



# ST. FRANCIS XAVIER UNIVERSITY

## ECONOMICS

Econ 401: Advanced Microeconomics

**J. ROSBOROUGH**

**Fall 2023**

**Office:** MULH 3063

**Email:** jrosboro@stfx.ca

### **Office Hours**

Mon 2:30pm – 3:45pm

Wed 1:00pm – 2:15pm

Or any time by appointment (just email)

### **Lectures: MULH 4022**

Mon 4:00pm – 5:15pm

Wed 2:30pm – 3:45pm

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### **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.

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### **TEXTBOOK (Suggested but not required)**

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

### **SUPPLEMENTARY BOOKS**

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

*Microeconomic Analysis*, (3<sup>rd</sup> 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*

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## Evaluation

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

• Problem Sets (3 or 4):	Throughout term	20%
• Midterm Exam:	Wednesday Nov 1 <sup>st</sup>	30%
• Final Exam:	TBA (December)	50%

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