



ST. FRANCIS XAVIER UNIVERSITY

ECONOMICS

Econ 401: Advanced Microeconomics

J. ROSBOROUGH

Fall 2019

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Office Hours

Mondays 9:45am – 11:00am

Thursdays 11:15am – 12:30pm

Fridays 2:15pm – 3:30pm

Lectures: Annex 23A

Mondays 2:15pm – 3:30pm

Thursdays 3:45pm – 5:00pm

Description of the Course

This is an advanced course in microeconomic theory designed for students considering graduate studies in economics. The focus of the course will be on the underlying theory and structure of economic models. We will revisit consumer theory, producer theory and general equilibrium using this rigorous approach to discuss more deeply the concepts of existence of equilibrium, duality, and comparative statics. In addition, we will cover material on game theory and information economics to provide full preparation for a standard two-course sequence in microeconomics at the graduate level.

TEXTBOOK (Suggested but not required)

Advanced Microeconomic Theory, (2nd or 3rd Ed.) by **Jehle & Reny** (2011)

SUPPLEMENTARY BOOKS

The Structure of Economics, (3rd Ed.) by **Silberberg & Suen** (2000)

Microeconomic Analysis, (3rd Ed.) by **Varian** (1992)

COURSE OUTLINE



1. Introduction

- *Economic Methodology*
- *Math Preliminaries*

2. Consumer Theory

- *Preference relations and Utility*
- *The Expenditure Problem and Duality*
- *The Envelope Theorem and the Slutsky Decomposition*

3. The Theory of Production

- *Profit maximization and Cost minimization*
- *Comparative Statics and Duality*

4. General Equilibrium

- *Walrasian Equilibrium and the Core*
- *Fundamental Theorems of Welfare*
- *Social Choice*

5. Game Theory

- *Static vs. Dynamic Games*
- *Complete vs. Incomplete Information*
- *Existence and Refinement of Nash Equilibrium*

6. Information Economics

- *Adverse Selection and Insurance*
- *Signaling & Screening*
- *Moral Hazard and the Principal-Agent Problem*

Evaluation

Your grade for the course will be determined by the following weighting scheme:

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|--------------------------|-------------------------------|-----|
| • Problem Sets (3 or 4): | Throughout term | 20% |
| • Midterm Exam: | Thursday Oct 24 th | 30% |
| • Final Exam: | TBA (December) | 50% |

Problem Sets

You are free to work with other students on the problem sets, and submit your answers in groups of 1, 2 or 3. Problem sets must be submitted at the start of the lecture in which they are due. Late problem sets will not be accepted and will receive a mark of zero.
