

Syllabus Version: 22-a

# **MGV-251V 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 to 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 Schedule and Class Material**

Please complete readings prior to beginning the asynchronous module for the indicated week, and the asynchronous material before the live class.

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

#### 1. Introduction, Part I

Readings:	<u>8 ways to build a business with a higher purpose</u> , Hargadon & Hudnut (online resource)
	Systems thinking: A little film about a big idea (online resource)
	The effort effect, Dweck (online resource)
Assignment:	Writing Assignment 1: Innovation Aspirations (due midnight before class)

## 2. Introduction, Part II

Readings:	How breakthroughs happen: The surprising truth about how companies innovate. (toolbox/course readings), Chapters 1 and 2
	Ford Motor Company (A): The Origins of Mass Production, Hargadon (toolbox/course readings)
	Diffusion of innovations, Hargadon (toolbox/course readings)
	Review Course Project (in Syllabus)

## 3. Creativity, Part I

Readings: How breakthroughs happen: The surprising truth about how companies innovate. (toolbox/course readings), Chapters 3 and 4

Reclaim your creative confidence, Kelley & Kelley, HBR [Needs VPN]

<u>Why Design Thinking Works</u>, Liedtka, HBR 2018 [Needs VPN - click 'Click search within this publication', search 'Accession Number' AN=132944588]

#### Assignment: Writing Assignment 2: Creativity (due midnight before class)

## 4. Creativity, Part II

Readings: Marvel case: Strategy, structure, and creativity, Hargadon (toolbox/course readings)

How to Catalyze Innovation in Your Organization, Arena, Cross, Sims and Uhl-Bien, MIT Sloan Management Review

## 5. Commitment, Part I

Readings: <u>The sure thing</u>, Gladwell, *New Yorker* (online resource) Hypothesis-driven entrepreneurship, Eisenmann, HBR (HBSP course pack - see wall post at the start of the semester)

### 6. Commitment, Part II

Readings: <u>Power Play</u>, Pfeffer, HBR [Needs VPN - click 'Click search within this publication', search 'Accession Number' AN=51600650]

<u>Harnessing the science of persuasion</u>, Cialdini, HBR [Needs VPN, click 'Click search within this publication', search 'Accession Number' AN=5329110]

Project Hippocrates (toolbox/course readings)

## 7. Entrepreneurship, Part I

Readings: How breakthroughs happen: The surprising truth about how companies innovate. (toolbox/course readings), review Chapter 3 and read Chapter 5

Review Systems thinking video and notes

<u>The televisionary</u>, Gladwell, *New Yorker* (online resource)

Assignment Writing Assignment 3: Produce an Event (due midnight before class)

#### 8. Entrepreneurship, Part II

Readings: Google: From garage start-up to IPO (1995 to 2004), Hargadon (toolbox/course readings)

## 9. Innovation Strategy, Part I

Readings: *How breakthroughs happen: The surprising truth about how companies innovate*. ( toolbox/course readings), read Chapter 6, skim Chapters 7–10

Match Your Innovation Strategy to Your Innovation Ecosystem Ron Adner, HBR [Needs VPN click 'Click search within this publication', search 'Accession Number' AN=19998909] What is strategy? Porter, HBR [Needs VPN click 'Click search within this publication', search 'Accession Number' AN=9611187954]
Apple stores (1999–2003), Hargadon (toolbox/course readings)

Optional: <u>Sustainable innovation</u>, Introduction and Chapters 1–2

## 10. Innovation Strategy, Part II

(There is no final exam.)

Readings:	<u>Wicked problems: Problems worth solving</u> , read first section, "Wicked Problems" (online resource)
Assignment:	Writing Assignment 4: Course reflection (due midnight before class)
	Group Project Slide (due midnight before class)
	Group Project (due midnight a <u>week after</u> the last class)

## **Course Assessments**

Course grades will be based on the following components:

Assignment/Assessment	Marked out of	Weight on Final Grade
Writing Assignments		
WA-1: Innovation Aspirations	[20]	[8%]
WA-2: Creativity	[20]	[8%]
WA-3: Produce an event	[20]	[8%]
WA-4: Course reflection	[20]	[8%]
Group Project		
3 Idea Candidates	[20]	[8%]
Report, 1-Slide Summary, and Weekly Working Document	[120]	[40%]
Participation		
Class contribution and async completion	[30]	[20%]

# Grading Scale

90.0 + = A 80.0 + = B 70.0 + = C 60.0 + = D <60 = F

# **Assignment and Assessment Information**

## **Class contribution and async completion**

Students are expected to complete all of the corresponding asynchronous material in advance of synchronous sessions, attend all synchronous 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 scheme 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 lower contribution.
1 point:	Absent with reasonable cause and advance notification.
0 points:	Absent without reasonable cause and/or advance notification.

\*It is expected that you will have your webcam on throughout classes, unless you have previously let your instructor know of extenuating circumstances.

Important note on completing of the asynchronous material: The synchronous sessions build on the asynchronous work - without completing the asynchronous material in advance, it can be difficult to participate in the class. It is expected that all asynchronous material will be completed in advance - should components of the asynchronous material exercised be skipped or completed later, then there will be a penalty deducted from the class contribution (missing large chunks of the asynchronous content or completing significant proportions of material late, will result in a significant impact on this component of the grade). If you are completing behind a corporate firewall / VPN, please ensure that your responses are saving.

## Overview

There are four short written assignments due over the semester, which connect directly with key course material. These papers must be your original work and must recognize all quoted materials and cite all sources used in their preparation.

Each assignment may be **up to a page single spaced**, should include your **name at the top** and should be submitted under 'Assignments' on the platform **by midnight the night before the noted class**.

## Guidance

Your responses should give your perspective on the assigned questions, drawing from class material. You are advised to read the readings and watch the async material **before writing the assignments** to allow you to make connections to the themes, concepts, or perspectives when writing your assignments.

**Grading**: The best papers (17+) will i) provide a well developed response to the assigned questions, ii) make clear connections to the class material, and iii) be written with clarity and concision. It is typical for only a small number of papers to receive the highests marks (19 or 20) on any particular assignment.

**Late assignments** will be marked down 2 points, and an additional point for every subsequent week that they are late. Assignments not submitted will receive a mark of 0.

## Writing Assignment 1: Innovation Aspirations

Drawing from the first week's readings and asynchronous materials, reflect on:.

(1) Your comfort with innovating: Discuss your comfort with innovating, for example the innovation activities you are most comfortable with, and those that you hope to develop during the class.

(2) Specific innovation challenges that you are facing: What innovation challenges are likely to affect your work, and what do you see to be the most difficult or important areas for success.

(3) Your passion for innovation: What makes you passionate about the innovation challenges that you are facing?

## Writing Assignment 2: On Creativity

Reflect on the first four chapters in *How breakthroughs happen,* async, and at least one of the short videos/posts :

- <u>Star Wars Dam Busters</u>
- Raiders of the lost archives (to get the full effect, read Spitballing Indy too)
- The post <u>"Blurred lines</u>" on the charges leveled against Robin Thicke and Pharrel Williams, Demi Lovato, and George Harrison.

Discuss the following:

(1) The dominant view of originality in innovation: What is the predominant view on the need for originality in creativity, both in the public at large, and within firms that you have worked.

(2) Your reflection on readings/videos: What is illustrated in the readings and videos about the role of creativity in innovation? What other examples can you think of that illustrate this?

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

# Writing Assignment 3: Produce an Event

Organize and put on an innovative experience for eight or more people that is in their best interests—something that is not a straightforward dinner party, movie, or 'catch-up'. This is not a drill; **you're expected to actually put on the event**, held at some point during the course, prior to the writing assignment submission (i.e., this is not a reflection on a historical event, nor a discussion of a future or hypothetical event).

The event could be in person or on-line (e.g., Zoom), and could be for friends, family, or colleagues. Keep in mind though that it should be creative in nature, even if you do online. With this in mind, and to get full value from the exercise, it should also not be something that you were planning on doing anyway, but rather something outside of what you would normally do.

This exercise is about your comfort level with using power and influence to get others involved and to attend something innovative. 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 to happen will require entrepreneurial effort to get others involved in something that is in their best interest.

Reflecting on the activity of organizing and hosting the event, as well as readings and the async, discuss: :

(1) **Describe the event**: Briefly describe the event and the extent to which you consider it innovative. Include a picture of the event for context.

(2) Gaining commitments: Describe your experience of getting others to attend and participate in the event, drawing from course concepts. For example, what persuasion or influence techniques did you use? What resistances did you face, and how did you overcome them? Are there things that you would have approached differently again?

(3) Broader reflections: What learnings will you take into other innovative projects going forward? What areas of gaining commitment were challenging for you, and how may you work on improving them?

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

**IMPORTANT**: 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 4: Innovations Reflections

Further details of this assignment will be posted to the course wall closer in the semester.

## **Guidance on Group Project**

The group project will involve identifying, analyzing, and discussing the implications of an emerging innovation. This innovation should involve both an emerging technology and a specific market or use case.

You will be assigned to a group by your instructor with groups formed randomly.

The project comprises several connected components, each are described further below:

- 1. **Working Document**: A shared 'working document', with a series of discussion questions to help explore the innovation across the four areas: Creativity, Commitment, Entrepreneurship and Innovation Strategy.
- 2. **3 Project Candidates**: One of the first parts of the group project is deciding on a good innovation context to examine. To help ensure that the innovation is bounded well to make for a good project, 3 candidates will be submitted for initial feedback.
- 3. 2 Slide Summary: A summary of key group insight.
- 4. **Report**: The report will (1) describe the innovation and its origins; (2) how the particulars of this innovation reflect central principles of innovation discussed in the course; and (3) using course concepts, predict the likely implications, opportunities and challenges that the innovation presents.

## **Group Project, Working Document**

To help you first select the innovation topic (i e., weeks 1-3), and then make connections between the innovation topic selected and course concepts, a Google Doc working document will be shared when groups are formed. This shared document will contain a series of prompts corresponding to class content, for you to build up a series of notes across the course, in turn helping when it comes to writing the report.

The notes in this working document are not meant to be elegantly written essays—they're just places to put your notes and learning, so that when you write the final paper, you have a good base to draw from. While there is no length requirement (they could be as short as a few bullet points, or pages in length), as a group you should ensure that you are engaging with the content. These documents will be periodically reviewed, and should be completed each week.

## **Group Project: 3 Project Candidates**

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

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.

For each of these three innovation candidates write an initial assessment of (each should be around 150 words that:

1. **Innovation**: Describe the innovation, clearly detailing its central technology and the use-case in a particular market.

2. **Elements that comprise the innovation**: Identifies existing technologies, stakeholders, or other groups that the innovation is building or or will need to work with.

**3. Likely implications**: Provides tentative implication of the innovation (e.g., likely implications for a particular market, or opportunities or challenges that the innovation presents).

As advice: Try to bound your candidate innovations (and sharpen your analysis) by clearly specifying your innovation. This means it involves a technology that is in use somewhere (i.e., not purely conceptual); for a clear use-case in a defined market; and has the potential for broader impact within the next 10 years. 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 focussing on the next ten years.

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

While the feedback that you will receive on the 3 project candidates is intended to help you write a report that builds closely on course material, you will still have discretion to select the topic of your final submission.

## Group Project, 2 Slide Summary

Prepare two slides summarizing the report that you are working on. This should include:

- 1. **The innovation**: Describing the innovation (the technical components, the market you are looking at), as well as elements that form the system which the innovation is a part of.
- 2. The course concepts that you look at: What are some of the key themes or course material that your group is examining in the report.

While there will be no formal group presentation, all members should be prepared to discuss the group project individually as part of informal small group discussions.

Format: A Google Slides template will be shared with each group in advance of Week 10.

#### **Group Project: Report**

The group report is intended to be written as an objective evaluation of a particular innovation (i.e., technology and market) - for example, an industry analyst evaluation.

#### A week after the final session, teams should submit the group project report:

The report should include the following components:

#### I. Executive Summary (250 words)

## II. Introduction: The focal innovation and its origins (500-750 words)

Innovation: Describe the innovation including the technological innovation and the market or use case.

What are the elements (e.g., stakeholders, technologies, industries) that make up the innovation and the broader system that it is part of. Create a network/system diagram that illustrates how the innovation connects with other elements.

## III. Relevance to a key course concept (or concepts) (500–750 words)

Describe how the innovation illustrates central principles of course concepts. This may include discussion on creativity, commitment, entrepreneurship, or innovation strategy.

To allow you to go into depth, it is suggested that you focus on one course concept, rather than trying to discuss everything.

## IV. Implications (500–750 words)

Describe the implications of this innovation. This may include its initial markets, growth trajectory, changes in complementary and competing technologies, social and economic forces, or corresponding opportunities and challenges associated with the innovation.

## V. Conclusion (250 words)

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

Note: While the 'working document' discussed earlier is intended to prove useful in writing the report, do not try and cram everything into the report. The report should read as a cohesive document, and focus on what you deem to be the most important connections with course material. The better reports make a more limited number of points well, rather than a lot of unsupported points.

More broadly, make sure that as a group you complete the draft sufficiently ahead of time to allow all members to read and review it.

## **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>