FAU

FLORIDA ATLANTIC UNIVERSITY

NEW COURSE PROPOSAL
Graduate Programs

Department Economics

College Business

(To obtain a course number, contact erudolph@fau.edu)

UGPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

Prefix ECO	*(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)*	Type of Course	Course Title
Number 5114	Lab Code	Lecture	Honors Advanced Microeconomics

Credits *(Review Provost Memorandum)*: 3

Effective Date *(TERM & YEAR)*: Fall 2020

Grading *(Select One Option)*: Regular (●) Sat/UnSat (○)

Course Description *(Syllabus must be attached; see Guidelines)*

This course provides students with a rigorous introduction to microeconomic theory. We begin with a formal analysis of consumer theory. Using models of consumer behavior, we derive demand curves and study several applications of consumer demand. We then move to producer theory and study behavior of the firm. We will explore firm supply and production in a variety of market settings, including perfect competition, monopoly and oligopoly markets. We also look at applications of game theory to economic behavior, incorporating both normal form and extensive form games. The course also investigates tw

Prerequisites	Corequisites	Registration Controls *(Major, College, Level)*
ECO 2023*; ECO 2013*; MAC2233*; STA2023* Minimum Grade B		

Prerequisites, Corequisites and Registration Controls are enforced for all sections of course

Minimum qualifications needed to teach course:	List textbook information in syllabus or here
Member of the FAU graduate faculty and has a terminal degree in the subject area (or a closely related field.)	A short course in intermediate microeconomics with calculus, by Roberto Serrano and Allen M. Feldman, 2nd Edition, Cambridge University Press
Faculty Contact/Email/Phone Eric Van Tassel / vantasse@fau.edu / 7-4176	**List/Attach comments from departments affected by new course** Economics

Approved by	*Date*
Department Chair Steven B. Caudill	1/22/20
College Curriculum Chair [illegible]	2/05/20
College Dean [illegible]	2/7/20
UGPC Chair	
UGC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu one week before the UGPC meeting.

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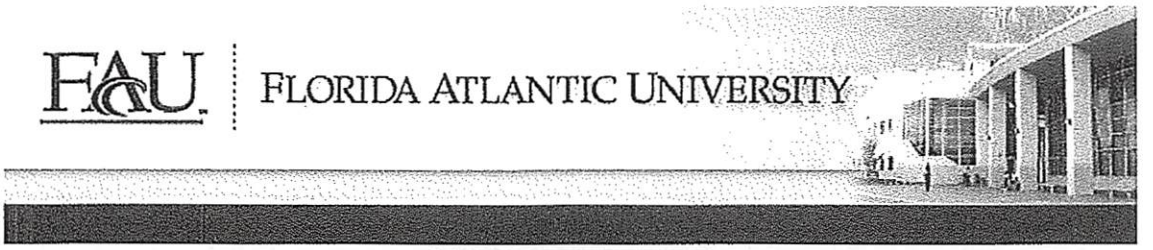

Department of Economics

ECO 5114

CRN

Fall 2020

Syllabus

Honors Advanced Intermediate Microeconomics

This course is cross-listed and taught concurrently with Honors Intermediate Microeconomics. Those students taking this course must pay graduate tuition fees. Those students passing this course receive three hours credit towards completion of our MA degree in economics. Those students who also successfully complete the 5000 level macro and econometrics courses in the Economics Honors Program are immediately admitted to the MA Program in Economics with 9 hours credit toward degree completion and a GRE waiver.

Fall 2019
College of Business Building ##
T and Th 9:30 – 10:50 am

Professor Information

Eric Van Tassel
Barry Kaye Hall 109
Email vantasse@fau.edu
Phone 561 297-4176

Office Hours
M, T & Th 12:00 – 1:00 pm and by appointment

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Required Text and Materials
A short course in intermediate microeconomics with calculus, by Roberto Serrano and Allen M. Feldman, 2nd Edition, Cambridge University Press

Course Description

This course provides students with a rigorous introduction to microeconomic theory. We begin with a formal analysis of consumer theory. Using models of consumer behavior, we derive demand curves and study several applications of consumer demand. We then move to producer theory and study behavior of the firm. We will explore firm supply and production in a variety of market settings, including perfect competition, monopoly and oligopoly markets. We also look at applications of game theory to economic behavior, incorporating both normal form and extensive form games. The course also investigates two general equilibrium models, namely a one person production economy and an exchange economy. In our general equilibrium analysis, we introduce the student to first welfare theorem of economics. The course also aims to examine decision making under risk, asymmetric information, and the impact of externalities and public goods on market efficiency.
Course Evaluation Method
The grade for this course will be assessed as follows:

1. Homework	25 points	Due dates announced in class
2. Midterm 1	25 points	Tuesday,
3. Midterm 2	25 points	Tuesday
3. Final exam	25 points	Thursday

The weekly homework assignments will be posted on Canvas.
The due dates of the HW will be indicated on the individual HW problem set.

Students taking the course for graduate credit (at the 5000 level) must complete all work for the 3000-level course and complete a take-home exam over the material in the corresponding 6000-level microeconomics course in our MA Program. This take-home exam will be count 20% of the course grade.

Course Outline

Lecture 1. A review of mathematical tools for economists and an introduction to microeconomic modeling. Partial and general equilibrium analyses. (Recommended reading: From Chapter 1).

Part I. The Theory of the Consumer

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Lecture 2. Preferences. Assumptions on preferences. Utility: cardinal and ordinal utility. Marginal utility and the marginal rate of substitution. (From Chapter 2).

Lecture 3. The budget set and the budget constraint. The consumer's optimal choice: graphic, analytical, and Lagrange function methods. (From Chapter 3).

Lecture 4. The individual demand function. The income demand curve or Engel curve. Normal and inferior goods. The demand curve. Ordinary and Giffen goods. The inverse demand curve. The cross demand curve. Substitutes and complements. (From Chapter 4).

Lecture 5. Further topics on the demand function. Substitution and income effects. Compensated demand. The Slutsky equation. Elasticity. Market demand. (From Chapter 4).

Lecture 6. Intertemporal choice of consumption. The supply of savings. Interest rates. Substitution and income effects. Present value. Taxes. Lump-sum tax and Rebating a tax. Consumer's surplus. (From Chapters 5, 6, and 7).

Lecture 7. Decision making under uncertainty. Expected utility functions and risk preferences. Applications to insurance markets, financial markets and labor markets. (From Chapter 20).

First midterm exam

Part II. The Theory of the Firm

Lecture 8. The technological constraints of the firm. The long run production function. Assumptions on technology. The technical rate of substitution. Returns to scale. The short run production function. Marginal product and average product. (From Chapters 9 and 10).

Lecture 9. Cost curves. Cost minimization. The long run cost function. Relation between returns to scale and the long run production function. The short run cost function. Relation between marginal product and the short run cost function. Relation between the long run and the short run cost functions. (From Chapters 9 and 10).

Lecture 10. Profit maximization. Profit maximization in the short run. The supply of a competitive firm in the short run. Long run profit maximization. The long run supply of a competitive firm. Producer's surplus. (From Chapters 9 and 10).

Part III. Market Structures: Partial Equilibrium

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Lecture 11. Factor markets: the behavior of a competitive firm focusing on inputs. The features of perfect competition. Industry supply. The industry supply in the short run. The industry supply in the long run in a competitive market with free entry and exit. Competitive market equilibrium. Social surplus maximization. Effects of taxes in the short run. Effects of taxes in the long run. The deadweight loss of a tax. (From Chapter 11).

Lecture 12. Monopoly. Profit maximization by a monopolist. The mark-up pricing of a monopoly. The loss of efficiency in a monopoly and the monopoly deadweight loss. Comparison
with a competitive market. Perfect or first-degree price discrimination. (From Chapter 12).

Lecture 13. Second- and third-degree price discrimination. Monopolistic competition. (From Chapter 12).

Lecture 14. Strategic interaction and game theory. Dominant strategies. Nash equilibrium. Threats. (From Chapter 14).

Second midterm exam

Lecture 15. Oligopoly. Simultaneous choice of output (Cournot). Collusion. Comparison of the different models. (From Chapter 13).

Lecture 16. Sequential choice of output (Stackelberg). Simultaneous choice of price (Bertrand). (From Chapter 13).

Part IV. General Equilibrium

Lecture 17. An exchange economy. A pure exchange economy and the Edgeworth box. Pareto efficient allocations. Competitive or Walrasian equilibrium. (From Chapter 15).

Lecture 18. The two fundamental theorems of welfare economics. Implications of the fundamental theorems of welfare economics. (From Chapter 15).

Lecture 19. General equilibrium model of an economy with consumption and production. Pareto-efficiency. Competitive equilibrium. The fundamental theorems of welfare economics revisited. (From Chapter 16).

Part V. Failures of the Competitive Market

Lecture 20. Externalities. Solutions to the problem of externalities. (From Chapter 17).

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Lecture 21. Public goods. The "free rider" problem. Solutions to the sub-optimality problem. (From Chapter 18).

Lecture 22 (on April 25). Information. Asymmetric information. Adverse selection. Moral hazard and the principal-agent problem. (From Chapter 20).

Final exam

Additional Course Policies

Missing Exams
Students are required to take exams on scheduled exam days. Students that miss an exam must provide a legitimate and documented reason for their absence.

Late Assignments
Late HW is only worth half credit.

Attendance Policy Statement
Attendance is not mandatory

Course Prerequisites and Credit Hours
ECO 2013 and ECO 2023, or ECO 3003, or equivalent and junior standing

Course Learning Objectives
Student will become familiar with the theory of microeconomic behavior and applications. Students should be able to derive demand and supply functions using formal mathematical models. Students will also a basic understanding of the concept of efficiency and general equilibrium results. Lastly, student should understand how market failure affects efficiency in the market place.

Grading Scale
Standard academic grading scale

Selected University and College Policies

Code of Academic Integrity Policy Statement
Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on

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personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty.

For more information, please see FAU Regulation 4.001 at: FAU Regulation 4.001.

Disability Policy Statement
In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at http://fau.edu/sas/

Counseling and Psychological Services (CAPS) Center
Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

Religious Accommodation Policy Statement
In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices, observances, and beliefs with regard to admissions, registration, class attendance and the scheduling of examinations and work assignments.

For further information, please see FAU Regulation 2.007 at: FAU Regulation 2.007.

University Approved Absence Policy Statement
In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the course instructor at least one week prior to missing any course assignment.

Incomplete Grade Policy Statement
A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

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The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete ("I") grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing ("F") grade.

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