Course Number: 440.601.82
Instructor: Oleg Kucher
Contact: okucher1@jhu.edu
Office Hours: To be announced later
Scheduler: September 5-December 18
Course Website: Blackboard

Course Description

The course covers the basic microeconomic theory and models that explain the behavior of consumers, firms, and markets. Topics include the theory of consumer choice, the theory of the firm, partial equilibrium, general equilibrium, imperfect competition, game theory, risk and uncertainty, and market imperfections, among the others.

Prerequisites

This course provides background in the microeconomic theory at the intermediate level and demands basic training in mathematics. It is necessary that students taking this course be sufficiently prepared in calculus, linear algebra, and introductory microeconomics.

Readings

The main textbook for the course is: Walter Nicholson and Christopher Snyder, Microeconomic Theory: Basic Principles and Extensions, 12th Edition, 2017. It should be available at the Campus Store. The appropriate chapters are noted on the unit presentations and in scheduler. The 11th edition is also fine but the page numbers and numbering of homework problems will differ.

For a less mathematical introduction, you may take a look at: Microeconomics by Michael Katz, which is optional. For discussion questions, please read: Steven E. Landsburg, “The Armchair Economist”. Additional readings may include journal or newspapers articles.

Khan Academy offers free video tutorials useful for reviewing calculus and derivatives.

Course Requirements

Students learn basic microeconomic theory and models from the unit lessons materials and readings. In addition, students would practice theory applications through questions, problem assignments, and exams.

The course is structured into 11 units, which consist of notes, Power Point presentations, assignments and questions, and recordings. Students need to supplement each lesson with the textbook reading. Most units cover one-two chapters from the textbook for the course.
Communication and Discussion

Email is the preferred mode of communication. You can send an e-mail from the Blackboard. Students should participate in the Discussion board. You can post your answer or respond to others on the discussion topic. If so, please keep the discussion in that thread. There would be a thread on the discussion board called Student Lounge, where you can communicate with other students. Your participation in the Lounge is optional.

Grading and Deadlines

Your grade in the course will be based on homework assignments (25%), quizzes (10%), one midterm and a final exam (30% each), and blackboard discussion (5%). All assignments and all quizzes are weighted equally.

1. Homework Assignments
   There will be 6 homework sets. Problems from each unit will be assigned from the textbook, 12th edition. The homework sets will help you to prepare for exams. You should submit the assigned homework via blackboard. Homework will be graded and the feedback will be provided. Students are encouraged to form groups (not exceeding 3) in solving these problems. Each student should individually submit homework, even for a group. For the group assignment, please include all names on the assignment.

   Homework assignments will be due biweekly at 11:30 PM ETS the Monday (HW1-4) and the Friday (HW 5-6). The first homework is released at the beginning of the course along with the first unit materials, and it is due in two weeks until just before Unit 2 begins. Please track the time and check the scheduler deadlines to avoid confusion.

2. Quizzes
   These short quizzes are designed to reinforce the concepts covered during lectures in units. This review will be in the form of web-based questions started after the Unit 3 begins. The assigned dates for quizzes will be announced additionally. You can take quiz at any time during the assigned dates.

3. Midterm and Final Exams
   Exams will be comprised of a problem solving questions with similar structure as homework. Each exam will cover five units. The final exam is NOT comprehensive, but the previous material is important for the final. Students will take exams individually.

   The midterm and the final exam will be posted on Monday in Week 7, and the final Week (October 22 and December 10 respectively), and must be completed by 11.30 PM ETS Wednesday (October 24 and December 12, respectively).

4. Discussions
   The discussion is organized by the discussion topic in accordance with units. It is expected that you share your thoughts and/or experience on the topic, so that you would be graded based on your answers. Discussions are hold throughout semester.
Assigning Letter Grades

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
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<tbody>
<tr>
<td>A+</td>
<td>98%-100%</td>
<td>B+</td>
<td>88%-89%</td>
<td>C</td>
<td>70%-79%</td>
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<tr>
<td>A</td>
<td>94%-97%</td>
<td>B</td>
<td>84%-87%</td>
<td>F</td>
<td>0%-69%</td>
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<tr>
<td>A-</td>
<td>90%-93%</td>
<td>B-</td>
<td>80%-83%</td>
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Late Policy

Homework assignments can be submitted up to a week after the due date. However, late homework will be discounted 10% points of the homework grade. No credit will be awarded for homework over the week late.

Exams and quizzes must be turned in by the due date. Late exams will not be accepted without prior arrangement and discussion with the instructor.

UNIVERSITY POLICIES

General

This course adheres to all University policies described in the academic catalog. Please pay close attention to the following policies:

Students with Disabilities

Johns Hopkins University is committed to providing reasonable and appropriate accommodations to students with disabilities. Students with documented disabilities should contact the coordinator listed on the Disability Accommodations page. Further information and a link to the Student Request for Accommodation form can also be found on the Disability Accommodations page.

Ethics & Plagiarism

JHU Ethics Statement: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

Read and adhere to JHU’s Notice on Plagiarism.

Dropping the Course

You are responsible for understanding the university’s policies and procedures regarding withdrawing from courses found in the current catalog. You should be aware of the current deadlines according to the Academic Calendar.

Getting Help

You have a variety of methods to get help on Blackboard. Please consult the resource listed in the "Blackboard Help" link for important information. If you encounter technical difficulty in
completing or submitting any online assessment, please immediately contact the designated help desk listed on the AAP online support page. Also, contact your instructor at the email address listed in the syllabus.

Copyright Policy

All course material are the property of JHU and are to be used for the student’s individual academic purpose only. Any dissemination, copying, reproducing, modification, displaying, or transmitting of any course material content for any other purpose is prohibited, will be considered misconduct under the JHU Copyright Compliance Policy, and may be cause for disciplinary action. In addition, encouraging academic dishonesty or cheating by distributing information about course materials or assignments which would give an unfair advantage to others may violate AAP’s Code of Conduct and the University’s Student Conduct Code. Specifically, recordings, course materials, and lecture notes may not be exchanged or distributed for commercial purposes, for compensation, or for any purpose other than use by students enrolled in the class. Other distributions of such materials by students may be deemed to violate the above University policies and be subject to disciplinary action.

Code of Conduct

To better support all students, the Johns Hopkins University non-academic Student Conduct Code has been integrated and updated to include all divisions of the University. In addition, it is important to note that all AAP students are still accountable for the Code of Conduct for Advanced Academic Programs.

Title IX

Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create a safe and inclusive learning environment on our campus. I also have mandatory reporting responsibilities related to my role as a Responsible Employee under the Sexual Misconduct Policy & Procedures (which prohibits sexual harassment, sexual assault, relationship violence and stalking), as well as the General Anti-Harassment Policy (which prohibits all types of protected status based discrimination and harassment). It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share information that I learn of regarding sexual misconduct, as well as protected status based harassment and discrimination, with the Office of Institutional Equity (OIE). For a list of individuals/offices who can speak with you confidentially, please see Appendix B of the JHU Sexual Misconduct Policies and Laws.

For more information on both policies mentioned above, please see: JHU Relevant Policies, Codes, Statements and Principles. Please also note that certain faculty and other University community members also have a duty as a designated Campus Safety Authority under the Clery Act to notify campus security of certain crimes, as well as a duty under State law and University policy to report suspected child abuse and/or neglect.
## Course Scheduler

<table>
<thead>
<tr>
<th>Week</th>
<th>Unit</th>
<th>Topic</th>
<th>Chapters</th>
<th>Assignment</th>
<th>Due Date*</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Unit 1</td>
<td>Intro to Math Review</td>
<td>CH 2</td>
<td>HW 1</td>
<td>MON, SEP 17</td>
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<tr>
<td>1-2</td>
<td>Unit 2</td>
<td>Utility Functions and Choice</td>
<td>CH 3,4</td>
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<tr>
<td>3-4</td>
<td>Unit 3</td>
<td>Demand Curves, Income and Substitution Effects</td>
<td>CH 4, 5</td>
<td>HW 2</td>
<td>MON, OCT 1</td>
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<tr>
<td>5-6</td>
<td>Unit 4</td>
<td>Production Theory and Costs</td>
<td>CH 9,10</td>
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<tr>
<td>6-7</td>
<td>Unit 5</td>
<td>Profit Maximization</td>
<td>CH 11,14</td>
<td>HW 3</td>
<td>MON, OCT 15</td>
</tr>
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**MIDTERM** (Units 1-5): October 22-October 24 | WED, OCT 24 |

| 8-9  | Unit 6 | Partial Equilibrium | CH 12,14 | HW 4 | MON, NOV 5 |
| 8-9  | Unit 7 | General Equilibrium | CH 13 | | |
| 10, 12 | Unit 8 | Uncertainty | CH 7 | HW 5 | FR, NOV 16 |
| 10, 12 | Unit 9 | Game Theory | CH 8 | | |
| 13-14 | Unit 10 | Imperfect Competition | CH 14,15 | HW 6 | FR, DEC 7 |
| 14-15 | Unit 11 | Asymmetric Information | CH 18 | | |

**FINAL EXAM** (Units 6-11): December 10-December 12 | WED, DEC 12 |

Note. All due dates will be posted in the section "Assignments". The release and due dates will be also reminded in the section "Announcements".
Course Description

**Unit 1: Introduction and Math Review**

Readings: Chapter 1 & 2

The microeconomics evolution and the math review. The math review covers calculus, differentiation rules, optimization with one or more than one variables, the necessary and sufficient conditions of maximization, and implicit function rule.

**Unit 2: Utility Functions and Maximization**

Readings: Chapter 3 & 4

The consumer theory and the utility functions. The review covers different shapes of utility functions, utility maximization, the necessary and sufficient conditions, indirect utility and expenditure functions.

**Unit 3: Demand Curves, Income and Substitution Effects**

Readings: Chapter 5 & 6

The consumer theory and the utility functions continues. The review covers graphical and mathematical representation of the demand curve concepts, income and substitution effects, and complementarity and substitutability among goods.

**Unit 4: Production Theory and Costs**

Readings: Chapter 9 & 10

The production theory and the costs functions. The review covers production functions and cost functions, and the difference between long and short-run cost functions for a firm.

**Unit 5: Profit Maximization**

Readings: Chapter 11 & 14

The theory of the firm and the allocation of the resources by firms to produce goods. The review covers the optimization process for a profit-maximizing firm in the context of competitive and non-competitive markets.
Unit 6: Partial Equilibrium

Readings: Chapter 12

The partial equilibrium model combines consumers and producers to describe how markets really work together. The review looks at how supply (producer’s response) and demand (the need of the consumer) respond to each other with focus on one market only.

Unit 7: General Equilibrium

Readings: Chapter 13

The general equilibrium model. The review looks at how the competitive markets are cleared simultaneously.

Unit 8: Uncertainty

Readings: Chapter 7

Risk and uncertainty. The review describes how a rational consumer handles risk and uncertainty, risk aversion, and brief introduction to the economics of information.

Unit 9: Game Theory

Readings: Chapter 8

Game Theory. The review covers the Nash Equilibrium, Sequential games, and Repeated games.

Unit 10: Imperfect Competition

Readings: Chapter 14 & 15

The monopoly and the price discrimination among consumers. The review also addresses the issue of oligopoly and monopolistic competition – the two other important variants of imperfect competition.