EBGN 585A
Division of Economics and Business
Engineering and Technology Management Capstone
Spring Semester 2018
T/TH 12:30 – 1:45 PM• MZ 335

Instructor:
Michael B. Heeley, Ph.D.
Division of Economics and Business (303) 273-3167
324 Engineering Hall mheeley@mines.edu
Office Hours: T/TH 10:45 – 11:55 AM and M 10:00 – 11:30 AM and by appointment

Instructional activity: 3 hours lecture
Course designation: Core

Course Description

This course is about the issues and challenges of running a firm in a competitive environment from the perspective of the general manager. You have or are developing expertise in the functional areas of business (e.g. marketing, finance, accounting…) from your courses as well as your work experiences— that is in doing things right. This course is designed to integrate and build upon your coursework in these functional areas. It is about “doing the right things” rather than just “doing things right”, to quote corporate consultant and author Peter Drucker.

Strategic management is focused on formulating and implementing the major goals of the firm in relation to changing competitive environmental conditions, firm resources, and individuals’ motives and values. This course is organized around fundamental concepts that will assist you in analyzing a wide range of strategic issues facing a firm. In addition, strategic management depends on more than learning just a few more analytic techniques. An appreciation of complex analytical and social processes is essential. The challenge for senior managers goes well beyond applying an appropriate formula to a problem because to date there are not any universal formulas for successful companies. Rather, senior managers must be able to identify that a problem exists and then to bring resolution, despite partial information. This course requires identifying, analyzing, and solving firm problems with original thinking and execution. A key instructional objective of this course is to help you develop a rigorous approach for addressing complex business problems. Thus, the utility of this course extend well beyond strategy. To summarize, the key learning objectives of this course are:

--To understand the fundamental concepts associated with Strategic Management, such as conducting analyses of the competitive environment a firm faces, assessing firm resources and potential sources of competitive advantage, and how to implement strategies;

--To identify problems in a complex business scenario; and

--To understand what pieces of information are important in diagnosing a strategic challenge and to apply the correct tools in addressing that challenge.
To integrate the content of this and other courses you have taken at Colorado School of Mines, you will be part of the senior executive team of a company and will be responsible, along with your other team members, for developing and executing a strategy for a company. Through the use of Capstone Simulation, you will run this company for eight fiscal years. During this experience, you will pull together the content from this course and act on this content as you would if you were a senior executive—you will be rewarded in alignment with your firm’s performance relative to that of your competitors. In addition, this course will use case analyses, behavioral exercises, and mini-lectures to further develop your knowledge on strategic management. Thus, you will be put in a number of situations where strategic challenges arise and will be responsible for recognizing and solving challenges in these situations. Your performance will be evaluated based on the success of the simulation company you run, your ability to analyze and resolve issues in the cases we cover, and your mastery of basic strategy concepts and tools.

**Required Readings and Materials**

1) **Capstone® on-line management simulation.** Available on-line at [www.capsim.com](http://www.capsim.com). Information on how to register will be provided in class on Tuesday, February 6th.

2) **Cases and Readings:**

**How Strategists Really Think: Tapping the Power of Analogy** by Giovanni Gavetti and Jan W. Rivkin

**The Five Competitive Forces That Shape Strategy** by Michael E. Porter

**Sustainable Business Strategies and PESTEL Framework** by Tomayess Issa, Vanessa Chang and Theodora Issa

**Case: Cola Wars Continue: Coke and Pepsi in 2010** by David B. Yoffie and Renee Kim


**Looking Inside for Competitive Advantage** by Jay Barney.


**Case:** eHarmony by Mikolaj Jan Piskorski, Hanna Halaburda and Troy Smith

**Right Game: Use Game Theory to Shape Strategy** by Adam Brandenburger and Barry J. Nalebuff


**Case:** Betfair vs. UK Bookmakers by Ramon Casadesus-Masanell; Neil Campbell
I have created a set of course materials at the Harvard Business Education web site and the ETM program is covering the costs of the course pack and the course link will be available on canvas. There are a limited number of course packs so please do not circulate the link.

Readings with an * are not available through the HBP website and will be available on canvas.

**Teaching Method**

This course is focused around case analyses and applying the concepts covered to your complex day-to-day work realities. I use a combination of interactive lectures, class discussion of concepts and cases, and behavioral simulations to communicate the main learning objectives. Because of the central role that discussions play in the course, it is important to come to each session well prepared to discuss the readings and cases scheduled.

In addition, I will use an on-line simulation in conjunction with this course. This simulation allows you and your team to run a company, from developing a strategy to executing that strategy with on-going decisions on everything from new product development, to marketing, to finance and accounting functions of your company. This experience will allow you to integrate the tools from this course as well as from your other experiences and courses, illustrating how
decisions you make in different functional areas are interdependent. Doing so will allow us to model some of the concepts we cover on competitive dynamics and hopefully provide you with insights on not only formulating and executing your own firm’s strategy, but also on how strategy evolves in an dynamic context.

The central goal of my teaching method is to provide opportunities for you to apply course concepts in the context of the cases and simulation; through constructive application of these concepts, you will best internalize these concepts and hopefully be able to use them long after the course is over.

**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 available at: http://bulletin.mines.edu/policiesandprocedures/

**Grading Criteria and Method**

Written, oral, individual and team skills are used within the context of this course. The purpose of multidimensional grading criteria is to provide opportunities to exercise each category of skills, all of which are central to the general manager. Specifically, course grades are determined as follows:

1. Class participation 20%
2. Quizzes/assignments 15%
3. Exam 25%
4. Capstone simulation 40%
I will endeavor to return all graded assignments within one week of being submitted.

More detailed course grade information is discussed below.

**Course Requirements**

**Class participation**  
20%

The emphasis of this course on applying the concepts covered to complex day-to-day work realities and on cases makes it crucial that your preparation for class be of consistently high quality. For each session, consider the issues raised in the readings, how they play out in firms you are familiar with and how they related to the case, if applicable. Additionally, be ready to respond to the contributions of your classmates. After each class period, I evaluate your classroom participation as follows:

- **3:** Outstanding positive engagement in the classroom discussion as evidenced by particularly insightful comments and excellent understanding of concepts covered in the readings for the course.
- **2:** Active, engaged participant in class.
- **1:** Attended class and contributed a little to the class / group discussions and activities.
- **0:** Missed all or a substantial part of the class session.

Attending all classes is essential to your learning in this course. If for some unavoidable reason you must miss a class, please let me know in advance so that your absence will not be unexplained. While it is not possible to “make up” an absence, a brief summary of the case to be discussed the day of your absence should be submitted (2 page maximum). This analysis will be regarded as class participation and will be graded on the same three point scale as class participation, depending on the quality of your analysis. This analysis is due within two days of the class for which you are absent. You may not submit such “analysis in lieu of presence” more than two times.

Also, since quality class participation figures prominently in this course, the Honor Code mandates that you not rely on notes, handouts, or cases from students who have previously taken this course.

**Quizzes/Assignments**  
15%

Up to three quizzes/assignments will be given during the semester. These will test your understanding of the material covered in class up to the date of the quiz or assignment.

**Exam**  
25%

There will be one exam on the date listed in the schedule. This exam will be based on a case situation and will test your understanding of the reading and concepts covered in class,
when it is appropriate to apply/use each concept, and how to effectively use the concepts covered in different situations.

**Capstone Simulation**  
40%

Each person will be assigned to a team and run a company within the Capstone simulation. You will compete against other teams in the class, who will also be running a company within the same industry in the Capstone simulation. The simulation is designed to give you an opportunity to apply insights gained from this course and others you have taken at the Colorado School of Mines to effectively make strategic decisions for a company and respond to competitor actions.

This portion of the course will be evaluated in three components:

1) You will receive points for your level of individual engagement in the simulation as evidenced by individual exercises prior to the live “game”, your on-going participation in Capstone, and your teammate’s assessment of your participation in the simulation.  
**6 total possible points**

2) You will make two formal presentations during the course of the semester. The first one will be immediately preceding your first set of competitive decisions for Capstone. This presentation will be made to the chairman of your Board of Directors and should focus on the strategy you have developed and intend to follow throughout Capstone. Prior to your presentation you will also need to submit a report outlining (max 4 pages) your company’s intended strategy. In your outline and presentation some things to consider include:

   *What position do you seek in the marketplace?*
   *What will differentiate your company? How will this lead to superior performance? What is your plan for getting there? How will you reach that position, and under what timetable? What trade-offs are you making? What are you deciding not to do?*
   *How will you create fit among your whole system of functional activities (e.g., marketing, finance, production, R&D, and HR).*
   *How are you organizing your top management team? What roles is each person performing?*

The second presentation is at the end of the simulation. You should present an analysis of your initial strategy compared to your strategy at the end of Round 8, comment on how your strategy and tactics evolved over the course of Capstone, assess the strengths and weaknesses of your strategy and execution abilities over the course of the game, and comment on what you would do moving forward if you were to continue running your company.

Both presentations will be evaluated based on the level of detailed understanding you demonstrate about the Capstone simulation as well as your ability to integrate economic concepts into your actions. Please make sure you email the powerpoint slides of each presentation to mheeley@mines.edu.

**14 total possible points**
3) You will also be evaluated based on your actual performance in Capstone. You and your team will select which financial performance criteria your company wants to be evaluated on (e.g., ROS, ROA, stock price, market capitalization) subject to the following constraints. You must weight market cap at 30% and no one metric can be more than 30%. You will be evaluated based on your score on each dimension, compared to the top score in your industry on this dimension. The final score will be a value out of 100 total possible points, which will then be scaled to 20% of your final grade. (To safeguard against the very remote possibility that your team’s company does extremely poorly, I will cap the lowest possible score at 20 out of 100, if that team can demonstrate that they have made significant efforts at turning their company around and are able to demonstrate a command of the details of the simulation and of the basic course content.)

20 total possible points

Non-performance of a team member:
If one or more of your team members is not participating fully in Capstone, please let me know. Please advise me of any problems during the semester as soon as possible. If there is consensus that one or more team members are not doing their fair share of the work load, I may pull this person off the team and require him/her to independently write a 30 page paper in lieu of Capstone. In order to do this, any final decisions on inadequate team participation must be made no later than March 8th. So don’t wait too long to talk with me if you experience team problems!

Additional Course Information

The Writing Center, located in Stratton 306, is there to help all members of the Mines community with writing projects at any stage of the writing process. Writing Consultants can help you understand an assignment; brainstorm, develop and organize ideas; cite sources; narrow your focus; and/or fine-tune your writing for polish, clarity, adherence to grammatical conventions, etc. To make an appointment, please visit our online scheduling system at: http://mines.mywconline.com.

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 disabilities.mines.edu for more information.