## Syllabus, Intermediate Microeconomics

MW 2:00-3:15, B&E room 305 MW 3:30-4:45, B&E room 305

Course description: This course examines individual decision making, with a particular eye for what incentives various market structures produce. While economists widely believe that "free markets" work well, and thus have no need of being regulated, we also believe certain types of markets are unlikely to produce good outcomes on their own. For example, it is often difficult or impossible to sell a used product when the quality is not readily apparent, such as a car. It seems plausible that non-competitive markets charge overly high prices for low quality goods. It seems odd that so much time is spent on education which is rarely used directly on the job. It seems very unlikely that the market on its own can reduce production of a harmful pollutant. Broadly, this course is concerned with when markets are best left to function on their own, when government intervention may be warranted, and what type of intervention might work best.

Since this is an economics course, we will approach these questions by discussing how economists view them. Often, economists will be in broad agreement (e.g. that there is little reason to regulate a market like retail gasoline with lots of small firms competing against one another). Sometimes an economist's answer will depend on his own beliefs, values, etc (e.g. a more liberal economist is likely to be more worried about monopoly than is a more conservative economist, while the latter is more likely to be worried about incentive effects of taxes). Both cases will be discussed.

While I try to keep the course reasonably policy-oriented, there is necessarily a fairly substantial amount of new language and techniques that must be absorbed in order to understand how economists think about policy. Some of this language and technique will be taught for its own sake, and to prepare you for higher level economics classes. Most of it will be taught in the service of policy analysis.

Contact info: My name is Jeremy Sandford, and I am an assistant professor in the economics department at UK. Please call me Jeremy if you are comfortable doing so, otherwise Dr./Prof. Sandford is fine. My email address is jeremy.sandford@uky.edu. My website is jasandford.com. It has a detailed schedule, which I will update after each class, and information on homeworks and exams, including exams from past years.

Office meetings: I will have regular office hours from 10-11am on Wednesdays and Thursdays, though some weeks I will need to cancel them, which will generally be done via email. Additionally, I am often in my office during business hours, and if you need to see me, please do not hesitate to email me to set up an appointment. As I teach two sections back-to-back this fall, I would prefer you only ask questions after class is over if you want something from that lecture clarified, and save those deep, philosophical questions for my office.

While many students can do well in the course without ever meeting with me, there is almost always a strong positive correlation between amount of time spent seeking my help and course grade.

**Homework**: There will be 5 graded homework assignments. The grade will be based on completeness as well as how thoroughly and correctly you have answered one or two questions that the grader selects to read through carefully. In addition to influencing your course grade, the homeworks are excellent preparation for

the midterm and final exam, and so you should plan on devoting the bulk of your time for this course to understanding them.

You should be able to complete some homework problems immediately after attending the relevant class. Others may require reading the assigned chapters, while some problems you may find quite puzzling at first and the answer apparent only after considerable contemplation and several failed attempts. Problem solving skills are crucial in both Eco 401 and the economics major. The process of being stuck and having to invest effort in some homework problems is vital to developing your problem solving skills within economics and gaining the economic intuition which will help you in future classes.

Working together on homeworks is fine, however each student must turn in his own write-up of the answers. Identical or nearly identical answers will be treated as academic dishonesty and will receive no credit. That said, this policy allows for students to solve all of the problems together, so long as each student writes up her answers individually.

Exams: The midterm exam is in class on Wednesday October 13. The final exam is on Monday December 13 from 1:00pm-3:00pm if you are registered for the 3:30 lecture, and on Wednesday December 15 from 1:00pm-3:00pm if you are registered for the 2pm lecture. It is not possible to take either exam at a different time, short of a university-excused activity which is discussed with me as far in advance as possible, or a documented serious illness. If you will not be available for either of these exam times, please do not take this course.

Course materials: The required book is "Microeconomics," 7th edition by Robert S. Pindyck and Daniel L. Rubinfeld. While the book is quite expensive, I urge you both to purchase a used copy on Amazon or a similar site and to consider purchasing an older edition, which as far as I can tell differ only slightly from the current 7th edition. At the time I am writing this, a used 6th edition goes for \$22.90 on Amazon, while a used 5th edition (published in 2000) goes for \$.01. My lectures comprise a main component of the course, and should be viewed as required source material. I may also occasionally distribute additional readings directly relevant to class lectures.

**Grading**: Course grades will be determined by a weighting of 5 homework assignments, one midterm, and a non-cumulative final exam. Specifically, your lowest numerical score of the three will count for 20% of your course grade, while the other two will each count for 40%. So, if you get a 75 on the homework, a 45 on the midterm, and a 70 on the final, you score for the course would be .4\*75 + .2\*45 + .4\*70 = 67. Your score will then be assigned a letter grade based on where you stand in the class. Over the last three instances of this course I have taught, I've given 24.3% of students A's, 31.8% B's, 32.7% C's, and 11.2% D's and F's. Most of the D and F grades went to people who missed multiple quizzes and/or exams. I expect to follow a similar distribution this semester.

Exams and homeworks will be free-response, with most of the points coming from problem-solving questions. The nature of this format means that exam averages will be considerably lower than you may be used to from introductory classes and multiple choice exams. Indeed, a typical average for an upper-level economics exam is between 50 and 70. Do not panic when you see your exam score, instead wait to fit it into the context of how the class as a whole did. After returning quizzes and exams, I will give you an idea of

how to translate your numerical score into a letter grade. Do not take this course if you plan on complaining later on that "everyone failed," or that exam scores are unreasonably low.

All students will be given the same opportunity to do well in this class. In particular, no student will receive a higher letter grade than a student with a higher numerical score, so appeals to me for a particular grade are very likely to be fruitless. There is no extra credit, and all students will have their grade calculated in the same manner.

**Academic dishonesty**: Cheating on exams or quizzes or plagiarizing a homework assignment are both serious violations of university policy and it is my responsibility to the university to pursue each. I will seek to impose the maximum penalty allowed under university guidelines should I become aware of a student having cheated on a quiz or exam or plagiarizing a homework assignment.

Students with disabilities: If you have a documented disability and need an accommodation, please make arrangements with me during the first week of the term. Please request that the counselor for students with disabilities send me a letter verifying your disability.

## Topics Covered

Lecture	Topic	Pindyck & Rubinfeld chapter
1	Supply and demand, elasticity	2
2	Consumer behavior	$3.1 \text{-} 3.5, \ 4.1, \ 4.3 \text{-} 4.6$
3	Uncertainty	5
4	Production	6.1 - 6.4
5	Competitive markets	8, 9
6	Monopolist behavior	10, 11
7	Oligopoly	12
8	Game theory	13
9	Markets with asymmetric information	17
10	Externalities and public goods	18
11	Intertemporal demand	15

Each lecture will take 2-3 class meetings. This list is preliminary. I will maintain an updated schedule on my website, jasandford.com, which will list the actual topic on each class day, as well as any additional readings that may be required.