AEB 6106: Microeconomic Principles and Analysis

Fall 2023

Instructor Information:

Kelly Grogan 1185 McCarty Hall A kellyagrogan@ufl.edu 352-794-7633

Office Hours:

Mondays 12:30PM – 1:30PM Fridays 12:30PM – 1:30PM

Course Logistics:

MWF 1:55PM – 2:45PM Classroom: Black Hall 0415

Final Exam: Thursday, Dec. 14, 10AM – 12PM

Course Description:

This course provides students with an in-depth examination of a variety of topics in microeconomic theory including consumer and producer theory, uncertainty, game theory, asymmetric information, externalities, and public goods. We will use both mathematical and graphical methods to illustrate concepts with increased emphasis placed on mathematical rigor. We will use various application assignments to further develop concepts.

Course Objectives:

By the end of this course, each student should be able to do the following:

- 1) Apply mathematical concepts such as the Envelop Theorem and Implicit Function Theorem to economic problems.
- 2) Solve constrained optimization problems.
- 3) Set up and solve the primal and dual consumer and producer optimization problems.
- 4) Build economic models to answer research questions.

Required Knowledge:

Students are expected to know how to graph basic equations and take derivatives. If this knowledge has gotten rusty, it is the student's responsibility to re-learn these skills.

Required Textbook:

Nicholson, W. Any Year/Edition. *Microeconomic Theory: Basic Principles and Extensions*. Southwestern, Thomson. (All editions have largely the same material but may vary by chapter number and applications)

Suggested "Tools"

This class includes many graphs that benefit from using color. Purchasing colored pencils or pens is recommended.

UF Grading Policy:

For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Course Grade and Assignments:

Your grade will be determined by

- Six problem sets (20% in total, 4% each, lowest score dropped)
- Two policy debates (30% total, 15% each)
- Three exams (45% total, 15% each)
- Effort (5%)
- Wellness bonus points (up to 6 per exam)

Letter grades will be assigned as follows:

A = 93 and higher

A = 90 - 92

B + = 87 - 89

B = 83 - 86

B - = 80 - 82

C + = 77 - 79

C = 73 - 76

C = 70 - 72

D + = 67 - 69

D = 63 - 66

D = 60 - 62

E = less than 60

Problem Sets:

There will be a total of 6 problem sets. Students are encouraged to discuss problems with others but you are expected to write up your own assignments. Please write on your assignment the names of students with whom you discussed the assignment. Writing up assignments individually implies that assignments or any portion of the assignments will not be identical. Late problem sets will not be accepted. Make-up work for missed problem sets will not be given. If a student is absent when an assignment is due, they are still responsible for submitting it online before the start of class. The student's lowest problem set score will be dropped. The book provides many practice problems with answers to odd-numbered questions. Students should take advantage of this resource for additional practice problems. I am also happy to help with even-numbered problems for which solutions are not available.

Policy Debates:

The best way to learn economic theory is to apply it. For each policy debate, you will be given a current policy. You will be asked to construct an economic model that could be used to assess the impacts of the policy and determine your stance on the policy. In class, you will be asked to briefly discuss the model used and its predictions about the policy. After all students have presented, the floor will be open for debate. 50% of your grade will be determined by the instructor's evaluation of your model and participation. The remaining 50% will be determined based on peer evaluation. This assignment might be done in pairs, depending on final course enrollment.

Exams:

There will be three exams covering portions of the course material. The third exam will occur during the final exam period for the course, which is scheduled for Thursday, Dec. 14, 10AM – 12PM. The final exam is not cumulative. If a serious, unforeseen, and documentable situation arises that prevents a student from taking any of the exams, the average of the other 2 exams will be entered for the missed exam.

Effort:

"Continuous effort - not strength or intelligence - is the key to unlocking our potential."
- Winston Churchill

This portion of the grade used to be titled "participation." After researching about the effects of rewarding the learning process instead of rewarding learning outcomes, I have changed this to "effort." Please see the attached article for more information on this line of research. You will be rewarded for demonstrating effort in this class. Effort includes, but is not limited to, the following:

- Attendance: Attending class (in-person or online) and actively participating in activities, asking questions, and providing comments and insight regarding course material are the basis of the learning process.
- Arriving on time: Late arrivals impede your learning process as well as the learning process of your classmates and will result in lowered effort scores.
- Engagement: Use of cell phones, laptops for non-noting takes purposes, etc. during class interferes with your learning process and will result in lowered effort scores.
- Time and energy spent on assignments and exams: Assignments and exams are meant to be learning experiences. There is little learning benefit from rushing through them at the last minute. Rushed, sloppy, and/or "bare bones" answers demonstrate a lack of effort.
- Utilizing office hours for additional help or clarification: Most students will face at least some material that they do not immediately understand. Following up with questions during office hours is a great way to gain a better understanding.

Bonus Points:

Wellness: Graduate school has notoriously been challenging for students' mental health and well-being. The COVID-19 pandemic has likely exacerbated this effect. To incentivize activities to support well-being, students will be able to accumulate bonus points, to be applied to each exam, by exploring activities proven to support well-being. Students can earn one point per week by trying one of the practices provided by the University of Berkeley's Greater Good in Action Program (https://ggia.berkeley.edu/). To document the activity, the student should complete all sections in the wellness log (included at the end of this syllabus). The student's wellness log should be submitted with its corresponding exam.

Lecture Resources

Lectures are recorded and will be made available through e-learning. When applicable, handouts will be used to disseminate clear pictures of graphs and figures. Written class notes will not be provided because the act of taking notes during class and then re-organizing your notes after class has been shown to improve student learning outcomes.

Feedback

I welcome feedback on lecture style, course content, and assignments. Periodically throughout the semester, I will email out a link to an anonymous survey to gather any feedback you may have and/or solicit feedback through assignments. You are also always welcome to provide feedback directly to me. I want this course to be the best possible learning experience for all students.

Academic Honesty:

Any student found to be in violation of the Student Honor Code will receive, as a minimum penalty, a grade of "0" on the assignment or exam. Students may also be asked to attend seminars on ethical decision making and/or avoiding plagiarism.

Attendance:

Attendance counts towards your effort grade, so students are strongly encouraged to attend class (in person or online). If circumstances cause an extended absence from class, please talk to me in advance.

Course Wellness Policy

No one wants to get sick from coming to class. If you have any COVID-19 symptoms or you are experiencing symptoms of any other easily spread ailment (cold, flu, etc.), please do not come to class. All classes will be recorded in Zoom for you to watch after class. For any other illness, please contact the instructor as soon as possible if you will miss an exam or need additional time to complete an assignment due to illness. Documentation of the illness will be required for assignment extensions.

Course Outline:

- I. Choice and Demand
 - 1. Preferences and Utility (Ch. 3)
 - 2. Utility Maximization (Ch. 4)
 - 3. Income and Substitution Effects (Ch. 5)
 - 4. Demand Relationships Among Goods (Ch. 6)
- II. Production and Supply
 - 5. Production Functions (Ch. 7)
 - 6. Profit Maximization (Ch. 8)
 - 7. Cost Functions (Ch. 9)
- III. Competitive Markets
 - 8. Partial Equilibrium Competitive Model (Ch. 10)
 - 9. Welfare Analysis (Ch. 11)
- IV. Imperfect Competition
 - 10. Monopoly (Ch. 12)
 - 11. Imperfect Competition (Ch. 14)
 - 12. Pricing Models (Ch. 15)
- V. Uncertainty, Information, and Externalities
 - 13. Uncertainty and Risk Aversion (Ch. 18)
 - 14. Information (Ch. 19)
 - 15. Externalities and Public Goods (Ch. 20)
 - 16. Political Economics (Ch. 21)

Tentative Schedule of Assignments and Exams **Dates subject to change based on progression through material.**

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Final Exam: Thursday, Dec. 14, 10AM – 12PM PS: Problem Set, PD: Policy Debate

University Policies

Course Evaluation

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://gatorevals.aa.ufl.edu/public-results/. Summaries

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: <u>Visit the Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services. Address: 3190 Radio Road. Services provided:

Counseling services
Groups and workshops
Outreach and consultation
Self-help library
Wellness coaching

Student Success Initiative: https://studentsuccess.ufl.edu/ Services provided:

Advising
Peer mentoring
Coaching
Peer tutoring

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or <u>visit the Student Health Care Center website</u>.

Academic Resources

E-learning technical support: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at <u>helpdesk@ufl.edu</u>.

<u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

<u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.

<u>Teaching Center</u>: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

<u>Writing Studio</u>: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint

Lauren's Promise: I will listen and believe you if someone is threatening you.

Lauren McCluskey, a 21-year old honors student athlete, was murdered on October 22, 2018, by a man she briefly dated on the University of Utah Campus. We must all take actions to ensure this never happens again. Any form of sexual harassment or violence will not be excused or tolerated at the University of Florida.

If you are experiencing sexual assault, relationship violence, or stalking, you can take the following actions:

- If you are in immediate danger, call 911.
- Report it to me, and I will connect you to resources.
- Seek confidential sources of support and help:
 - <u>UFPD Office of Victim Services</u>: 51 Museum Road, 352-392-5648
 - <u>Sexual Assault Recovery Services (SARS)</u>: Infirmary Building, 352-392-1161
 - Alachua County Rape Crisis Center (confidential): 352-264-6760

Diversity, Equity, and Inclusion: The University of Florida's College of Agricultural and Life Sciences (CALS) supports the University of Florida's commitment to diversity, equity, and inclusion. By fostering a sense of belonging for students, staff, and faculty, while leveraging the uniqueness of the people who study and work at the university, we believe our campus community is enriched and enhanced by diversity, including but not limited to, race, ethnicity, national origin, gender, gender identity, sexuality, class, and religion. This course will support an understanding of the diversity of our distance and campus communities as well as our agricultural and natural resource communities, locally and globally.

This course will strive to create a learning environment for students that supports a diversity of thoughts, perspectives, and experiences while honoring your identities. In this class we will take the following approaches to help achieve this:

- All course participants will use the names and pronouns provided by students for use in class. If these differ from those that appear in official university records, you can change your Display Name at One.UF (see Student Help FAQs eLearning University of Florida (ufl.edu)).
- If your performance in this course is being impacted by your experiences inside and/or outside the classroom, do not hesitate to contact the instructor and/or teaching assistant (TA). Instructors in CALS are a great resource for you and you may provide feedback anonymously. Feedback may result in general announcements to the class, if necessary, or reporting to appropriate UF personnel to address your concerns.
- CALS instructors and TAs like many people, are still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that makes you feel uncomfortable, please discuss with your instructor or TA or contact the CALS Dean's Office (cals-dean@ufl.edu).

Wellness Activity Log, Exam 1

Week	Date Range	Date of Activity	Activity Chosen	Things I liked	Things I disliked	Other Observations	I would like to do this again (Y/N)
1/2	8/23 – 8/29						
2/3	8/30 - 9/5						
3/4	9/6 - 9/12						
4/5	9/13 - 9/19						
5/6	9/20 - 9/26						
6/7	9/27 – 10/3						

Wellness Activity Log, Exam 3

Week	Date Range	Date of Activity	Activity Chosen	Things I liked	Things I disliked	Other Observations	I would like to do this again (Y/N)
1 2	110/24 = 110/11						
13	110/12 - 110/14						
14	11/13 = 11/21						
15	11/26 – 10/22 – 10/28						
16 11	12/3 - 19/29 - 11/4						
16+ 12	12/10 - 12/14- 11/7						