ECON 400 A01
Advanced Microeconomic theory
Course Outline – Fall 2024 (CRN 11131)

## UVic Land Acknowledgement

We acknowledge and respect the ləkʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the ləkʷəŋən ... 

E-Mail: rondeau@uvic.ca
Lectures: MT 11:30-12-50 CLE A330
Office Hours: Wednesdays 1:00 – 3:00 or by appointment

## Course Content

This course presents an advanced treatment of consumer theory and of the foundations of cost benefit analysis, choice under uncertainty and game theory. The content of lectures will reflect the need to develop theoretical methods and a formalization (modeling) of individual preferences and choices. This will allow us to restate the main results of consumer theory (previously seen in lower level courses), pointing out their formal theoretical origins and empirical implications.

The objective of the course is to expose students to the process of formal economics studies and theory development, principally by working through the complete development of consumer demand theory, from basic axioms on preferences to the statement of empirically testable empirical predictions. We will explore the origins of concepts introduced in lower level microeconomics courses and pursue a deeper understanding of their implications for consumer behavior and demand systems. Although the main topic of the course is consumer demand and behavior, it is important to keep in mind that our principal objective is primarily methodological, proceeding through the formal process of developing a consistent economic theory. As such, the course has a strong methodological component.

It is important to emphasize that this is a course on theory, and that the level of discussion will be advanced (hence the name of the course). Students should be prepared for an exhaustive mathematical treatment and analysis of consumer choices. Pre-requisites are essential and are not normally waived.

## Lecture Topics

1.  Mathematical preliminaries Sets, Functions and Optimization
    - G&R Mathematical Appendices
2.  Consumer Theory (G&R Ch. 1,2,3, and possibly 4)
    2.1 Basic Axioms of Preferences and Choices
    2.2 Preferences and Existence of Utility Functions
    2.3 The Consumer's Utility Maximization Problem
    2.4 Indirect Utility and Marshallian Demand
    2.5 The Consumer's Expenditure Minimization Problem
    2.6 Expenditure Functions and Hicksian Demand
    2.7 Duality and Equilibrium Equivalence
    2.8 Consumer Surplus Measures - the Foundation of Benefit Cost Analysis
    2.9 Slutsky Matrix and Theoretical Predictions
3.  Choice under uncertainty (G&R Ch. 17 and 19)
    3.1 Axioms of Choice under Uncertainty
    3.2 Expected Utility Functions
    3.3 Risk Preferences
    3.4 Risk and Insurance
4.  Game theory and mechanism design (as time allows)

## Learning Outcomes

At the end of the course, successful students will be able to

- Derive the entire classical consumer theory problem
- Identify the role that each axiom of consumer theory plays in the resulting properties of consumer choices and resulting demand system
- Critique the theory
- State how the theory can be empirically tested
- Explain the formal links between consumer theory and the foundation of Benefit Cost Analysis
- Perform basic calculations of welfare changes resulting from policies in all four Hicksian dimensions
- State the axioms of choice under uncertainty
- Identify the limitations of expected utility theory
- Compute optimal choices under uncertainty in a variety of scenarios (insurance, investment, etc)

## Course prerequisites

ECON 313; ECON 350. Pre-requisite are not normally waved.

## Notes and Textbook and Brightspace

The course Brightspace site will be populated with extensive lecture notes that will form the core of the course. In the past, I have not ask students to purchase a standard text, mainly because this course covers a small por of the material typically presented in a book at this level and it seemed wasteful to ask students to purchase a text textbook. However, my preferred text for this course:

Hugh Gravelle and Ray Rees, Microeconomics, Third Edition. Pearson Education, Harlow, England, 2004.

It is one of the more accessible advanced micro textbooks. It will also be a long lasting reference book if you go on to do graduate work in economics. It is recommended that you obtain a copy (note, it is easy to find!!!).

This material is also covered in all advanced microeconomics texts and students will find it useful to consult any of the references below for an alternative presentation of the course material.

Jehle, G.A. and P. Reny, Advanced Microeconomic Theory - 2nd Edition. (2000)
Silverberg, E., the Structure of Economics: a Mathematical Analysis. (1990)
Varian, H.R., Microeconomic Analysis, 3rd edition. (1992)
Kreps, D., Microeconomics (1990)

## Brightspace

The lecture notes, asasignments, prac exams and other course material will all be posted in Brightspace. Students are expected to be fully functional with the system.

All announcements will be posted in Brightspace. Students are advised to check it frequently.

## Grading

### Grading Scheme

The course grade is determined as follows. [Provide a summary of the techniques to be used to assess students' performance in the course and how assignments, tests and other course work will be evaluated. Provide a breakdown indicating the weight assigned to each part of the course. Include any compulsory attendance/participation requirements]

| | |
|---|---|
| FOUR or FIVE homework assignments for a total of | 20% |
| ONE in-person midterm exam Thursday October 24 | 30% |
| Final Exam (Date to be set by registrar) | 50% |

## Mandatory/Essential Course Components

All exams are essential course requirements, meaning, they must be attempted in order to pass the course. Note that essential course requirements are deferrable, the final exam is considered essential and thus deferrable by definition.

Assignments are not considered essential course components. This means that failure to complete assignments will only result in a grade of zero on the assignment and not trigger a N (incomplete) grade. Assignments are not deferrable and must therefore be completed by the required date.

## Grading Scale

| A+ | A | A- | B+ | B | B- | C+ | C | D | F or N |
|---|---|---|---|---|---|---|---|---|---|
| 90-100 | 85-89 | 80-84 | 77-79 | 73-76 | 70-72 | 65-69 | 60-64 | 50-59 | 0-49 |

Students should review the University's more detailed summary of grading

# Missing Assessments

Should students encounter a situation where they miss an exam or cannot submit an assignment at its due date, they may qualify for an academic concession. Students are required to indicate the speci

Review of an assigned grade
Sexualized violence prevention and response
Students with a disability
Term assignments and debarment from examinations
Travel plans
Waitlists

The following policies are explicitly included because of their importance:

## Waitlist Policies

Instructors have no discretion to admit waitlisted students or raise the cap on the course.
Students on the waitlist should discuss with the instructor how to ensure they are not behind with coursework in the event they are admitted.
Registered students who do not participate as specified in this outline during the first 7 calendar days from the start of the course may be dropped from the course.
Registered students who decide not to take the course are responsible for dropping the course and are urged to do so promptly out of courtesy toward waitlisted students.
Waitlist offers cease after the last date for adding courses irrespective of published waitlists.

## Academic Integrity

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility.  Students are expected to observe the same standards of scholarly integrity as their academic and professional counterparts.  A student who is found to have engaged in unethical academic behaviour, including the practices described in the Policy on Academic Integrity in the University Calendar, is subject to penalty by the University.

Review What is Plagiarism for the definition of plagiarism. Note: Submitted work may be checked using plagiarism detection software.

## Student Code of Conduct

The Humanities, Science, and Social Sciences Faculthat have adopted this Student code of conduct. Please, review.

## University Policies

University Calendar - Section "Information for all students"

[Equity statement](Equity statement)

various supportive program through the [UVic Global Community Initiative](#) including a Mentorship Program and Conversation Partner Program.