run
b. In the long-run
C. Cost functions in the short- and long-Runs (Ch. 7)
D. Demand for factors of production (inputs) (Chs. 15.1)
E. Aggregate supply under perfect competition (Ch. 8.3-8.4)
F. Supply under monopoly (11.1)
IV. Pareto efficiency and the First (Fundamental) Welfare Theorem (Ch. 10)
V. Market failures: Conditions under which the First Welfare Theorem does not apply
16. Monopoly (Chs. 11, 12)
a. Sources of monopoly power
b. Monopoly and social welfare
c. Price discrimination (Ch. 12)
d. Monopoly and monopsony in factor markets (Ch. 15.2-15.3)
17. Monopolisitic competition (Ch 13.6)
18. Oligopoly (Chs. 13, 14)
a. Primer on game theory
b. Cournot, Bertrand, and Stackelberg equilibria

| Week | Day | Date | Topic | Assignment |
| :---: | :---: | :---: | :---: | :---: |
| Week1 | Tuesday | 21-Jan |  |  |
|  | Thursday | $23-J a n$ | Definitions of commonly-arising concepts |  |
| Week 2 | Tuesday | 28-Jan | Definitions of commonly-arising concepts |  |
|  | Thursday | 30-Jan | Definitions of commonly-arising concepts | Assignment 1 |
| Week 3 | Tuesday | 4-Feb | Supply and Demand |  |
|  | Thursday | 6-Feb | Fundamentals of welfare economics | Assignment 1-Due |
| Week 4 | Tuesday | 11-Feb | Budget constraints | Assignment 2 |
|  | Thursday | 13-Feb | Preferences and utility |  |
| Week 5 | Tuesday | 18-Feb | Consumer demand: Choosing optimal bundles of goods | Assignment 2-Due; Assignment 3 |
|  | Thursday | 20-Feb | Individuals' demand curves |  |
| Week 6 | Tuesday | 25-Feb | Individuals' demand curves | Assignment 3 Due ; |
|  | Thursday | 27-Feb | Review Exam 1 |  |
| Week 7 | Tuesday | 3-March | Exam 1 |  |
|  | Thursday | 5-March | Theory of Supply- Overview |  |
| Week 8 | Tuesday | 10-March | Spring Break |  |
|  | Thursday | 12-March | Spring Break |  |
| Week 9 | Tuesday | 17-March | Theory of Supply- Overview | Assignment 4 |
|  | Thursday | 19-March | Theory of Supply- Production |  |
| Week 10 | Tuesday | 24-March | Theory of Supply- Production | Assignment 4-Due |
|  | Thursday | 26-March | Theory of Supply- Production |  |
| Week 11 | Tuesday | 31-March | Theory of Supply- Production | Assignment 5 |
|  | Thursday | 2-April | Pareto efficiency and the First (Fundamental) Welfare Theorem (Ch. 10) |  |


| Week | Day | Date | Topic | Assignment |
| :---: | :---: | :---: | :---: | :---: |
| Week 12 | Tuesday | 7-April | Pareto efficiency and the First (Fundamental) Welfare Theorem (Ch. 10) | Assignment 5-Due |
|  | Thursday | 9-April | Review Exam 2 |  |
| Week 13 | Tuesday | 14-April | Exam2 |  |
|  | Thursday | 16-April | Monopoly |  |
| Week 14 | Tuesday | 21-April | Monopoly |  |
|  | Thursday | 23-April | Monopoly |  |
| Week 15 | Tuesday | 28-April | Monopolistic competition | Assignment 6 |
|  | Thursday | 30-April | Oligopoly |  |
| Week 16 | Tuesday | 5-May | Oligopoly | Assignment 6-Due |
|  | Thursday | 7-May | Oligopoly |  |

