

Subject: EBGN Number: 201

Course Title: Principles of Economics

Section: A and B

Semester/year: Spring 2017

Instructor: Scott Houser, PhD

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How I think about teaching and learning:

Somewhere along the line, many students have developed a definition of teaching that centers on the delivery of information. However, I think of teaching as designing opportunities for students to learn.

That says something about my view of our roles in this class. Learning is your responsibility. I can't do the hard work of learning for you. Your job in this class is to master the tools of economics so that you'll be able to use them in your personal and professional lives.

My job is to create rich and effective ways for you to learn the principles of economics and to provide you with opportunities to practice using the tools of economics to analyze real problems. In and around those opportunities, I will do everything I can to help each of you learn.

I'm convinced that the best learning happens when it's done with other learners. There is an enormous amount of research that demonstrates the value of active and interactive learning (I'm happy to share if you're interested). That's why we're going to use most of our time in class and recitation *doing* economics *together*.

Office hours:

Please note that I have office hours in my office and at CASA. Please check the schedule for my location.

- Monday: 8-9 AM (EH328), 12-2 PM (at CASA), 3-4 PM (EH328)
- Tuesday: 9-10 AM (at CASA), 10 AM 12 PM (EH328)
- Wednesday: 8-10 AM (EH328), 3-4 PM (EH328)
- I spend a lot of time at recitations sections so I don't have scheduled office hours on Thursday or Friday. Those are good days for appointments.

I'm also happy to meet you at other times by appointment if my posted office hours conflict with your schedule. I'm available most of the week when I'm not in class so we should be able to find a time that is better for you. If you'd like to make an appointment, please email me with a few suggested times, and we'll work out a time to meet in person, talk by phone or chat online.

Student Learning Outcomes

At the end of the course, students will:

- 1. Apply the scientific method to economic questions.
- 2. Analyze markets for goods, services, and resources using the supply and demand model.
- 3. Analyze government policy using the tools of economics with consideration for efficiency criteria and equity considerations.
- 4. Apply tools of cost-benefit analysis to decisions of individuals and the society.
- 5. Analyze the decisions of oligopolists using game theory.
- 6. Explain and evaluate measures of macroeconomic activity including GDP, unemployment, inflation and measures of income distribution.
- 7. List the determinants of economic growth.
- 8. Explain international differences in economic well-being using the traditional economic growth model with attention to the validity of the model for different institutional contexts.
- 9. Evaluate the predictions of economic models using economic data.

Topics Covered – additional detail in course calendar

- 1. Modeling in economics
- 2. Economic decision-making
- 3. Markets and efficiency
- 4. Labor markets
- 5. Market failures
- 6. Cost-benefit analysis
- 7. Imperfect competition
- 8. Macroeconomic measurement
- 9. Economic growth
- 10. Income distribution and poverty

Course description from Bulletin: Introduction to microeconomics and macroeconomics. This course focuses on applying the economic way of thinking and basic tools of economic analysis. Economic effects of public policies. Analysis of markets for goods, services and resources. Tools of cost-benefit analysis. Measures of overall economic activity. Determinants of economic growth. Monetary and fiscal policy.

Prerequisites: None.

Class meeting days/times:

- Section A: MW, 11:00 to 11:50 AM
- Section B: MW, 2:00 to 2:50 PM
- Recitations meet on Thursdays and Friday at various times and locations

Class meeting location: Metals Hall in the Green Center

Blackboard link: blackboard.mines.edu (you may self-enroll if you are not automatically enrolled in the Blackboard course)

Instructional activity: <u>3</u> hours lecture <u>0</u> hours lab <u>3</u> semester hours

Course designation: <u>____</u> Common Core <u>___</u> Distributed Science or Engineering

____ Major requirement ____ Elective ____ Other

Special information about the hybrid course design:

This semester we will be experimenting with a hybrid-online course design. The basic idea is that you will do a significant amount of work online to get the basics of the course content before you come to class and recitation to work on applications of economic tools and models. The online work will require an average of 2.5 hours per week.

The online work will replace one hour of class meetings each week. Most weeks, you will attend class for one hour on either Monday or Wednesday, and you will attend your scheduled recitation section for one hour each week.

We have assigned students to Monday or Wednesday class meetings by recitation section as follows:

| Monday | Wednesday |
|--------|-----------|
| A01 | A07 |
| A03 | A09 |
| A04 | A10 |
| A06 | A15 |
| B02 | B13 |
| B05 | B14 |
| B08 | B16 |
| B11 | B19 |

Required Materials

Connect Economics – all assignments are integrated with Blackboard so you should follow the links on Blackboard to register and to complete assignments. Registration opens on Monday, 8/22. **Other required supplemental information:** Additional required readings and assignments will be posted on Blackboard.

Grades and Grading Components

| ٠ | Connect Learnsmart assignments | 20% |
|---|--------------------------------|-----|
| ٠ | Connect quizzes | 5% |
| ٠ | In-class exercises | 20% |
| ٠ | Group research projects | 30% |
| ٠ | Group citizenship | 5% |
| ٠ | Midterm exams | 10% |
| • | Comprehensive Final Exam | 10% |

1. Connect Learnsmart Assignments – 20% of your course grade

This online learning resource is where you will encounter most of the basic course content. These assignments are built on an adaptive learning system that assesses your knowledge of the course content and focuses your time and effort on the areas where you need additional study. The Learnsmart assignments on Connect are replacing 1/3 of the class meetings this semester. Generally, there will be 1 set of Learnsmart assignments due each week which is typically due on Monday at 8:00 AM. See the course calendar for the schedule of assignments and estimated time for completion. Advice from other Mines students about these assignments is included in the last section of this syllabus before the course schedule.

2. Connect Quizzes – 5% of your course grade

These online quizzes will give you a chance to demonstrate your mastery of the content that was learned in the Connect Learnsmart assignments. You will have access to notes, other learning resources and other students during the quizzes. See the course calendar for specific deadlines. Quizzes are available 1 week before they are due.

3. In-class exercises – 20% of your course grade

These activities will include experiments, data analysis, practice problems, and short writing assignments that will help you to practice using the language and tools of economics. The inclass exercises will build on the information that you have learned from Connect and will give you a chance to demonstrate that you can do economic analysis. These will include both individual and group activities. Some exercises will require you to bring something to class for discussion and further analysis. Others will require you to finish the work we begin in class on your own time. We will do in-class activities during the large class meetings and in recitations.

4. Group research projects – 30% of your course grade

The group research projects will allow you to work with your colleagues in recitation to answer a structured question about a market, a government policy or other real-world economic issue. You will be expected to use an economic model for analysis to explain and/or predict, and to test your analysis against data. Groups will submit project reports in the form of a memo to a defined audience (e.g., employer, government agency, interest group). Groups will receive feedback from peers and your TA. Groups will have the opportunity to revise their analysis and reports until they are acceptable. Recitation time will be allocated for group projects so outside meeting time should be minimal. NOTE: Failure to contribute to your group's report will result in a score of 0.

5. Group Citizenship – 5% of your course grade

Individual group members will provide feedback on the quality of participation, engagement and professionalism of other group members. This feedback will be aggregated over all the groups in which you participate and will inform this portion of your course grade.

6. Midterm Exams and Comprehensive Final Exam – 20% of your course grade

These multiple choice exams will assess your mastery of the course content and your ability to use the tools developed in the course. The first midterm will be administered in class on *Wednesday, 2/22*. The second midterm will be administered in recitation on *Thursday, 4/27, or Friday, 4/28*. The final exam will be administered according to the CSM final exam schedule.

Your grade in this class will be based on your overall percent average, using the following guidelines:

- A 92% and greater,
- A-: 90% to less than 92%,
- B+: 88% to less than 90%,
- B: 82% to less than 88%,
- B-: 80% to less than 82%,
- C+: 78% to less than 80%,
- C: 72% to less than 78%,
- C-: 70% to less than 72%,
- D+: 68% to less than 70%,
- D: 60% to less than 68%,
- F: less than 60%.

These guidelines are subject to change, but if you score in the stated range you are guaranteed at least the corresponding grade.

Grades will be maintained and posted on Blackboard throughout the semester.

Grievance Procedure: Anyone feeling that a dispute exists after the grading of any assignment may submit a written grievance. The grievance should identify the item in dispute and arguments supporting the student's position. Grievances must be submitted in writing within two class periods following the return of the assignment. I will return a written response within two class periods after receipt.

Course Attendance Policy

All students are advised to be familiar with CSM's policy regarding the make-up of work missed due to excused absences. This policy may be found in the Bulletin and at http://inside.mines.edu/Student-Absences. In short, documentation for an excused absence must be provided to the Office of the Associate Dean of Students who will then send notices of excused absence to the faculty. The method for providing this documentation is up to the Associate Dean of Students. In all cases of unexcused absences the faculty member has the right to deny the student the opportunity to make up all or part of the missed work. The Athletics Department issues excused absence notices for student athletes.

Due dates: The dates of online assignments and group projects are indicated on this syllabus. We generally do not offer extensions, unless there are extenuating circumstances. These circumstances include documented illness, family emergencies, and business/athletic/school related trips. Excused absences are required for deadline extensions or make-up assignments to be provided. Please coordinate extensions with your TA.

Class sessions and recitations: Although attendance is not taken on a daily basis, students are expected to regularly attend and participate in class. If you miss a class meeting, it is your responsibility to get any notes and assignments from that class. The exercises we do during classes and recitations are designed as interactive learning activities; therefore, their value depends on your presence and your participation. In-class exercises and recitation activities cannot be exactly duplicated as individual assignments. However, alternatives will be provided for students with excused absences.

Coursework Return Policy

In-class exercises will be returned within one week. Group submissions will be returned to the first student listed. It is the responsibility of the group members to ensure that all members receive the feedback from the assignment. Online assignments give you immediate feedback. Exams will be graded within one week and will be available for review in recitation.

iClicker Policy

We'll use iClickers often in class; however, points will not be awarded solely based on student use of iClickers. No registration is necessary.

Disability Support Statement:

The Colorado School of Mines is committed to ensuring the full participation of all students in its programs, including students with disabilities. If you are registered with Disability Support Services (DSS) and I have received your letter of accommodations, please contact me at your earliest convenience so we can discuss your needs in this course. For questions or other inquiries regarding disabilities, I encourage you to visit <u>disabilities.mines.edu</u> for more information.

Policy on Academic Integrity/Misconduct

The Colorado School of Mines affirms the principle that all individuals associated with the Mines academic community have a responsibility for establishing, maintaining and fostering an understanding and appreciation for academic integrity. In broad terms, this implies protecting the environment of mutual trust within which scholarly exchange occurs, supporting the ability of the faculty to fairly and effectively evaluate every student's academic achievements, and giving credence to the university's educational mission, its scholarly objectives and the substance of the degrees it awards. The protection of academic integrity requires there to be clear and consistent standards, as well as confrontation and sanctions when individuals violate those standards. The Colorado School of Mines desires an environment free of any and all forms of academic misconduct and expects students to act with integrity at all times.

Academic misconduct is the intentional act of fraud, in which an individual seeks to claim credit for the work and efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. Student Academic Misconduct arises when a student violates the principle of academic integrity. Such behavior erodes mutual trust, distorts the fair evaluation of academic achievements, violates the ethical code of behavior upon which education and scholarship rest, and undermines the credibility of the university. Because of the serious institutional and individual ramifications, student misconduct arising from violations of academic integrity is not tolerated at Mines. If a student is found to have engaged in such misconduct sanctions such as change of a grade, loss of institutional privileges, or academic suspension or dismissal may be imposed.

The complete policy is <u>online</u>.

Advice from previous students about the Connect Master assignments:

- 1. Focus on learning
 - You need to actually want to learn the material and not just get through assignments. You may get through assignments easier, but if you learn the material you'll do well on tests.
 - Sit down and do the Connect assignments with intent of learning and you will learn the material for the course very well.
 - Make sure you do the assignments ahead of time and don't just breeze through them to get the answers right. It doesn't take much extra time to be engaged when doing the activities and it is hugely beneficial.
 - Don't just mindlessly work your way through Connect activities. It is definitely possible to complete entire Connect activities by just guessing until you get enough questions accidentally right to pass the assignment. Some of my friends did this, and they ended up struggling a lot with the quizzes later on, creating huge issues. Definitely don't skim the Connect activities.
- 2. Watch the videos carefully
 - Always watch the videos. They are the most helpful tool. Most of the questions the system asks come from the videos. Additionally, there are definitions to key words on the side of each video.
 - Actually pay attention to the videos. It is very easy to ignore them and still get the homework done quickly, but in order to actually learn econ you should definitely watch the vids.

- 3. Take notes (this was the most often repeated advice)
 - Handwritten notes will make the actual assignments online go very quickly and will help in class during lectures and in-class assignments. Makes it very easy to study for exams, as well.
 - Takes detailed notes that coincide with next lecture so you can complete the inclass exercises with ease. Come to class prepared.
 - It was helpful to write down definitions and formulas into my notebook that were explained in Connect.
 - Take notes on the videos and the other resources because in the beginning I did not do that and it was very difficult to do the LearnSmart assignments and participate in class.
- 4. Break up the work and don't wait until the last minute
 - Spread out the Connect assignments throughout the week. This helped my understanding as well.
 - I'd say to do it at your own pace. The site makes it very easy to break up into sections and do like a module a day which is a lot less stressful than three or four modules in one night.
 - Don't put the assignments off until the last moment. Just because you know you can get 100% on the assignments doesn't mean you should just sail through them. It'll come back to bite you on the exam.
 - I would say to NEVER wait to do all of your Connect assignments in one day/night. Mostly because it's simply not possible, and you won't learn anything.
- 5. Experiment
 - Don't necessarily follow one line of thought. Some chapters you'll need to read the book, others you can understand the terms and concepts easier by just doing the questions online. Some chapters you'll complete all the questions in one 30 min session. Other chapters it will take you several sessions of 30 min each to fully understand the concepts thrown at you. People learn different things at different paces, be flexible and adjustable in your learning. Only an idiot refuses to change bad habits.
- 6. Trust the system
 - I would just say to trust the system and also break up the time in learning the blocks of information because it isn't useful to get it all in one go.
- 7. Be honest about your confidence
 - Be honest about your confidence level when answering questions. If you answer wrong and say you think it is right or you know it the system will slow you down significantly. The Connect system does help you with topics that you might be struggling with.
 - Gauge your confidence answer (I know it; I think so; etc.) based on how long it took you to think of an answer.
- 8. Use the resources (including ebook, Why This Matters, Worked Examples, Recharge, Reports)
 - When you get a question wrong look at at least one of the resources they provide you so you understand why you missed the question so you can learn from it and you can answer it correctly the next time.
 - Don't be afraid to get questions wrong, and use the resources Connect offers when you do! Read the real world examples ["Why This Matters"], they're actually really interesting.
 - Take advantage of recharge. You can also create your own quizzes and exams in order to be prepared for the exams.

- 9. Be patient
 - Stick with it. It takes some getting used to, understanding the words they want and all, but once you do it is a very useful tool to learn econ.
 - The system isn't perfect so if you think that it should give you the point and it didn't, it's fine just move on it won't affect your score.
- 10. Work in groups and ask questions
 - Work in groups if you are struggling with understanding material because studying together can help you comprehend material easier.
 - Try to learn the answers or concepts online, but make sure to ask questions in class of online to better understand the class and objectives.
 - Take advantage of all of its resources and if you don't feel it helped you, speak up. Go to office hours or seek more help.

Detailed course schedule: (NOTE: Course content and schedule are subject to change. All changes will be announced in class and on Blackboard. It is your responsibility to keep up with posted announcements and changes to the schedule.)

| Week | Dates | Торіс | Connect Assignment | Estimated Connect Time (minutes) | Connect Quiz | In-class activity (proposed) | Recitation activity (proposed) | Notes |
|------|----------------|---|---|---|--|---|--|-----------------------------|
| | | | (Assignments and quizze | es due on Mon | day at 8:00 AM | | | |
| 1 | 1/10 – 1/13 | Introduction How to use Connect | unless noted) Create an account Intro video (due 1/11) Graph tutorial (due 1/18) | 30 | None | How do I learn? Engineering and economic problems Survivor | | No recitation |
| 2 | 1/18 – 1/20 | Economic models | Week 2 videos Fundamentals | 175 | None | Comparative advantage and gains to trade | PPF for the island Economic decision- making | No class on Monday, 1/16 |
| 3 | 1/23 – 1/27 | Demand and supply | Week 3 videos Demand Elasticity Supply | 158 | Week 2 material | Individual and market demand for sodas Gasoline spending and elasticity | Market experiment | |
| 4 | 1/30 - 2/3 | Market equilibrium and welfare | Week 4 videos Equilibrium and policy Market efficiency | 159 | Week 3 material | Gains to trade in the market experiment | International trade experiment | |
| 5 | 2/6 – 2/10 | International trade | Week 5 videos International trade | 151 | Week 4 material | Trumping international trade | Practice with FRED Discuss group research projects | |
| 6 | 2/13 – 2/17 | Shifts in S and D; comparative statics analysis | Week 6 videos Demand Supply Equilibrium and policy | 198 | Week 5 material Week 6 material | Shifting demand for autos Practicing comparative statics | More comparative statics practice Assign 1 st group research project | |
| 7 | 2/22 – 2/24 | Midterm exam on Wednesday, 2/22 | | | | Mid-term exam | Group work time | No class on Monday, 2/20 |

| 8 | 2/27 – 3/3 | Taxes and the labor market | Week 8 videos Equilibrium and policy Market efficiency Resources Resource prices and utilization | 168 | Week 7 material | Demand for some Mines grads | Modeling marijuana taxes Group work time | Draft group research project #1 due Friday, 3/3 at 11:59 PM |
|----|----------------|--|---|--------------|---------------------|---|---|--|
| 9 | 3/6 – 3/10 | Market failures – externalities and public goods | Week 9 videos Market failure | 68 | Week 8 material | The problem with zero pollution Public investment game | Group presentations | |
| 10 | 3/13 – 3/17 | Pollution policy | Lessons from economic approaches to policy* | 90 (approx.) | Week 9 material | Alternatives to command and control regulation | Cap and trade systems | Final group research project #1 due Friday, 3/17 at 11:59 PM |
| 11 | 3/20 – 3/24 | Tools of cost- benefit analysis | Present value* Cost-benefit analysis* | 90 (approx.) | None | Applying CBA to landmine clearance | Grade game Start 2 nd group research project | |
| | 3/27 – 3/31 | Spring Break | | · | | | - <u></u> | |
| 12 | 4/3 – 4/7 | Imperfect competition | Week 12 videos Monopoly Price discrimination Monopolistic competition and oligopoly | 71 | None | Game theory applications | Group work time | |
| 13 | 4/10 – 4/14 | Macroeconomic measurement (GDP, unemployment, and inflation) | Week 13 videos Measuring output and income Business cycles | 159 | Week 12 material | Nominal, real and per capita changes in GDP | Is more GDP better? Group time | Draft group research project #2 due Friday, 4/14 at 11:59 PM |
| 14 | 4/17 – 4/21 | Economic growth | Week 14 videos Economic growth The growth model* | 73 | Week 13 material | Growth rates Applying the growth model | | No recitation – E-days |

| 15 | 4/24- 4/28 | Applying the economic growth model | Convergence* Institutions* Innovation and growth* | 90 (approx.) | Week 14 material | Limits to the growth model | Midterm exam #2 in recitation | Final group research project #2 due Friday, 4/28 at 11:59 PM |
|----|---------------|--|---|--------------|---------------------|----------------------------|-------------------------------|--|
| 16 | 5/1 – 5/3 | Income and wealth distribution | Trends and causes* Global inequality* Why this matters* Social mobility* | 60 (approx.) | None | ТВА | | No recitation |
| | TBA | Final exam | (see the official CSM final exam schedule for date and time) | | | | | |

*Videos and questions outside of the Connect Master system