ECO 7115: Microeconomic Theory

Instructor: Steven Slutsky Office: Matherly Hall 338 Phone: 352-392-8106 Office Hours: Wednesday, 4:00 – 5:00 pm E-mail: slutsky@ufl.edu

Class Location: Matherly Hall 14 **Class Meeting Time:** Tuesday and Thursday, 1:55 to 3:50 pm

Course Prerequisites: Appropriate mathematical background including differential calculus and some linear algebra Course Textbook (required): Mas-Colell, Whinston, and Green. *Microeconomic Theory*(MWG) Course Textbook (supplementary): Chiang and Wainright, *Fundamental Methods of Mathematical Economics*, 4th Edition (C&W)

Course Description: This course develops and applies techniques of optimization to economics. Solving non-linear programming problems using Kuhn-Tucker conditions, the envelope theorem, comparative statics analysis for optimization problems, and duality theory are covered. These concepts are applied to modeling optimizing behavior of consumers and producers. In addition to basic optimization, preferences and revealed preference theory, consumer surplus, and aggregation are also studied.

Course Objectives: Students who successfully complete this course will be able to analyze and solve optimization problems that arise in a variety of contexts in advanced courses.

Class Modality: This is a fully in-person course. There will be a midterm and a final exam which may be a take home exam or may be scheduled at a convenient time in person. The midterm will be around the week of October 17 (covering the material through section III and part of section IV below depending on how rapidly we cover the material) and the final will be in the final exam week. They will be scheduled to allow enough time to solve problems and to minimize conflicts with exams in other courses.

Grading: The grade is largely based on the midterm and final exams, which count equally. Given variability in difficulty of problem questions there will be a grading curve which typically has led to an average grade on the exams of around 3.25. There are also problem sets throughout the semester, which are mostly a learning experience. However, a student on the margin between two grades will receive the higher grade with a good performance on the problem sets and the lower grade with a poor performance. Unless otherwise told, you are allowed to work with your classmates while completing these problem sets. Working together can facilitate deeper learning of the material. You must, however, turn in your own work. Submitting a classmates' work as your own is a violation of the UF Student Honor Code.

Professionalism and Honor Code: Students are bound to not cheat or plagiarize, and are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: 'On my honor, I have neither given nor received unauthorized aid in doing this assignment.'"

You should familiarize yourself with the <u>UF Student Honor Code</u>. Cheating and plagiarism are not the only violations of this policy. Importantly, ignorance of a policy is not a valid reason for violating it.

Students Requiring Accommodations: Students with disabilities requesting accommodations should first register with the Disabilities Resource Center (392-8565; <u>https://disability.ufl.edu/</u>), providing appropriate documentation. Once registered, students will receive an accommodation letter that can be presented to the instructor when requesting accommodations. Please register at the beginning of the course if seeking accommodations.

Course Evaluation: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Students will be notified when the evaluation period opens.

UF Teaching Center: The UF Teaching Center offers guidance on study skills and tutoring services. You can find more information at: <u>https://umatter.ufl.edu/office/teaching-center/</u>.

Health Counseling and Emergencies:

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <u>http://www.counseling.ufl.edu/cwc</u>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or <u>http://www.police.ufl.edu/.</u>

Course Topics

I. Optimization Theory

MWG - Math Appendix MC, MD, MJ, MK, ML C&W - Chapters 9, 11, 12, 13

II. Preferences & Utility

MWG - Chapter 1(A&B)MWG - Chapter 2(A - D)MWG - Chapter 3(A - D)

III. Demands

MWG - Chapter 2E C&W - Chapter 12.5

IV. Duality

 $\begin{array}{l} MWG \ \ - \ Chapter \ 3 \ (E-H) \\ C\&W \ \ - \ Chapter \ 13.6 \end{array}$

V. Revealed Preference

MWG - Chapter 1 (C, D) MWG - Chapter 2 F MWG - Chapter 3 J

VI. Consumer Surplus & Welfare

MWG - Chapter 3I

VII. Aggregate Demand

MWG - Chapter 4

VIII. Production Theory

MWG - Chapter 5 C&W - Chapter 12.6 and 12.7