

MGT-251 Management of Innovation

Course Description

Everywhere you look, innovation and entrepreneurship are changing the nature of work. Startups are overturning existing industries. In turn, existing companies are shifting strategies, reorganizing, and rapidly adopting new technologies and practices to keep up. To accomplish this, they are demanding more entrepreneurial leadership from their employees.

Whether you're leading change or responding to it, managing innovation and entrepreneurship are now essential skills. We'll blend theory and practice to develop the following capabilities:

<u>A solid understanding of the innovation process</u>: What is innovation? What makes you and others innovative? How can you become a student of innovation —learning from others and effectively managing your own efforts?

<u>The ability to lead innovation wherever you find yourself</u>: How can you manage yourself or your group to effectively innovate? How do power and politics shape innovation, and how can you use them to your advantage? How can you increase the likelihood of seeing new opportunities, coming up with good ideas, and seeing them through to impact?

<u>The critical thinking skills to evaluate innovation theories and interpret current</u> <u>events</u>: How do you get past the hype of media stories on innovation? What are the common patterns of innovation and change?

This course adopts a practice perspective on innovation. In other words, we will focus on what people are thinking and doing that leads to (or reacts to) innovations, why it works when it does, and how we can develop the same mindsets, skills, and tools to do the same. Using this perspective, we will address four interrelated activities that make up the innovation process: creativity, commitment, entrepreneurship, and innovation strategy.

The lessons of this course are applicable in any setting. Whether you're a leader, a manager, or an individual contributor, our goal is to enable you critically evaluate opportunities for innovation, help you effectively manage innovation in organizations, and give you hands-on experience in the tools and techniques of innovation.

The course involves readings, video lectures, written assignments, in-class discussions and exercises, and a group project.

There are five secrets to doing well in this class:

Read, Listen, Think, Engage, and Respect.

Course Materials

Books

- Hargadon, A. B. (2003). *How breakthroughs happen: The surprising truth about how companies innovate*. Harvard Business School Press. (Canvas files)
- Hargadon, A. B. (2015). Sustainable innovation: Build your company's capacity to change the world. Stanford University Press.

Articles

Link to purchase the coursepack can be found on the course wall.

Individual Articles are noted in the course schedule in the weeks they are due.

Some readings will require access via the Library's VPN. You can find details for setting up your library VPN at: Access Online Materials from Off Campus

Some readings can be accesses online (noted as an online resource).

Some readings are provided via the Canvas class site (Files)

Course Schedule (see Canvas for updates)

For each week, please complete readings prior to beginning the video lecture modules. Written assignments should be submitted by midnight before class.

1. Introduction, Part I		
Readings:	8 ways to build a business with a higher purpose, Hargadon & Hudnut (online resource) Systems thinking: A little film about a big idea (online resource) The effort effect, Dweck (online resource)	
Video Lectures:	See Canvas Module	
Assignment:	Writing Assignment 1: Introductions and Aspirations (due midnight before class)	
2. Introduction,	Part II	
Readings:	How breakthroughs happen (HBH), Chapters 1 and 2 Ford Motor Company (A): The Origins of Mass Production, Hargadon (Canvas files) Diffusion of innovations, Hargadon (course readings) Review Course Project (in Syllabus)	
Video Lectures:	See Canvas Module	
3. Creativity, Pa	rt I	
Readings:	HBH, Chapters 3 and 4 <u>Reclaim your creative confidence</u> , Kelley & Kelley, HBR [Needs VPN]	
Video Lectures:	See Canvas Module	
Assignment:	Writing Assignment 2: On Creativity (due midnight before class)	
4. Creativity, Pa	rt II	
Readings:	<u>Creativity is the new productivity</u> , Belsky (online resource) Marvel case: Strategy, structure, and creativity, Hargadon (Canvas files)	
Video Lectures:	See Canvas Module	
Assignment:	Group Project Candidates: Submit your team's top 5 candidate topics for the final project.	
5. Commitment	, Part I	
Readings:	The sure thing, Gladwell, <i>New Yorker</i> (online resource) Hypothesis-driven entrepreneurship, Eisenmann, HBR (HBSP coursepack)	
Video Lectures:	See Canvas Module	
Assignment:	Writing Assignment 3: On Commitment (due midnight before class)	
6. Commitment	, Part II	

Readings:	Power Play, Pfeffer, HBR [Needs VPN]			
	Harnessing the science of persuasion, Cialdini, HBR [Needs VPN]			
Video Lectures:	See Canvas Module			
7. Entrepreneurship, Part I				
Readings:	<i>HBH</i> , review Chapter 3 and read Chapter 5 Review <u>Systems thinking</u> video and notes <u>The televisionary</u> , Gladwell, <i>New Yorker</i> (online resource)			
Video Lectures:	See Canvas Module			
8. Entrepreneurship, Part II				
Readings:	Google: From garage start-up to IPO (1995 to 2004), Hargadon (Canvas files)			
Video Lectures:	See Canvas Module			
Assignment:	Writing Assignment 4: Produce an Event (due midnight before class)			
9. Innovation Strategy, Part I				
Readings:	HBH, read Chapter 6, skim Chapters 7–10 Sustainable innovation, Introduction and Chapters 1–2 <u>What is strategy?</u> Porter, HBR [Needs VPN] Apple stores (1999–2003), Hargadon (Canvas files)			
Video Lectures:	See Canvas Module			
Assignment:	Writing Assignment 5: On Innovation Strategy (due midnight before class)			
10. Innovation Strategy, Part II (There is no final exam.)				
Readings:	Sustainable innovation, pick/read one chapter from 4–8 <u>Wicked problems: Problems worth solving</u> , read first section, "Wicked Problems" (online resource)			
Video Lectures:	See Canvas Module			
Assignment:	Group Project due (due midnight before class)			

Course Assessments

Course grades will be based on the following components:

(a) Written Assignments (5 submissions) 50%

- (b) Group Project (2 parts) 35%
- (c) Live Session Participation 10%
- (d) Online videos and responses 5%

Descriptions of each component are given below. All deliverables should be converted to pdf format for submission via the LMS.

Assignment/Assessment	Points	Weight on Final Grade
Writing Assignments		
Introductions and Aspirations	[20]	[10%]
On Creativity	[20]	[10%]
On Commitment	[20]	[10%]
On Entrepreneurship	[20]	[10%]
On Innovation Strategy	[20]	[10%]
Group Project		
Group Project, Part I	[20]	[10%]
Group Project, Part II	[50]	[25%]
Participation		
Live Session Participation	[30]	[10%]
Asynchronous Participation	[10]	[5%]

Grading Scale

[Indicate the program requirements for attaining each letter grade: A, A-, B+, etc.]

90+ = A 80+ = B 70+ = C 60+ = D <60 = F

1. Five individual writing assignments (each = 10%, 50% total). For these assignments you will answer a set of questions reflecting on the readings and/or the topic of the sessions. Your answers will be 350 (+/- 50 words) for each assignment. See Guidance on Written Assignments and the individual assignments for details.

2. Group project (Part I = 10%, Part II = 25%, 35% total). Groups will be randomly assigned. See the Guidance on Group Project for both Part I and II for details.

3. Class participation and attendance (10% of grade). Students are expected to attend all class sessions and be prepared by completing assigned readings and any other preassigned work. Students are also expected to actively participate in class discussions and group exercises. Highly rated class participation involves thoughtful comments and questions, not just "floor time" or repetition of facts from the readings.

The following rubric is used to grade attendance and student participation in each session:

3 points:	Good participation. Present and engaged during session, with substantial contributions with comments that furthers discussion.
2 points:	Satisfactory participation: Present and engaged during session with minimal contribution.
1 point:	Absent with reasonable cause and advance notification.
0 points:	Absent without reasonable cause and advance notification.
-3 points:	Absent without cause.

4. Open-response or individual work during video lectures (5% of grade). Completion of all open-response questions or individual work required during video lectures will comprise 5% of the course grade. Individual questions and work are graded as pass/fail—if a student completes all assignments for a given week with substantial thought, he/she will receive 1 point; the percentage of completed questions each week will determine what fraction of 1 point is credited. If the student does not complete the asynchronous work and/or does not complete it with substantial thought, the student will receive 0 points.

Assignment and Assessment Information

Guidance on Written Assignments

Assignments should include your **name at the top** and should be submitted under 'Assignments' on the platform **by midnight the night before the class noted**.

Late assignments will be marked down 1 point if they're submitted in the following week, and an additional point for every week thereafter.

Overview

There will be five short written assignments due in the quarter. Each assignment will answer a set of questions about that week's readings and videos and will be scored up to 20 points each (see grading criteria below). These papers must be your original work and must recognize all quoted materials and cite all sources used in their preparation.

The assignments provide you the opportunity to think about and respond to the topics presented in the videos and readings. Do not simply repeat facts from the readings, and do not ignore the readings altogether.

Take a clear stand on the question and provide ideas or facts from the readings in support of that stand, or tell me why the readings fall short and provide an alternative explanation using ideas and facts from the readings and elsewhere (using appropriate citations).

Those skills should be in evidence in your writing for this class. While you will not receive line editing, and may or may not receive comments about your writing, it will be a factor in the grading.

Scoring Rubric

The writing assignments will be scored as follows:

- 18+ points if you:
 - (1) Clearly state your position,
 - (2) Support it with ideas and facts from the readings, and
 - (3) Write with clarity and concision.

16–18 points if you give me two of the above three

14–16 points if you give me one out of three

0 points if you fail to turn it in on time

Writing Assignment 1: Introductions and Aspirations (350 words)

Review the section "Guidance on Written Assignments" in the syllabus.

Describe (with individual paragraphs addressing each of the three questions below) what you want to have learned by the end of this course about innovation and why.

(1) Describe a specific challenge involving innovation that currently affects or will likely affect your work.

(2) How comfortable would you say you are at engaging with innovation whether leading a new project or joining a team?

(3) What aspects of innovation (what knowledge, tools, or abilities) are you most interested in mastering?

Writing Assignment 2: On Creativity (350 words)

Reading the first four chapters in *How breakthroughs happen* and one or more of the following short videos (embedded below):

- Neil Gaiman 2012 commencement speech "Make good art"
- Star Wars Dam Busters
- Raiders of the lost archives (to get the full effect, read Spitballing Indy too)

You can also read the post <u>"Blurred lines"</u> on the charges leveled against Robin Thicke and Pharrel Williams, Demi Lovato, and George Harrison.

Using ideas and examples from both the readings for this class (*HBH*) and the video or post you chose, describe your views on the role of originality in the creative process. Specifically describe each of the following (a paragraph for each):

(1) Your sense of the dominant public view on the role of originality in creativity

(2) Your experiences with how managers in organizations view originality and creativity

(3) How you might now approach the creative process given these readings and videos

Writing Assignment 3: On Commitment (350 words)

Think of a project you would like to take on at work, school, or home. To make sure it's feasible and to anticipate the concerns of someone else whose commitment you'll need next, use the steps in the Eisenmann reading, "Hypothesis-driven entrepreneurship." In this assignment:

(1) Describe your "idea" in a single sentence, including (in this case) the technical and operational elements required, the users, and the value proposition of the solution (the benefit).

(2) Identify one aspect of your idea that you are uncertain about (or you think someone else would be).

(3) State your uncertainty as a falsifiable hypothesis, and describe how you would measure it.

(4) Come up with three experiments of increasing scale to test your hypothesis (e.g., \$5, \$50, \$500 tests).

Writing Assignment 4: Produce an Event (350 words)

Produce an event. Organize and put on an experience for eight or more people that is in their best interests—something that is not a straightforward dinner party, movie, or nightclubbing. This is not a drill; you're expected to actually put on the event.

This exercise is about your comfort level with using power and influence. So while this exercise involves coming up with a creative event that would work for eight people (minimum) in your network, making or getting the commitments necessary for it happen, and the entrepreneurial effort to bring it all together in the right way, is also about the willingness to exert control (power and influence) over others (see below) to do something that is in their best interest.

Your written assignment should follow the format:

(1) Describe the event. Include a picture of the event for context.

(2) Describe your experience. How did it feel while you were "designing" the event? Did you use any particular persuasion techniques? How did you pick the participants? How did it go?

(3) Finally, rate yourself on the innovativeness of your event (its novelty, value, and non-obviousness).

Plan to briefly (30 seconds) describe your event to the class.

ADVISORY: While this exercise encourages the use of power and/or influence, it forbids the unethical use of power that comes as a cost to your participants or to personal gain on your part. Your goal should be to provide a positive experience for all involved.

Writing Assignment 5: On Innovation Strategy (350 words)

Begin with the innovation your team is studying for the final paper.

Using the readings on innovation strategy in *Sustainable innovation* and "What is strategy?" identify one major capability that would be necessary to bring this innovation to a particular market.

Important: Don't confuse the capabilities required for effective operation (core capabilities) with those required for innovation (i.e., dynamic capabilities: those that enable you to create, commit to, and build a new offering - see pages 24-25 in the book Sustainable Innovation). In this case, you are identifying a dynamic capability necessary for innovating that is particularly relevant to your proposed venture.

Describe the capabilities by addressing the following:

(1) Briefly describe your innovation and the particular market you are addressing in this assignment.

(2) Identify the most critical dynamic capability you believe would be necessary to effectively develop this new venture for this particular market.

(3) Describe three ways you might assess whether a person, a subunit, or an outside resource has that capability.

Some advice:

Think about how you would evaluate a team that was proposing to implement your innovation. What capabilities would you want to see in such a team? What would make you doubt that this team could pull it off? These are the capabilities you should be thinking about.

It helps to precede your identified capability with the phrase "The ability to [your verb here] . . . ," ensuring your verb corresponds to a critical activity in the innovation process (e.g., the ability to build a . . . , to design a . . . , to create a . . . , to partner with . . .). Note this is the ability of your team and not the feature of the resulting product or service itself.

Be specific to the technology, industry, and market segment you are pursuing. "The ability to sell" is not the same as "the ability to sell plant-based meats to restaurants" or "sell telemedicine solutions to hospital systems."

Guidance on Group Project

The group project will involve identifying, analyzing, and discussing the implications of a current innovation.

Teams will identify a current innovation and (1) describe the innovation and its origins; (2) discuss how this innovation demonstrates, extends, and contradicts particular topics covered in the course; and (3) using course concepts, predict the outcome (and corresponding opportunities and challenges) this innovation presents.

Teams will submit Part I (assessing five candidate innovations) before Session 5 for review/approval.

Teams will submit Part II, the final paper, before Session 10.

Group Project, Part I: Project Candidates

Before Session 4, teams will submit Part I: five project candidates for review and comments.

You will still have discretion to select the topic of your final submission.

For each of these five candidates included in the submission, an initial assessment (each should be around 75–100 words) will be provided for each "current innovation" that:

- 1. Defines the innovation and its likely origins
- 2. Identifies the likely relevant concepts in the course
- 3. Provides a tentative prediction for the likely outcome of this innovation

These initial assessments are for your benefit: use them to determine which of the candidate innovations are best suited for the deeper analysis required of the final submission.

As advice: Try to bound your candidate innovations (and sharpen your analysis) by clearly specifying your innovation (which includes both a novel solution and a clear market or use case). In other words:

BAD: Autonomous vehicles

BETTER: The potential impact of autonomous vehicles in long-haul trucking fleets

GOOD: The potential impact of fleet coordination solutions for autonomous vehicles in long-haul trucking

Do not confuse an innovation with a specific firm or product - this is not an assessment of a particular firm or product offering, but rather of an innovation itself.

Group Project, Part II: Final Submission

Before Session 10, teams will submit Part II:

The format of the report will be as follows:

I. Executive Summary (250 words) (15 points)

II. Introduction: The focal innovation and its origins** (500–750 words) (30 points)

Innovation: Describe the innovation in terms of its function, the elements that make it up, and the particular configuration(s) that are emerging.

Origins: Describe the origins of the elements making up this innovation and their evolution and convergence.

III. Relevance to concepts discussed in the course** (500–750 words) (30 points)

Demonstration: How do the particulars of this innovation demonstrate central principles of innovation discussed in the course readings and classroom discussions?

Extension: How do the particulars of this innovation extend our understanding of the central principles of innovation discussed in the course?

Contradiction: How do the particulars of this innovation contradict our understanding of the central principles of innovation discussed in the course?

IV. Predictions (500–750 words) (30 points)

Predictions: Clearly articulate the likely outcome of this innovation (such that your predictions can be disconfirmed) in terms of impact and timing.

Opportunities and Challenges: Discuss the corresponding opportunities and challenges that accompany your predictions.

V. Conclusion (250 words) (15 points)

Summarize your main points, and consider the larger implications for our understanding of how innovation happens.

Program Mission

The mission of the UC Davis Graduate School of Management is to be a global leader in management research and education. As part of the world's premier public university system, we pursue significance, excellence, and scholarly rigor in our research, teaching, and service to the people of California. We emphasize curiosity, creativity, and high standards in the generation and transmission of theoretical and practical knowledge relevant for business.

Honor Code and Academic Integrity

Academic integrity exists when students and faculty seek knowledge honestly, fairly, and with mutual respect and trust, and accept responsibility for their actions and the consequences of those actions. Without academic integrity, there can be no trust or reliance on the effectiveness, accuracy, or value of a University's teaching, learning, research, or public service activities. It is therefore key that we understand what academic integrity is, why it is important, and how to help it flourish on college campuses.

1. It is expected that all class members will treat each other with respect and dignity.

2. It is not acceptable behavior to insult, harass, or demean any member of the class.

3. Professional business behavior should be modeled in the classroom, including the use of appropriate language, jokes, or stories.

In general, students should adhere to the <u>UC Davis Principles of Community</u>, copied below.

The University of California, Davis, is first and foremost an institution of learning and teaching, committed to serving the needs of society. Our campus community reflects and is a part of a society comprising all races, creeds, and social circumstances. The successful conduct of the university's affairs requires that every member of the university community acknowledge and practice the following basic principles:

We affirm the inherent dignity in all of us, and we strive to maintain a climate of justice marked by respect for each other. We acknowledge that our society carries within it historical and deep-rooted misunderstandings and biases, and therefore we will endeavor to foster mutual understanding among the many parts of our whole.

We affirm the right of freedom of expression within our community and affirm our commitment to the highest standards of civility and decency towards all. We recognize the right of every individual to think and speak as dictated by personal belief, to express any idea, and to disagree with or counter another's point of view, limited only by university regulations governing time, place, and manner. We promote open expression of our individuality and our diversity within the bounds of courtesy, sensitivity, and respect.

We confront and reject all manifestations of discrimination, including those based on race, ethnicity, gender, age, disability, sexual orientation, religious or political beliefs, status within or outside the university, or any of the other differences among people which have been excuses for misunderstanding, dissension, or hatred. We recognize

and cherish the richness contributed to our lives by our diversity. We take pride in our various achievements, and we celebrate our differences.

We recognize that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of spirit and purpose based on mutual respect and caring.

For more information, please review the Academic Conduct Booklet: <u>https://gsm.ucdavis.edu/sites/default/files/2020-10/code_of_conduct_booklet_2020.pdf</u>