

**Business Model Development
EBGN 460
Fall Semester 2019**

Instructor

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Office Hours

Fridays
12:00-1:00
AND flexible by appointment

Class Meetings

Tuesdays & Thursdays
9:30 – 10:45

Teaching Assistant

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Course Overview

Breakthrough products or services may embody cutting-edge engineering, but that does not automatically translate into a real-world success. A well-developed business model is the difference between success in the lab and success in the marketplace. How will you create and deliver value for a target market? How will you capture that value? How will you sustain your value delivery initially and as the business scales? Business model development is critical for startups and established firms alike. It's indispensable for social entrepreneurs. A business model demonstrates how a team (inside an organization or a startup) delivers value in a scalable and sustainable way. This course introduces a structured way to approach developing a viable business model.

LEARNING OBJECTIVES

Upon completion of this course, you will learn and gain first-hand experience with the following topics:

- Understand the process of developing a business model for different types of products or services.
- Learn how to effectively analyze business models of competitors and established organizations.
- Experience developing a creative business model that takes advantage of technical and market opportunities.
- Develop business models to ensure the new product or service achieves its strategic and financial objectives.
- Gain skills in designing and testing new business models.

REQUIRE COURSE MATERIALS

- Readings to be posted.

PEDAGOGICAL METHOD

This is a survey course with a significant practical component. It is centered on learning and applying business model development concepts to complex market realities. I use a combination of interactive lectures, class discussions, and real-world projects (teamwork) to communicate the learning objectives.

COURSE GRADING

Attendance: Due to the experiential nature of this course, your attendance in ALL class sessions is required.

Individual Grades

1. Participation and In-class Learning (200 points)

In class, your collaboration opportunities multiply and you gain so much through networking and real-world problem solving. *Quality* class participation is therefore grounded in your preparation for and contribution to discussions and assignments. Here's a rough breakdown of how I assess your participation and in-class learning:

85-95%: You attend class consistently on time and actively participate in discussions. Your contributions indicate genuine interest in collaborating and helping. Focus is on quality contributions, not quantity. Your teammates cannot live without you.

75-84%: You attend class consistently on time and actively participate in discussions. Your comments indicate some interest in helping. Your teammates find you somewhat helpful.

70-74%: You attend class consistently on time, and usually do not participate in discussions. Your teammates wouldn't miss you if you were absent.

<69%: You don't come to class consistently and when you do, you are not usually engaged. Your teammates think you dropped the course.

2. Team Journal – Individual Contribution (200 points)

As is typical of real-world teams, I expect your team to document alternatives explored, action contemplated and taken, assumptions tested, and customer input gathered. Your team maintains a shared team journal. We will elaborate on this in more detail during the first week of the course. While the team journal is shared by all team members, this grade reflects your individual contribution to the journal.

Team Grades

1. Team Deliverables (500 points)

In order to facilitate learning-by-doing, this course incorporates real-world projects. You will form a business model development team. This team works through the process of developing a workable model initially and iterate on it to reach viability. Your deliverables grade is based on completing 10 deliverables that help you complete your project.

2. Team Presentation (100 points)

New product development teams typically deliver presentations to company senior executives. Your team will prepare and deliver a presentation in the same manner. I expect you to deliver a convincing presentation designed to "sell" your company's executives on your new product plans. More details will be provided in class.

Summary of Assignments and Points

Assignment	Grading Basis	Points
Participation & Contribution	Individual	200
Team Journal	Individual	200
Class Deliverables	Team	500
Team Presentation	Team	100
Total		1000

SYLLABUS IS SUBJECT TO CHANGE DURING THE SEMESTER AS COURSE IS ADJUSTED TO FIT NEEDS

Journal Guidelines

Your journal is both a venue in which to keep track of your work and an opportunity to demonstrate the steps you took to evaluate and execute the idea. Thus, the journal should “show your work.” Include **a lot** of details. For example, rather than saying, “We interviewed eight people this week,” write down who they were, how you identified them, how/where you spoke, and for how long. Also include notes from each interview and an analysis of what you learned and how it influenced your choice of next steps. Generally speaking, “good” journals have frequent, detailed entries. “Average” journals appear to be a rush job put together in the last couple weeks of the semester.

COURSE EXPECTATIONS

Active Participation – All success is built on a foundation of hard work and curiosity. Do not procrastinate. The nature of group work is cumulative and poor work early on will make the deliverables much more difficult later on.

Collaboration – Entrepreneurship requires your active collaboration with others including co-founders, beneficiaries, employees, investors, partners, suppliers, etc.

Creativity – Entrepreneurship requires creative thinking. You have to be curious to explore new ideas regardless of their source and be willing to see multiple perspectives. To succeed, you must remain open to challenging your assumptions and beliefs.

Grievances: As a rule, makeup is not an option in this course. If you feel you have been graded unfairly on an assignment, you may follow this process:

1. Within **seven days** of receiving the grade, write me an appeal. After seven days, **grades are final**.
2. In your appeal, you must provide a **written statement** as to why the grade is unfair. Be sure to state your argument as to why the grade is not in alignment with grading standards, or the work was misinterpreted. Arguing that you need or deserve a higher grade because you worked hard is insufficient.
3. Submit your appeal to me **via email** and I will consider it and let you know my decision within seven days.

Diversity and Inclusion:

At Colorado School of Mines, we understand that a diverse and inclusive learning environment inspires creativity and innovation, which are essential to the engineering process. We also know that in order to address current and emerging national and global challenges, it is important to learn with and from people who have different backgrounds, thoughts, and experiences. Our students represent every state in the nation and more than 90 countries around the world, and we continue to make progress in the areas of diversity and inclusion by providing [Diversity and Inclusion programs and services](#) to support these efforts.

Students with Disabilities:

The Colorado School of Mines is committed to ensuring the full participation of all students in its programs, including students with disabilities. If you anticipate or experience any barriers to learning in this course, please

feel welcome to discuss your concerns with me. Students with disabilities may also wish to contact Disability Support Services (DSS) to discuss options to removing barriers in this course, including how to register and request official accommodations. Please visit their website at disabilities.mines.edu for contact and additional information. If you have already been approved for accommodations through DSS, please meet with me at your earliest convenience so we can discuss your needs in this course.

Accessibility within Canvas:

Read the [Accessibility Statement](#) from Canvas to see how the learning management system at the Colorado School of Mines is committed to providing a system that is usable by everyone. The Canvas platform was built using the most modern HTML and CSS technologies, and is committed to W3C's Web Accessibility Initiative and [Section 508](#) guidelines.

Discrimination, Harassment, and Title IX:

All learning opportunities at Mines, including this course, require a safe environment for everyone to be productive and able to share and learn without fear of discrimination or harassment. Mines' core values of respect, diversity, compassion, and collaboration will be honored in this course, and the standards in this class are the same as those expected in any professional work environment. (More information can be [found here](#).) **Discrimination or harassment of any type will not be tolerated.** As a participant in this course, we expect you to respect your instructor and your classmates. As your instructor, it is my responsibility to foster a learning environment that supports diversity of thoughts, perspectives and experiences, and honors your identities. To help accomplish this:

- Course rosters are provided to the instructor with the student's legal name. I will honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.
- If something is said or done in this course (by anyone, including myself) that made you or others feel uncomfortable, or if your performance in the course is being impacted by your experiences outside of the course, please report it to:
 - Me (if you are comfortable doing so)
 - Wellness Center- [Counseling](https://www.mines.edu/counseling-center/) (<https://www.mines.edu/counseling-center/>)
 - [Speak Up](https://www.mines.edu/speak-up/) (<https://www.mines.edu/speak-up/>) – Anonymous Option

In this course, we will cultivate a community that supports survivors, prevents interpersonal violence, and promotes a harassment free environment. Title IX and Colorado State law protects individuals from discrimination based on sex and gender in educational programs and activities. Mines takes this obligation seriously and is committed to providing a campus community free from gender and sex-based discrimination. Discrimination, including sexual harassment, sexual violence, stalking, and domestic violence, is prohibited and will not be tolerated within the Mines campus community. If these issues have affected you or someone you know, you can access the appropriate resources on the [Mines Title IX website](#). You can also contact the Mines Title IX Coordinator, Camille Torres, at 303.384.2124 or titleix@mines.edu for more information.

It's on us, all of the Mines community, to engineer a culture of respect.

CARE @ Mines:

If you feel overwhelmed, anxious, depressed, distressed, mentally or physically unhealthy, or concerned about your wellbeing overall, there are resources both on- and off-campus available to you. If you need assistance, please ask for help from a trusted faculty or staff member, fellow student, or any of the resources below. As a community of care, we can help one another get through difficult times. If you need help, reach out. If you are concerned for another student, offer assistance and/or ask for help on their behalf. Students seeking resources for themselves or others should visit care.mines.edu.

Additional suggestions for referrals for support, depending on comfort level and needs include:

- [CARE at Mines](https://care.mines.edu) (care.mines.edu)– for various resources and options, or to submit an online “CARE report”

- about someone you're concerned about (email care@mines.edu)
- [CASA](https://www.mines.edu/casa) (https://www.mines.edu/casa) – for academic advising, tutoring, academic support, and academic workshops
- [Counseling Center](https://www.mines.edu/counseling-center/) (https://www.mines.edu/counseling-center/)- for students to call 303-273-3377 for an appointment. There are also online resources for students on the website. Located in the Wellness Center 2nd floor at 1770 Elm St.
- [Health Center](https://www.mines.edu/student-health/) (https://www.mines.edu/student-health/) – students may call 303-273-3381 for appointment. Located in Wellness Center 1st floor at 1770 Elm St.
- [Colorado Crisis Services](http://coloradocrisisservices.org) (http://coloradocrisisservices.org) – for crisis support 24/7, either by phone, text, or in person. Colorado Crisis Services is a great confidential resource, available to anyone by calling 1-844-493-8255, or texting “TALK” to 38255. Walk-in location addresses are posted on the website.

All of these options are available for free for students. The Counseling Center, Health Center, and Colorado Crisis Services are confidential resources. The Counseling Center will also make referrals to off-campus counselors, if preferred.

In an emergency, you should call 911, and they will dispatch a Mines or Golden PD officer to assist.

Absence Policy:

The [Student Absences](#) webpage outlines CSM's policy regarding student absences. It contains information and documents to obtain excused absences.

Note: All absences that are not documented as excused absences are considered unexcused absences. Faculty members may deny a student the opportunity to make up some or all of the work missed due to unexcused absence(s). However, the faculty members do have the discretion to grant a student permission to make up any missed academic work for an unexcused absence. The faculty member may consider the student's class performance, as well as their attendance, in the decision.

In the case of an absence, the student is responsible for determining what work was missed and for putting forth a good faith effort to review the material on their own.

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 can be found in the [Mines' Policy Library](#).

EBGN 460 Course Schedule

W	S	Date	Topics/Activities	Deliverable
1	1	Tue 1/8	Overview, Goals & Expectations.	
		Thu 1/10	No class	
2	2	Tue 1/15	Business Models Overview	
	3	Thu 1/17	Project Opportunities. Form Teams	Form Teams. Agreement
3	4	Tue 1/22	Product Business Models	Deliverable 1
	5	Thu 1/24		
4	6	Tue 1/29	Service Business Models	Deliverable 2
	7	Thu 1/31		
5	8	Tue 2/5	Software Business Models	Deliverable 3
	9	Thu 2/7		
6		Tue 2/12	No class: Career Day	Business Model 1.0
	10	Thu 2/14	Teamwork: Business Model 1.0	
7		Tue 2/19	No class: Presidents' Day	
	11	Thu 2/21	Hybrid Business Models	
8	12	Tue 2/26	Verticals: Mining Business Models	Deliverable 4
	13	Thu 2/28		
9	14	Tue 3/5	Verticals: Oil & Gas Business Models	Deliverable 5
	15	Thu 3/7		
10	16	Tue 3/12	Verticals: Education Business Models	Deliverable 6
	17	Thu 3/14		
11	18	Tue 3/19	Professional Services Business Models	Deliverable 7
	19	Thu 3/21		
		Tue 3/26	No class: Spring Break	
		Thu 3/28		
12	20	Tue 4/2	Social & Non-Profit Business Models	Deliverable 8
	21	Thu 4/4		
13	22	Tue 4/9	Partnerships	Deliverable 9
	23	Thu 4/11		
14	24	Tue 4/16	Innovative Business Models	Deliverable 10
	25	Thu 4/18		
15	26	Tue 4/23	Presentation Prep, Tips & Best Practices	Team Presentation
	27	Thu 4/25		
16	28	Tue 4/30	Final Team Presentations	Celebration
	29	Thu 5/2		

Schedule is very likely to change