Intermediate Microeconomic Theory:
Imperfect Competition and Market Failure
ECN 100B, Fall 2019

Professor Brendan Price

Lecture: TR 1:40–3:00pm, Everson 176

COURSE LOGISTICS

Contact information

Instructor:

Email:	brendanprice@ucdavis.edu
Office:	Department of Economics 1112 Social Science & Humanities Building (SSH)
Office hours:	Monday 1:00–2:00pm & Thursday 11:00am–12:00pm

Teaching assistants:

Giuseppe Ippedico	(gippedico@ucdavis.edu)
Office hours:	Monday 4:00–6:00pm (118 SSH)
Sean Kim	(snkim@ucdavis.edu)
Office hours:	Friday 10:00am–12:00pm (118 SSH)

Course description

This course is the second part of a two-part sequence in Intermediate Microeconomics. In the first part, ECN 100A, you learned how consumers maximize utility and how firms pursue profit. We will build upon these concepts by exploring how firms' behavior depends on the amount of competition they face; how "market failures" like externalities and asymmetric information can distort incentives and make society worse off; and how people and firms make decisions in an uncertain world. You will also learn new analytical tools used by other upper-division Economics courses at UC Davis.

Course prerequisites

To take this class, you must have taken (i) ECN 100A and (ii) MAT 16A–16B, MAT 17A–17B, or MAT 21A–21B, with a grade of C– or higher in each of these courses. Please consult the Advising Center in 2216 SSH (ecnugadvisor@ucdavis.edu) if you have any questions or concerns about the prerequisites.

We will use calculus in this class. You will need to be comfortable with mathematical functions and basic algebra to understand the material and to complete the coursework.

Discussion sections and office hours

Each of you is registered with a particular TA-led discussion section. You are **strongly** encouraged to attend the weekly sections: they are an opportunity for you to ask questions, work through confusing material, and practice solving problems similar to those you'll see on homeworks and exams.

You may only attend the section you're assigned to. However, you are welcome to come to any of the TA office hours (as well as mine), regardless of which section you attend.

Discussion sections and office hours will begin during the week of Monday 9/30–Friday 10/04.

Take advantage of office hours!

Many students are shy about attending professors' office hours. Don't be. I encourage you to attend my office hours if you think you will benefit from coming (even if you don't have specific questions to ask). Most of the time, several students come to my office hours and I work with everyone as a group to help understand the course material. (These conversations improve my teaching in the classroom, too, since they help me know which parts of the material students are finding most challenging.)

Readings

Lecture notes: I will give you written lecture notes to accompany each lecture. Before each class (typically the night before or earlier), I will post an "incomplete" lecture note to Canvas, with empty space reserved for computations we will do together in lecture. I encourage you to bring hard copies of these incomplete notes to class, so that you can fill in the blanks yourself and take additional notes. I will post the "completed" version of each lecture note to Canvas after class (typically within 1–2 days).

Textbook (optional): Since I am giving you self-contained lecture notes, there is no required textbook for this class. However, if you wish to consult a textbook for additional study, a good option is *Microeconomics: Theory and Applications with Calculus*, by Jeffrey M. Perloff (any edition is fine).

Many of my lectures were originally based on the Perloff textbook, and I will maintain a document on Canvas listing the Perloff sections that most closely correspond to the material we discuss in class. However, please note that the textbook sometimes uses different notation and terminology to describe a particular concept. Where discrepancies occur, homework and exam questions will always be written and graded on the basis of the definitions, concepts, and terminology used in the lecture notes.

GRADING AND COURSE REQUIREMENTS

Assignments and grading

Assignments/weighting: Your grade will be based 15% on homework and 85% on exams (two midterms and a final). I will calculate your grade using one of two formulas, whichever is more favorable to you:

15%	Homework		15%	Homework
25%	Midterm 1	or (if it's better for you)	15%	Your worst midterm
25%	Midterm 2		25%	Your best midterm
35%	Final exam		45%	Final exam

I will select the appropriate formula automatically on the basis of your exam grades. This system is intended to give you a chance to recover if you underperform on one of the midterms, but are able to demonstrate a better understanding of the material by the end of the course.

I reserve the right to award extra points for constructive class participation or other deserving contributions and to give negative points for disruptive behavior.

Grade distribution: Final grades will be determined by a curve, which I will apply after all assignments have been completed. The average GPA in Economics major courses (including ECN 100B) is usually around 2.7. However, there is no restriction on the exact number of A's, B's, C's, D's, and F's I give out, and I will assign grades based on student performance rather than a predetermined quota.

Homework

Assignments: There will be 7 graded homework assignments, tentatively due at 5:00pm (Pacific Time) on the dates indicated in the class schedule at the end of this syllabus. Homework will be assigned roughly one week in advance of the due date. There will be no make-up homework assignments, and late submissions will not be accepted. While you are welcome to study together to learn the material, **you must do all of the homework assignments on your own**. This is in your own best interest, since doing the homework yourself is essential for being prepared for the exams.

Uploading: All homework must be uploaded to Canvas (under "Assignments") in `.pdf`, `.jpg`, or `.png` format. If you complete an assignment by hand, you will need to create a digital copy by scanning it or taking a photo. If you use a word processor, you should export to `.pdf` format. Please make sure your answers are clear and easy to read: we will deduct points if we cannot read them.

Grading: Each homework assignment will be graded in two parts:

- First, I will select one or more questions to be fully graded, *without announcing which ones in advance.* The selected question(s) will count for 50% of your assignment grade. Because you won't know which question(s) will be graded in full, you should do your best on every question.

- The remaining 50% of your assignment grade will be based on a "check/check minus" assessment of the remaining questions. You can receive full credit for this portion of the assignment even if you make mistakes, as long as you have demonstrated a sincere effort to complete each problem. (To help you get used to my assignments, HW1 will be graded 100% on the basis of effort.)

The homework portion of your grade will be calculated using only your best 5 assignment scores. These top 5 scores will receive equal weight in grading. Dropping your lowest two scores is meant to ensure you aren't penalized if you can't submit a particular assignment on time due to an emergency or other unavoidable circumstances. However, it is in your interest to do *all* of the homework assignments, since that's one of the best ways you can prepare for the exams.

Exams

Coverage: **All exams are cumulative**. Midterm 1 covers material from weeks 1–4. Midterm 2 covers material from weeks 1–7, but most of the questions will be based on weeks 5–7. The final exam will cover all of the material taught in this class, with special emphasis on material covered in weeks 8–11.

Why do I use cumulative exams? Because research shows that they help students learn and remember the course material. ECN 100B is a prerequisite for many upper-division Economics courses, and I want to give you the best possible preparation for the classes you will be taking in the future.

Missed exams: **There will be no make-up exams.** If you miss a midterm exam due to an **excused illness**, your class rank on the final exam will determine the score used for your missed midterm. You must notify me **by the date of the midterm** if you wish to request an excused absence.

Re-grade policy: If you would like to request an exam re-grade, please do the following:

1. Submit a written re-grade request **in person** within one week of receiving your graded exam.

2. In your written request, indicate which question(s) deserve special attention in my second reading of your exam, and explain why those questions deserve special attention.

3. Attach the original version of your exam to this written statement.

Please note that I will review your entire exam. That is, if some of your answers are found to be lacking (in content, in clarity, etc.) upon the second reading, you may end up losing points. Re-graded exams will be returned, at the latest, two weeks after the initial return of the exams.

If we have made a clerical error in calculating your grade (e.g., an arithmetic error in adding up your score), you don't need to submit a re-grade request. Simply bring the error to my or a TA's attention so that we can correct it.

CLASS POLICIES

Academic participation

Under university policy, **you must verify your participation in this course no later than the add deadline (Thursday 10/10)** by visiting https://participate.ucdavis.edu. If you don't, you may not be able to register next term, or you could face a reduction in your financial aid.

Academic honesty

To protect the integrity of a UC Davis degree, and to reward my students' efforts to learn the material, I expect everyone in this class to follow the UC Davis Code of Academic Conduct at all times.

To ensure that you know what I expect, I have posted the Academic Code to Canvas (you can also find it at http://sja.ucdavis.edu/cac.html). Please read it and make sure you understand it, and please make every effort to avoid even the appearance of suspicious behavior.

Academic dishonesty includes, but is not limited to,

- using cell phones or notes on exams
- copying or looking at another student's exam
- talking during exams
- copying another student's homework

I am required to refer all suspected violations of the Academic Code to Student Judicial Affairs for disciplinary action. **If you are found by Judicial Affairs to have cheated on an exam, you will receive an "F" in my course.** If you are found to have cheated on a homework assignment, your final grade will be reduced by one whole letter grade (e.g., from B+ to C+).

You and your classmates have worked hard to get here, and Giuseppe, Sean, and I will work hard to teach you to the best of our ability. Please do not disrespect our shared efforts by attempting to cheat.

Communicating with us

Course announcements: I will communicate with you mostly through Canvas "Announcements". Please make sure your Canvas account is configured to send you email notifications when an announcement is posted (click "Account", then "Notifications", then the check mark next to "Announcement").

If you have questions about course material:

- When possible, bring your questions to office hours or discussion section. It's much, much easier and more efficient to talk about economics in person than in writing.
- You may also post questions on the Canvas "Discussions" page, where Giuseppe, Sean, and I (as well as your fellow classmates) can give timely answers that the whole class can benefit from. (And of course, please don't disclose the answers to homework problems on the discussion forum.)
- In general, please refrain from emailing your TA or myself with questions about course material: given the size of the class, we need to focus our efforts on lecture, section, office hours, and the discussion forum, where we can provide much better assistance than is possible over email.

If you have questions about course administration/policies:

- Look carefully through the syllabus and through other relevant documents posted on Canvas.
- If you're still unsure, you may then email me or your TA. We will not respond to emails asking questions that are clearly stated in the syllabus.

If you are struggling with the course: Come to office hours, talk to me after class, or send me an email.

Sensitive issues and missed exams: For questions involving sensitive matters (e.g., a health or family issue), or if you are requesting an excused absence from a midterm exam, please email me directly.

Technology policy

No laptops, cell phones, or recording devices are allowed in lecture. (Tablets are okay as long as you keep them flat on your desk.) Also, please do not take photos during class, as this is quite distracting!

I have adopted this policy because research shows that students learn more effectively when electronics are banned from the classroom. Taking notes by hand improves comprehension and memory, and it contributes to a classroom environment where you, your neighbors, and I can all do our best work.

COURSE OUTLINE

Lecture and (tentative) homework schedule

Note: The homework due dates listed below are subject to change, depending on how quickly we get through the material. I will announce exact due dates as the course progresses.

Week #	Tuesday		Thursday		Homework	
1			9/26	Lecture	9/27	—
2	10/01	**Online lecture**	10/03	Lecture	10/04	**HW1 due**
3	10/08	Lecture	10/10	Lecture	10/11	**HW2 due**
4	10/15	Lecture	10/17	Lecture/Review	10/18	**HW3 due**
5	10/22	**Midterm 1**	10/24	Lecture	10/25	—
6	10/29	Lecture	10/31	Lecture	11/01	**HW4 due**
7	11/05	Lecture	11/07	Lecture/Review	11/08	**HW5 due**
8	11/12	**Midterm 2**	11/14	Lecture	11/15	—
9	11/19	Lecture	11/21	Lecture	11/22	**HW6 due**
10	11/26	Lecture	11/28	**Thanksgiving**	11/29	—
11	12/03	Lecture	12/05	Lecture/Review	12/06	**HW7 due**

There will be no in-person lecture on Tuesday 10/01. Instead, I will prepare a recorded lecture on problem-solving and study tips for you to watch on your own time.

If time permits, a portion of the lectures on 10/17, 11/07, and 12/05 will be reserved for in-class review sessions. If we are running behind, however, these will be regular lectures.

The midterm exams will be administered in class on 10/22 and 11/12. The registrar has scheduled the final exam for Wednesday 12/11 from 6:00–8:00pm. **Please make sure you will be available to attend both midterms and the final exam. If you have to miss one or more exams, you should not enroll in this course.**

Tentative list of topics

Below is the list of topics in the order I plan to cover them (chapter numbers refer to Perloff, 4th Edition). This list is subject to change; I will inform you of any changes as the course progresses.

- Part I (before Midterm 1):
    - Monopoly (Ch. 11.1–11.5)
    - Price discrimination (Ch. 12.1–12.3)
    - Factor markets (Ch. 15.1)
    - Monopsony (Ch. 11.7)
- Part II (between Midterms 1 and 2):
    - Game theory (Ch. 13.1–13.2)
    - Oligopoly (Ch. 14.1–14.5)
    - Public goods (Ch. 17.6)
- Part III (after Midterm 2):
    - Externalities (Ch. 17.1–17.5)
    - Choice under uncertainty (Ch. 16.1–16.3)
    - Adverse selection (Ch. 18.1–18.2)
    - Moral hazard (Ch. 19.1)