ECON 133 F/G Principles of Microeconomics Colby College | Department of Economics

Biwei Chen bchen@colby.edu Diamond 351 | By Appointment MW 4-5PM & TR 11-11:40AM https://bchen.youcanbook.me Note: When you reach out to me via email, please indicate in the **Subject: E133**. Throughout the course, please make sure that you can receive announcements timely in email via Moodle.

Prerequisite

Basic Algebra and Geometry

Meetings

MW 1:00-2:15 (F) & 2:30-3:15 (G), DIAM 145

Description

This course introduces the foundations of economic analysis and explanation. It follows the classical themes of Adam Smith in the Wealth of Nations, highlights the economic ways of thinking and quantitative reasoning, and applies economic principles to a wide range of real-world phenomena. Topics include the nature of economics, social competition and rules, production and exchange, international trade, consumer choices, producer decisions, market equilibrium and welfare, income distribution and inequality, government taxation and intervention, market efficiency and failures, and the Coase theorem. Format: lectures and discussions, polls and quizzes, book review, problem sets, exams, research project.

Objectives

The course develops basic analytical frameworks for decision making and policy analysis. The main goal is to instill economic intuition that can help students better understand the society as well as model household and business decisions. Moreover, students will acquire foundational theories and essential skills to solve economic problems intuitively, graphically, and quantitatively.

Upon completing this course, students should be able to

- Explain the definition/nature/scope of economics and its scientific foundation
- Understand competitive criteria and "rules of the game" in social competition
- Apply efficiency and equity principles to private decisions and public policies
- Build the opportunity cost framework and perform marginal equalization analysis
- Appreciate the driving forces behind exchange and the benefits of international trade
- Model consumer behavior, producer behavior, and how their decisions affect markets
- Apply the law of consumption, the law of production, and the law of demand and supply
- Analyze the market competition effects and contrast perfect competition to monopoly markets
- Develop the demand-supply model to analyze market fluctuations and government public policy
- Characterize factor market equilibrium, model income distribution and measure income inequality
- Evaluate market efficiency, examine market limitations, and identify the sources of market failures

Website

Please check the course website regularly for updates on lecture materials, assignments, readings, videos, exam guides, course policies, and other resources. Lecture slides will be posted ahead of class meetings. Students shall read the material before the lecture and review afterwards. Note that the textbook slides are not complete and students are advised to take notes with equations, graphs, and models.

Textbook

[1] N. Gregory Mankiw (2021) Principles of Economics, 9e, Cengage [Web Link]

[2] Biwei Chen (2022) *Foundations of Economic Analysis and Explanation*. Cognella (forthcoming) Digital textbook materials are provided free of charge. For a color-print copy, students can order online (\$34.95 + \$9 delivery). To render the textbook affordable to students, the author has waived all royalties.

Evaluation

Student evaluation consists of Book Review (4% extra credit), Problem Sets (20%), Quizzes (10%), Midterm Exam (35%), Final Exam (35%), and Research Project (10% optional). The overall evaluation is a letter grade converted from the percentage scale taking into account of the entire class distribution.

- Book review or summary for digesting a brief to Adam Smith and his work (first week assignment). Avoid any citation and reference. Write in your own words (within two pages, <1500 words).
- Problem sets will be assigned every week with extra credit opportunities. Format: analytical and
 quantitative applications of economic theories and models. Students are encouraged work in groups
 but must submit independent solutions. The total grades for all problem sets are capped at 20%.
- Quizzes. There are weekly short quizzes throughout the semester and the highest ten will be taken for credit. Format: multiple-choice questions on basic concepts, models, and calculations. Due to extra opportunities, no make-up quizzes will be rescheduled for absent or late students.
- Midterm and final exams will not be rescheduled because of travel and other personal arrangements. In the case of a documented emergency or conflicts with the scheduled exam date, a make-up exam will be given (or with the pre-approval from the instructor).
- Research project will be assigned after the midterm and due before the final exam. Students can choose "Corporate Business and Market Analysis" or "Public Policy Analysis and Evaluation". Students can substitute the research project grades for 10% of the exam grades. Refer to Projects
- Attendance and classroom. Department-wise policy applies. Without a valid excuse, late attendance
 and absences will negatively impact student's grade. Cellphones and other digital devices are not
 permitted during the lectures and exams unless otherwise instructed. Please maintain mutual respect
 and courtesy throughout the class. Content-related discussions and questions are encouraged.

Colby College supports the religious practices of students, faculty, and staff. Students are expected to notify instructors of their intent to fulfill the obligations of their religious tradition well in advance of these days. For this class, students are responsible for notifying the instructor by email at least two weeks in advance of the date in question. Please note that all assignment deadlines are firm and late submission will not be accepted due to various extra credit opportunities.

Grading Metrics and Letter Grades (based on a 100% scale)					
A+ 97~100	B+ 87~89	C+ 77~79	D+ 67~69		
A 93~96	В 83~86	C 73~76	D 63~66		
A- 90~92	B- 80~82	C- 70~72	D- 60~62		

Tentative Schedule

Week	Topics	Lecture	
W1	Course Logistics & Overview Introduction The Scientific Methodology in Economics	L1 CH1 L2 CH2	
W2	Scarcity, Competition and Social Rules The Opportunity Cost and Applications	L3 CH2 L4	
W3	World Trade Facts and Patterns Classical Trade Theory and Model	L5 CH3	
W4	The Theory of Value and Market Exchange	L6	
W5	Consumer Choice Theory: Utility and Preference Consumer Choice Theory: Utility Maximization	L7 L8 CH21	
W6	The Law of Demand: Quantity Demanded vs Demand The Law of Demand: Price Elasticity and Applications	L10 CH4 L11 CH5	
W7	Review Session & Midterm Exam: TBA		
W8	Production Theory: Output and Technology	L12 CH13 L13	
W9	Production Theory: Cost and Profit	L14 CH13 L15 CH14	
W10	Market Structure and Business Decision Perfect Competition vs Monopoly Firms	L16 CH14 CH15 16 17	
W11	Demand and Supply Model: Market Equilibrium Demand and Supply Model: Welfare Analysis	L17 CH4 CH7 CH8	
W12	Market for Production Factors: Income Distribution Theory Market for Production Factors: Income Inequality Measure	L18 CH18 19 20	
W13	Market Intervention Policies: Price Control Market Intervention Policies: Quantity Limit	L19 CH6	
W14	General Equilibrium and Market Efficiency Market Failures and the Coase Theorem	L20 CH10 CH11	
W15	Review Session & Final Exam: TBA	•	

Note: "L" stands for lectures from Chen (2022); "CH" refers to chapters from Mankiw (2021) No classes on Oct. 10M & 11T; No classes on Nov. 23W-27; Last day of class Dec. 9F [Link] Last day to drop Oct. 21; last day to withdraw Dec. 9 (Class of 2026) [Link]

Get the Most Out of this Course

- Attend lectures, office hours, and study groups
- Prepare the readings ahead of lecture (textbook slides)
- Take notes during lectures (lecture slides are incomplete)
- Pay attention to course announcements and instructions
- Start early to work on assignments in groups and alone
- Review the lectures afterwards with your study groups
- Clarify confusion and correct mistakes from assignments
- Seek help and guidance when puzzled or get stuck
- Practice makes perfect. Ask, ask, ask questions

Time-on-Task Expectation

Learning activity	Comments and formats	Minimum time on task	Total hours	
Ahead-of-lecture reading: slides	Overview topics/concepts Prepare to ask questions	About 30 to 60 minutes for each lecture	10 to 20 hours	
Lecture meetings	Rigorous introduction, analysis, and Q&A	About 70 minutes per meeting including polls & quiz	35 hours	
In-class polls	Interactive learning	About 5 to 10 minutes per lecture activities	2 to 3 hours	
In-class quizzes	Basic concept reviews	About 20 to 30 minutes per week	4 to 5 hours	
Lecture review (including videos)	Focus on lecture notes, examples & applications	About 2 to 4 hours per week for previous lecture slides and notes	20 to 40 hours	
Problem sets	Short answer, analytical and quantitative applications	About 3 to 4 hours per week	30 to 50 hours	
Exam preparation	Multiple choice & analytical Basic concepts & application	Midterm preparation: 10-15 hours Final preparation: 15-20 hours	25 to 35 hours	
Book review (optional)	Digest and reflect on a brief of Adam Smith and his work	Reading: 15 to 20 hours Writing: 5 to 10 hours	20 to 30 hours	
Enhanced readings (optional)	Expert encyclopedia on key topics in microeconomics	About 2 to 3 hours per week on average for 3 to 5 articles	30 to 40 hours	
Research project (optional)	Real-world applications of microeconomic analysis	About 5 to 10 hours per week for 4 weeks before final exam	20 to 40 hours	
		Total time expected: 150-200 hours		

Academic Integrity https://www.colby.edu/academicintegrity/academic-integrity-on-the-syllabus/

Academic dishonesty is a serious offense against the college. Sanctions for academic dishonesty are assigned by an academic review board and may include failure on the assignment, failure in the course, or suspension or expulsion from the College for multiple academic dishonesty findings." In particular, cases or not reported to the dean.

Students are expected to exhibit extreme care relative to personal honesty in all academic work, including in-class and out-of-class learning experiences, such as exams, quizzes, essays, problem sets, journals citation, papers and research projects. Posting an exam, assignment, or answers to them on an online forum (before, during, or after the due date), in addition to consulting posted materials, constitutes a violation of the Academic Honesty policy. Likewise, unauthorized use of live assistance websites, including seeking "expert" help for specific questions during an exam, can be construed as a violation of the policy. Dishonest work includes but is not limited to the following:

- Obtaining aid or information without giving due recognition to the sources of such aid or information. Such dishonesty encompasses 1) asking to copy or copying other students' work to claim as one's own on an exam or assignment of any kind and 2) all forms of plagiarism.
- Plagiarism includes using ideas, words or phrases from any source without citing that source and downloading or purchasing papers or parts of papers from others or the Internet and claiming such work as one's own.
- Giving aid or information when it is clearly inappropriate to do so, such as providing answers for an exam or writing a portion of a paper or an entire paper for someone, including selling one's work.

Plagiarism: Presenting the work of another person as one's own work (including papers, words, ideas, information, computer code, data, evidence-organizing principles, or style of presentation of someone else taken from the Internet, books, periodicals or other sources). Plagiarism includes:

- quoting, paraphrasing or summarizing without acknowledgment, even a few phrases
- relying on another person's data, evidence or critical method without credit or permission
- failing to acknowledge the source of a major idea or ordering principle central to one's own paper
- submitting another person's work as one's own; using unacknowledged research sources gathered by someone else

Unauthorized Collaboration: Collaboration on projects, papers, computer programs or other academic assignments that have been prohibited by the instructor.

Misrepresenting or fabricating material, including misleading citation of sources as well as falsified or fabricated data or results from experiments or other analyses. Misrepresenting facts related to academic performance, including the justification of absences, late assignments and other activities.

Avoid Plagiarism https://libguides.colby.edu/avoidingplagiarism
Plagiarism Exercise https://plagiarism.arts.cornell.edu/tutorial/exercises.cfm

Covid-19 Policy & Procedures https://covid19.colby.edu/covid-19-health-and-safety/
Academic Procedures https://www.colby.edu/catalogue/2014/06/03/academic-procedures/
Colby Plan https://www.colby.edu/catalogue/2014/06/03/colby-plan-mission-and-precepts/
Religious Holidays & Events https://life.colby.edu/what-to-do/spiritual-life/holiday-calendar/