Subject: Economics and Decision Making  Number: EBGN515

Course Title: Economics and Decision Making

Section: A

Semester/year: Spring 2015

Instructor or Coordinator: Edward J. Balistreri

Contact information (Office/Phone/Email): ebalistr@mines.edu
Office hours: 9-11am MW and 9-9:30am TR
Class meeting days/times: 11:00am-12:15pm TR
Class meeting location: Marquez 226

Web Page/Blackboard link (if applicable): http://inside.mines.edu/~ebalistr/

Teaching Assistant (if applicable): NA

Contact information (Office/Phone/Email):

Instructional activity: _3_ hours lecture _0_ hours lab _3_ semester hours

Course designation: ___ Common Core ___ Distributed Science or Engineering
___ Major requirement _X_ Elective ___ Other (please describe ____________)

Course description from Bulletin:

EBGN515. ECONOMICS AND DECISION MAKING. 3.0 Hours.
The application of microeconomic theory to business strategy. Understanding the horizontal, vertical, and product boundaries of the modern firm. A framework for analyzing the nature and extent of competition in a firm’s dynamic business environment. Developing strategies for creating and sustaining competitive advantage.

Textbook and/or other requirement materials:

Required text:

Cambridge, Massachusetts.


Student learning outcomes: At the conclusion of the class students will...

1. ... have a solid understanding of the basic models of industrial organization
2. ... be able to apply game theory to strategic interactions
3. ... have a basic understanding of the legal context for competition policy and regulation
4. ... be able to use equilibrium modeling tools to evaluate the impacts of a mergers on competition and other outcomes.
Brief list of topics covered:

1. Microeconomic review and basic firm optimization
2. Industrial organization and the theory of the firm
3. Game theory
4. Competitive analysis and competition policy

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 [online](#).

Grading Procedures:

Grades will be determined by the student’s performance on exams and the group project. The student is required to contact the instructor if class meetings conflict with other responsibilities or qualified excuses.

Grades will be assigned according to the following weighting:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Midterm Exam I (Feb. 12th)</td>
<td>25%</td>
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<tr>
<td>Midterm Exam II (March 31st)</td>
<td>25%</td>
</tr>
<tr>
<td>Group Project (Due April 30th)</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
</tr>
</tbody>
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Coursework Return Policy: Assignments will be returned within two weeks, along with suitable materials and feedback that enable the student to understand how to improve their learning and performance.

Absence Policy: See the Grading Procedures section above.

Homework: NA

Common Exam Policy: NA
Detailed Course Schedule:

Week of Jan 5th: First Class Jan 8th: Principles of Microeconomics (Markets)
Week of Jan 12th: Microeconomic review continued (efficiency, surplus, cost curves, optimization)
Week of Jan 19th: Firm-level demand and Monopoly
Week of Jan 26th: Perfect and almost perfect competition
Week of Feb 2nd: Oligopoly (Cournot, Bertrand, Stackelberg)
Week of Feb 9th: Spatial Competition and MIDTERM EXAM 1 (Feb. 12)
Week of Feb 16th: Intro to Game Theory
Week of Feb 23rd: Game Theory Basics (Nash equilibria and dominated strategies)
Week of March 2nd: Game Theory Basics (Normal and extensive forms and sub-game perfection)
Week of March 9th: SPRING BREAK
Week of March 16th: Repeated games, trigger strategies, and mixed strategy equilibria
Week of March 23rd: Mixed strategy equilibria cont.
Week of March 30th: MIDTERM EXAM 2 (March 31st)
Week of April 6th: Strategic interactions in small groups with collective decision rules
Week of April 13th: Introduction to competition policy
Week of April 20th: Merger simulation models
Week of April 27th: Work of Project (in-class help) and Project Due on Thursday
Week of May 4th: FINAL EXAM as Scheduled by CSM (Do not make travel arrangements until you know when the exam is scheduled. Failure to take the final as scheduled will result in a grade of zero for the final, no exceptions.)