### Colorado School of Mines

#### Intermediate Microeconomics – EBGN 301 – Sections A and B

Instructor: Dr. Becky Lafrancoisemail: blafranc@mines.eduOffice: 110 Engineering HallOffice Phone: 303-384-2191Office Hours: 8-9 AM and 3-4 PM Monday and Wednesday, 9-11 AM Tuesday, or by appointment\*

\*You may schedule appointments outside of office hours through email.

Teaching Assistant: Andrew Shawemail: andshaw@mymail.mines.eduOffice/Lab Hours: 4-6 PM Wednesday, 9-11 AM Thursday – Outside of EH110

| Section A                        | Section B                               |
|----------------------------------|-----------------------------------------|
| Class Meetings: MWF 11:00-11:50  | Class Meetings: MWF, 2:00-2:50          |
| Class Location: Marquez Hall 326 | Class Location: Brown Building West 210 |

Course Web Pages: Canvas and possibly Blackboard

Instructional Activity: 3 hours lectureSemester Hours: 3Course Designation: Humanities and Social Science Requirement

# **Course Description**

This course introduces the theoretical and analytical foundations of microeconomics and applies these models to the decisions and interactions of consumers, producers and governments. Develops and applies models of consumer choice and production with a focus on general equilibrium results for competitive markets. Examines the effects of market power and market failures on prices, allocation of resources and social welfare.

Prerequisites: EBGN201 and MATH213

Economics is much more a way of thinking than a set of conclusions. In the process of learning this way of thinking you will improve your analytical skills, your ability to solve problems, and the quality of your decision making. In *Intermediate Microeconomics*, we will apply the economic way of thinking to help consider how markets allocate resources; why prices and wages rise and fall; what effects government intervention has on allocation and prices; how we make decisions under uncertainty; why businesses start up and go out of business; and what advantages and disadvantages there are to competition.

# **Recommended Materials**

Textbook/ebook – Microeconomics by Goolsbee, Levitt, and Svyerson, Worth Publishers

# **Student Learning Outcomes**

At the end of the course, students will:

- Apply the theory of the firm to explain production decisions and to derive market supply
- Apply the competitive market model to taxation, international trade restrictions and other current policy discussions

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- Apply the standard model of consumer choice to household decisions
- Use the consumer choice model to derive demand and measure consumer welfare in product markets and to analyze labor supply decisions
- Use the general equilibrium model of competitive markets to demonstrate that competitive markets are usually efficient and to analyze the implications of competitive markets for equity
- Use the standard model to demonstrate the static efficiency and equity implications of monopoly
- Analyze the pricing and production strategies of firms in imperfectly competitive markets

## Topics Covered – additional detail in course calendar

Basic Economic Concepts; Consumption and Production; Markets and Prices; Advanced Topics

## **Graded Components**

## Pre-Class Quizzes – 5% of final grade

Prior to each class session, you will be required to watch a short video or videos that introduce the basic concepts and definitions you will be expected to know coming in to that class period. After watching the videos, you will be required to complete a brief quiz on the concepts presented in the videos.

## Individual Homework Assignments – 5% of final grade

Some days, in addition to the pre-lecture videos and quizzes, there will be required problems to turn in before or during class.

#### **Team-Based Problems and Assignments – 15% of final grade**

A significant portion of class time will be devoted to working on problems or discussing and analyzing reading assignments in teams. Group work will be collected each day, and your responses will be graded on a 0-3 scale, where:

- 0 = 0% -- no participation in assingment
- 1 = 50% -- minimal participation/correctness
- 2 = 85% -- good participation/correctness
- 3 = 100% -- excellent participation/correctness

# Individual Writing Assingments – 15% of final grade

*Minimum Wage Assignment – 10% of final grade –* You will write a memo that evaluates the potentail impact of an increase in the minimum wage using economic theory and empricial evidence. Complete details are available on the course management system. **Due date: 4/19** 

Other Writing Assignments – 5% of final grade – There are many issues of the day which lend themselves nicely to study by and economist (or a student of economics). This semester, you will

read articles related to microeconomics and may be required to prepare brief summaries of these articles so that you are prepared to discuss their content in class.

## Midterm Exams (3) – 15% each for 45% of final grade

There will be **four in-class mid-semester exams**. I will drop your lowest mid-semester exam score. Exams will consist of both multiple choice and open-ended questions. If you miss an exam for any reason during the semester (not including university excused absences) there will not be a make-up offered. This will be counted as your low exam score.

Exam Dates: 2/3, 3/3, 3/24, 4/28

## Final Exam – 15 % of final grade

The final exam is required, and the exam will be cumulative. Like the mid-semester exams, it will consist of both multiple choice and open-ended problems. The date of the exam will be determined by the registrar.

## **Non-Graded Components**

*Problem Sets* – The homework assignments distributed throughout the semester will give you the opportunity to practice and apply the concepts discussed in class in a pressure-free environment and to prepare for exams. I will not collect and grade the problem sets, however you are strongly encouraged to form study groups to work on these problems to prepare for exams. Solutions will be provided after the problem sets have been available for one week.

#### **Grading and Grading Procedures**

Components:

| Pre-Class Quizzes                   | 5%                                                                                                       |
|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| Individual Homework Assignments     | 5%                                                                                                       |
| Team-Based Problems and Assignments | 15%                                                                                                      |
| Individual Writing Assignments      | 15%                                                                                                      |
| Exams                               | <u>60%</u>                                                                                               |
|                                     | 100%                                                                                                     |
|                                     | Individual Homework Assignments<br>Team-Based Problems and Assignments<br>Individual Writing Assignments |

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

| A =  | 93-100% | B- = | 80-82% | D+ = | 66-69%    |
|------|---------|------|--------|------|-----------|
| A- = | 90-92%  | C+ = | 77-79% | D =  | 63-65%    |
| B+ = | 87-89%  | C =  | 73-76% | D- = | 60-62%    |
| B =  | 83-86%  | C- = | 70-72% | F =  | below 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 or Canvas.

**Grievance Procedure:** Anyone feeling that a dispute exists after the grading of any assignment or exam 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 or exam. I will return a written response within two class periods after receipt.

# **Course Attendance Policy**

Please be familiar with the Attendance Policy for the Colorado School of Mines: <u>http://inside.mines.edu/Student-Absences</u>

**Exams:** The dates of exams are indicated on this syllabus. Please mark your calendars early. Due to the nature of the grading system (lowest exam dropped), I generally do not offer make-up exams, unless there are extenuating circumstances.

Lectures: Failure to attend and participate in in-class assignments and activities will count negatively toward your course score. I expect students to regularly attend and participate in class. If you miss a lecture, it is your responsibility to get any notes and assignments from that class. It is up to you to master the subject matter of the course and to demonstrate the ability to use the tools covered at an acceptable skill level. I will offer make-up opportunities for in-class group assignments only if you have an excused absence.

# **Coursework Return Policy**

In-Class Assignments – In-class assignments will be graded and returned within one week.

*Exams* - Exams will be graded within one week and will be available for review in class. Students will not be permitted to keep exams, however they will be available for review in the professor's office.

# **Students with Disabilities**

Colorado School of Mines complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990. If you have a disability and need a reasonable accommodation for equal access to education or services at Colorado School of Mines, please contact the Disability Services Office at 1770 Elm St. – Wellness Center 209, by calling 303-273-3297, or emailing Katie Ludwin <u>kludwin@mines.edu</u>. If you have a disability that could affect your performance in this class or that requires an accommodation under the Americans with Disabilities Act, please see me as soon as possible so that we can make appropriate arrangements.

• Disability Services Website: <u>http://disabilities.mines.edu/</u>

# 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 an 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>.

# **Detailed Course Schedule\***

| Week  | Dates     | Topics                             | Chapter      | Assignments      |
|-------|-----------|------------------------------------|--------------|------------------|
| 1     | 1/10-1/13 | Introduction, Group Formation,     |              |                  |
|       |           | Supply and Demand                  |              |                  |
| 2     | 1/16-1/20 | MLK Holiday – No Class 1/16        |              |                  |
|       |           | Supply and Demand                  | 2            |                  |
| 3     | 1/23-1/27 | Supply and Demand, Market Analysis | 2, 3         |                  |
| 4     | 1/30-2/3  | Market Analysis                    | 3            | Exam 1 – 2/3     |
| 5     | 2/6-2/10  | Consumer Behavior                  | 4            |                  |
| 6     | 2/13-2/17 | Consumer Behavior                  | 4            |                  |
| 7     | 2/20-2/24 | President's Day – No Class 2/20    | 5            |                  |
|       |           | Demand                             |              |                  |
| 8     | 2/27-3/3  | Demand                             | 5            | Exam 2 – 3/3     |
| 9     | 3/6-3/10  | Production and Costs               | 6, 7         |                  |
| 10    | 3/13-3/17 | Production and Costs               | 6, 7         |                  |
| 11    | 3/20-3/24 | Perfect Competition                | 8            | Exam 3 – 3/24    |
|       |           | Spring Break 3/27-3/31 – No Class  | es This Week |                  |
| 12    | 4/3-4/7   | Perfect Competition                | 8            |                  |
| 13    | 4/10-4/14 | General Equilibrium                | 14           |                  |
|       |           | Monopoly                           | 9            |                  |
| 14    | 4/17-4/21 | E-days – No Class 4/21             |              |                  |
|       |           | Monopoly                           | 9            |                  |
|       |           | Pricing                            | 10           |                  |
| 15    | 4/24-4/28 | Imperfect Competition              | 11           | Exam 4 – 4/28    |
| 16    | 5/1-5/3   |                                    |              |                  |
| Final |           |                                    |              | Cumulative Final |

\* Course content subject to change. All changes will be announced in class and online. It is your responsibility to stay informed of changes.