ECON 3104: Microeconomic Theory

Instructor: Austin Bradley

Spring, 2023

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Office Hours: 12:30-2:00	Class Hours: M/W 5:30-6:45pm
Office: TBD	Class Room: Pamplin Hall 2001

Course Description

Per the Virginia Tech course catalogue, this class will cover: "Theories of demand, production, perfectly and imperfectly competitive price determination, and general market equilibrium" and analytic applications of these concepts. These should sound familiar as they are broadly the same topics covered in ECON 2005. In this course, we cover the same general concepts but with a more rigorous, calculus based foundation. We begin with individual preferences and build from there, eventually reaching markets in equilibrium.

Key skills covered in this course:

- Constrained optimization

- Comparative statics

- Game theory equilibrium concepts

Required Textbook

Intermediate Microeconomics: A Modern Approach 9th edition, Hal R. Varian, ISBN: 978-0-393-69132-0

Prerequisites

Courses: ECON 2005, (MATH 1225, MATH 1226) or ECON 2005, (MATH 1025, MATH 1026)

Practically, you are expected to be comfortable with differential calculus and the concepts taught in Principles of Microeconomics.

Course Structure

Lecture

Except for exam days, lecture is held Monday and Wednesday 2:30 - 3:45. You are highly encouraged to attend each lecture session and ask questions about the material.

Problem Sets: 10%

During the course, there will be 5 problem sets assigned on Fridays, due the following Wednesday at the start of class, covering the previous weeks' material. Problem sets are intended to help you prepare for the exams and will be graded for primarily for completion using the following scale:

- ✓+: All questions are addressed thoroughly and correctly: 100%

- ✓: All questions are addressed with appropriate effort with minor errors: 90%

- ✓-: All questions are addressed but with major conceptual issues or minor omissions 75%

- no credit: large portions of the problem set are not addressed or with minimal effort: 0%

Late problem sets will be accepted within 24 hours of the deadline for half credit.

I will provide an answer key for each assignment, posted to Canvas after class on Wednseday evenings.

Midterms: 60%

There will be two midterm exams given during normally scheduled class times. These exams will be 'non-cumulative'; however, please keep in mind that later material builds on earlier topics.

The two midterms are tentatively scheduled for:

- Midterm 1: Wednesday March 1st

- Midterm 2: Wednesday April 12th

If you miss an exam for any reason, the weight of that exam will shift to the final making it worth 60% of your total grade. To ensure that you don't have an incentive to miss an exam, you may also choose to "miss" an exam retroactively if you are unhappy with your score. If you wish to use this policy — dropping a midterm, making the final worth 60% of your grade — you must inform your instructor prior to the date of the final.

Final Exam: 30%

We will have a cumulative final on Wednesday, May 10th at 10:05 am

Grading Scale

>93:A, 90-92:A-, 87-89:B+, 83-86:B, 80-82:B-, 77-79:C+, 73-76:C, 70-72:C-, 67-69:D+, 63-66:D, 60-62:D-, 59 and below:F.

For final grades, I will round up to the nearest integer value

Course Policies

Office Hours and Email

Office hours times and location are yet to be set. I am happy to meet with you if you have any questions; feel free to reach out and schedule an appointment. Please *e-mail*, me with any questions or concerns with "ECON 3104" in the subject line, I do not check Canvas messages often.

Missed/ Dropped Exams

If you miss a midterm exam, the weight will be shifted to the final making it worth 60% of your course grade. No other make-up exams will be given.

If you are unhappy with your grade on a midterm, you may choose to drop it, shifting the weight to the final. Essentially, you may 'retroactively miss' a exam; it is never in your interest to purposefully skip one. You must inform me prior to taking the final if you choose to exercise this option.

Honor Code

The Virginia Tech Honor Code states:

"As a Hokie, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do."

Students enrolled in this course are responsible for abiding by the Honor Code. A student who has doubts about how the Honor Code applies to any assignment is responsible for obtaining specific guidance from the course instructor before submitting the assignment for evaluation. Ignorance of the rules does not exclude any member of the University community from the requirements and expectations of the Honor Code. For additional information about the Honor Code, please visit: https://www.honorsystem.vt.edu/

"I have neither given nor received unauthorized assistance on this assignment."

This statement applies to all exams and assignments. Cheating in any way on an exam will not be tolerated. Offenders will be reported to the Honor System Review Board.

For problem sets, you are free to use any resources you wish short of outright plagiarism. However, keep in mind that the problem sets are valuable tools to prepare for exams.

Accommodations for Disabilities

Any student who needs an accommodation because of a disability (learning disability, attention deficit disorder, physical disability, etc.) AND has worked with the office of Services for Students with Disabilities (SSD) should let me know well before scheduled exams. You will need to give me an exact time for each exam (including the final) so that I can make reservations. All SSD exams will be given in the SSD offices, (or as COVID-19 policies allow.) Take my advice, if you are eligible for double time on my exams, you will want to take advantage of that.

Schedule

This schedule is tentative and subject to change.

Topic 01: Preferences, Utility, and Choice

- Varian Chapters 2-5

Topic 02: Demand curves and comparative statics

- Varian Chapters 6 & 8

- Problem set 1

- End of material for Midterm 1

Topic 03: Risk and inter-temporal choice

- Varian Chapters 10 & 12

- Problem set 2

Topic 04: Production functions, supply, monopoly

- Varian Chapters 18-22, 24

- Problem set 3

- End of material for Midterm 2

Topic 05: Duopoly, Oligopoly, and Game Theory Intro.

- Varian Chapters 27-28

- Problem set 4

Topic 06: Game Theory Intro. Continued

- Varian Chapters 28-29

- Problem set 5