

Course Outline

Department of Economics
School of Business and Economics

ECON 3900-3
Intermediate Microeconomics 2 (3,0,0)

Calendar Description

Students continue to study intermediate topics in partial and general equilibrium analysis. Topics include consumer choice under different scenarios, factor markets, game theory, imperfect competition, general equilibrium analysis and welfare economics, public goods, and externalities.

Educational Objectives/Outcomes

After completing this course, students should be able to:

1. Apply basic mathematical tools to solving economic problems.
2. Incorporate strategic behaviour (i.e. game theory) in economic decision making.
3. Use partial equilibrium analysis and factor markets analyzing economic issues.
4. Use general equilibrium analysis and welfare economics analyzing economic issues.
5. Use theory of market failure (e.g. public goods, externalities, imperfect competition) analyzing economic issues.

Prerequisites

ECON 2900; MATH 1170 or equivalent

Co-requisites

Texts/Materials

Varian, Hal R., Intermediate Microeconomics: A Modern Approach, 8th Edition, New York: W.W. Norton, 2010.

Student Evaluation

Assignments: 0-20%

Midterm(s)/quizzes	30-75%
Final exam	25-50%

Course Topics

1. Review of Consumer Theory
 - Review of choice axioms
 - Use of the Lagrange for utility maximization problems
2. Consumer Theory
 - Endowment goods and intertemporal choices
 - Risk and uncertainty
3. Factor markets
 - Perfectly competitive factor markets
 - Imperfectly competitive factor markets
4. Game Theory
 - Normal form equilibrium concepts such as dominant strategy equilibrium, iterated dominate strategy equilibrium
 - Nash equilibrium in pure and mixed strategies
 - Subgame perfect Nash equilibrium
 - Applications
5. Imperfect Competitions
 - Cournot, Stackleberg and Stackleberg warfare
6. General equilibrium and Welfare Economics
 - Edgeworth boxes
 - Walras's law
 - Walrasian equilibrium for an exchange economy
 - Walrasian equilibrium for a production economy
 - Welfare properties of a Walrasian equilibrium
 - First Fundamental Theorem of Welfare Economics
 - Second Fundamental Theorem of Welfare Economics
 - Conditions required
 - No externalities, no increasing returns, no public goods, etc.
 - Introduction to social choice theory
 - Arrow's impossibility theorem
 - Introduction to social welfare functions and/or social choice functions
7. Public Goods
 - Definition
 - Problems with private provision
 - Problems with public provision

- Inefficient levels due to voting
- Inability to elicit truthful preferences

8. Externalities

- Definition
- Market solutions (e.g. the Coase theorem)
- Government solutions

Other possible topics if time permits include:

- Bertrand competition, price leadership, monopolistic competition, bilateral monopoly, or other models
- Duality theory
- Non-negativity constraints
- Asset markets
- Auctions
- Asymmetric information
- Network economics
- Behavioural economics

Methods for Prior Learning Assessment and Recognition

As per TRU policy

Attendance Requirements – Include if different from TRU Policy

As per TRU policy

Special Course Activities – Optional

Use of Technology – Optional