Economics 51Mark L. Tendalltendall@stanford.eduStanford UniversityLandau Economics Building, Room 147Winter 2015-2016Office Hours: Tu 3:30-5pm, We 9:30-11am

Econ 51: Economic Analysis II (Intermediate Microeconomics, Part II)

Course overview and objectives

Economics 51 is the second course in the Economics Department's undergraduate "core" curriculum (Econ 50-51-52), a three-quarter survey of intermediate microeconomics and macroeconomics. Building on the basic microeconomic framework introduced in Econ 50, we will develop additional models for depicting the behavior of firms, individuals, and governments. First, we will study the pricing, production, and strategic choices of firms with market power: beginning with such topics as price discrimination, vertical integration, and an economic analysis of advertising, we will proceed to models of oligopoly and monopolistic competition. This will be followed by a brief survey of game theory and its microeconomic applications. Next we will show how basic models of consumer and producer theory can be extended to incorporate risk and uncertainty. We will also explore several topics in the economics of information, including moral hazard, adverse selection, and auction theory. After the midterm exam, we will proceed to an analysis of general equilibrium theory, using models that explicitly account for the ways in which various markets (such as labor, capital, and product markets) are interconnected, and developing the economic theory of gains from trade. We will also review the efficiency properties of markets, including cases in which competitive markets do not yield efficient outcomes. We will conclude with a brief overview of political economics, assessing the efficiency and other properties of governmentfunded outcomes and political decisions. Throughout the quarter, lectures, assignments, and exams will be designed to give you a strong grounding in the tools of microeconomic analysis – shedding light on such diverse topics as the rise and fall of firms and industries, the effects of globalization, and the conditions that give rise to economic crises.

Prerequisite: Econ 50

Econ 51 closely follows and builds on many of the topics developed in Econ 50. If your grasp of Econ 50 material (basic consumer and producer theory, both graphical and mathematical; constrained optimization; comparative statics) is rusty, you may want to review that material in the opening weeks of this quarter. As in Econ 50, we will make frequent use of multivariable calculus; we will also use some basic probability and statistics (including such topics as expected value and variance).

Required text

Besanko and Braeutigam, *Microeconomics*, 5th edition, Wiley, 2014.

Besanko and Braeutigam will serve as our primary textbook; you should read all assigned chapters (and their appendices) in full. Some additional readings will be announced in class and posted in Coursework. If you already own a copy of an earlier edition of the Besanko and Braeutigam textbook, you probably do not need to purchase the 5th edition; it will be your responsibility, though, to keep track of any differences between the texts. Remember that several copies of the book are kept on reserve in the library.

Course organization

Lectures will be held in Bishop Auditorium on Tuesdays and Thursdays from 1:30 to 3:20 p.m. On Fridays, you will attend a 50-minute section with your teaching assistant. Section meetings will help reinforce your understanding of the course material, both intuitively and mathematically. I strongly recommend that you attend every week, and that you get to know your TA well. Regular lecture attendance should prove to be valuable as well, particularly since we will be covering quite a bit of material that does not appear in the textbook. Please make good use of office hours (both mine and the TAs'), which will begin during the second week of the quarter. In order to foster a productive learning environment, laptop computers will be allowed in the lecture hall only for note-taking and other academic uses relevant to Econ 51. All other electronic devices, with the exception of iClickers, should be turned off during class.

Teaching assistants and sections

You will be assigned a teaching assistant and a specific weekly TA section time by Wednesday, January 13; regular sections will meet for the first time on Friday, January 15. In section meetings, TAs will collect and return homeworks, review each week's material, and present examples not covered in lectures. You will be responsible for all material covered in sections.

E-mail and course website; section registration

TA sections will open for registration (in Coursework, not in Axess) after the first day of class. By Sunday, January 10, please indicate your preference for a TA section on the Econ 51 course website at http://coursework.stanford.edu. Also remember to add Econ 51 to your study list in Axess; if you do so immediately, it will simplify your coursework registration. All homework assignments, answer keys, handouts, and supplementary readings will be available on Coursework, so it is important that you check it frequently. Our Coursework website will also provide information about office hour times and locations. The TAs and I will frequently use Coursework to make course-related e-mail announcements; you are encouraged to communicate with us via e-mail. We will use Piazza (http://www.piazza.com) to answer questions electronically, as well as for frequent online discussions. If you have questions about

course material, I strongly encourage you to post them in Piazza, so that you can interact with your classmates, and all of us can benefit from reading all questions and answers. We will send out information about enrolling in Piazza after the first day of class. For any other questions, please attend office hours and/or contact me via e-mail. Remember that e-mail is an imperfect substitute for personal contact; please use e-mail only for questions that can be answered via simple text-only responses, or to request an appointment.

Homeworks

Homeworks will be assigned (and posted in Coursework) approximately every week, and will be due during your TA section meetings unless otherwise announced. If you are unable to hand in an assignment during section, you can submit your homework early in person or electronically. Make sure, though, that you make these arrangements with me or with your TA *beforehand*. No late homeworks will be accepted. I will drop your lowest homework score in calculating your final grade, so you will not be penalized if illness, travel, emergency, stress, or distraction should cause you to skip one assignment. Please take the homeworks seriously – Econ 51, like Econ 50, is a "problem-solving" course, and careful work on the homework assignments will be good preparation for the midterm and final exams. These assignments will also give you an opportunity to analyze and interpret current events and economic issues, and to practice your skills in writing about economics.

Midterm and final exam

There will be one midterm exam in class on Thursday, February 4; the final exam will be on Tuesday, March 15, from 7:00 to 10:00pm. There will be no make-up exams, and no early or late sittings for exams. Varsity athletes or others traveling on official university business may be able to take exams remotely (at the same time as all other students): please contact me at least one week in advance in order to make arrangements. If an emergency makes it impossible for you to take the final exam at the appointed time, but you have completed all other requirements for the course, I can give you a grade of "Incomplete" to be resolved by taking the Econ 51 final exam at the end of a future quarter – but only if you request such an arrangement from me in advance.

Grading

Your final numerical average will be calculated based on your performance in homeworks (25%), the midterm (30%), and the final exam (45%). Numerical scores will not be converted to letter grades until the very end of the quarter. Specific letter grades will never be assigned to individual homework assignments or exams. If, due to a serious illness or emergency, you are unable to take the midterm exam, your final grade will be based solely on your homeworks and final exam. You must contact me immediately, though, in order to receive this accommodation.

Lecture notes and class attendance

The notes you take during class lectures will serve as your single best resource in preparing for exams and homework assignments. Copies of all projected slides will be posted online after each class; note, though, that these will not include all of the information covered in lectures. Textbook readings will provide additional detail, and will serve as a good complement to (but not a substitute for!) your attendance in class.

"Clickers" and other electronic devices

In order to make lectures more interactive, to give you opportunities to test and deepen your grasp of course concepts, and to allow me to adapt my lectures to your understanding, we will frequently use iClickers in the classroom. Your performance on clicker questions will provide evidence of class participation and effort, and may benefit you if you are on the borderline between two letter grades at the end of the quarter. You will never be graded on whether or not your clicker responses are "correct."

Economics Department Common Course Policies

All courses taught in the Stanford Department of Economics are governed by a common set of course management rules. A document explaining these rules is available in coursework, and on the Economics Department website at https://economics.stanford.edu/undergraduate/major/economics-common-syllabus. Please be sure to read this document in its entirety, and let me know if you have any questions.

Students with documented disabilities

Students who have a physical or mental impairment that may necessitate an academic accommodation or the use of auxiliary aids and services in a class must provide a verification letter dated in the current academic term from the Office of Accessible Education (OAE). Please contact the OAE as soon as possible and provide me with your letter by the end of the second week of the quarter (January 15) in order to ensure that we can accommodate you appropriately. The OAE is located at 563 Salvatierra Walk (phone 723-1066 Voice; 725-1067 TTY; http://studentaffairs.stanford.edu/oae).

Course lecture schedule (subject to revision)

Date	Subject	Textbook (B&B) Readings
Tu 1/5	Course overview; review of Econ 50 material; perfect competition	Chapters 10-11
Th 1/7	and monopoly; monopsony.	
Tu 1/12	Price discrimination; vertical integration; tying and bundling; advertising.	Chapter 12
Th 1/14		
Tu 1/19	Market structure and competition; oligopoly models; monopolistic competition.	Chapter 13
Th 1/21		
Tu 1/26	Game theory and strategic behavior: Nash equilibrium; prisoner's dilemma games; sequential move games; backward induction; applications.	Chapter 14
Th 1/28		
Tu 2/2	Review / synthesis.	
Th 2/4	Midterm Exam (in class)	
Tu 2/9	Risk and information: expected value and variance; expected utility; risk aversion and risk premia; insurance.	Chapter 15
Th 2/11	Asymmetric information: moral hazard; adverse selection; value of information; auctions.	Chapter 15
Tu 2/16	General equilibrium theory: graphical and numerical examples; conditions for general equilibrium; Walras' law; comparative statics and general equilibrium.	Chapter 16
Th 2/18	Efficiency of competitive markets; Edgeworth boxes; welfare theorems; comparative advantage and gains from trade.	Chapter 16
Tu 2/23	General equilibrium theory: further applications and extensions.	
Th 2/25	Externalities and public goods: property rights; the Coase theorem; optimal provision of public goods.	Chapter 17
Tu 3/1	Public goods, continued; political economics; further extensions.	
Th 3/3		
Tu 3/8	Summary; review.	
Th 3/10		
Tu 3/15	Final Exam, 7-10pm [Note that the Stanford Registrar's Office set this time to avoid proximity to the Econ 102A final exam.]	