KAIST
School of Business and
& Technology Management

Syllabus
Fall/2020

MSB204
Introduction to Innovation Management

Credits: 3

Professor: WonJoon Kim
(wonjoon.kim@kaist.edu)

Special Lecture by Professor: Dr. Seungheon Song
(McKinsey and Company)

Teaching Assistant:

First lecture: Sept. 1st

Examination date:

Contents:

1. Aims of the course
2. Starting level
3. McKinsey and Company Co-teaching
4. Teaching Method
5. Study Material
6. Lectures
7. Office Hour
8. Examination
9. Term Project
10. Grading
11. Timetable

1. Aims of the course

The purpose of this course is to introduce you to innovation studies, and to train you to think strategically about innovation management and policy from the perspective of firm and government. You will understand basic and fundamental theories in innovation studies and understand the mechanism of innovation in technology, firms, and nations. Therefore, in this course, we will explore such topics as, not bounded:

History of Innovation Studies
Sources of Innovation
Innovation and Economic Development
Types and Patterns of Innovation
Diffusion and Dynamics of Innovation
Innovation Strategy of Firms and Institutions
Open Innovation
Sustainable Innovation
Innovation Systems
Innovation, Science and Technology Policy

2. Class Operation Format

The course will be lecture, case, video and discussion based using Education 3.0 platform. We will use a combination of text and cases to explore and apply the topics. If you stay up on the material you will learn more during the discussions and be successful at the assignments.

Over the course of the semester, you will work in groups or individual to complete your presentation or case study. During the course of the semester, you will have several assigned exercises (some in class, some out-of-class) and presentation assignment. Through reading, organizing presentations, developing your own case analysis, you will gain a much richer understanding of the process of strategic analysis.

The course consists of three hours of lectures, video, discussion per week. The topics of the lectures are for each week listed in the planning scheme below. The lectures are normally on **Tuesday and Thursday from 10:30p.m. – 12:00p.m.**

- You need to do one of the following items before and during class:
  i. Preliminary study through video lecture with some assignments
  ii. Group discussion
  iii. Term project discussion
- In addition, you will have following requirements:
  i. Midterm
  ii. Group term project (on a topic germane to the class)

Most of notices, announcements, article to discuss during class hours will be posted on Facebook page, so please affiliate below class homepage of Facebook:

- **It will be announced later**

3. Textbook

"Strategic Management of Technological Innovation" by Melissa A. Schilling (Mcgrow-Hill)
Note: Although this book is a main textbook for this class, most of the lectures will be based on the lecture notes (PPT files).

4. Office Hours

By appointment with email.

5. Examinations

There is a midterm examination which will include questions regarding the understanding of the issues students learned.

6. Individual Paper Proposal

The proposed paper entails posing problem, collecting an appropriate data set, how to conduct an analysis, and writing preliminary results in the form of a short research paper. I will give you a more detailed description of the project a little later in the term.

7. Grading

Grading will be based on final exams, term project/homework. The point distribution will be as follows:

Final Term Presentation	-	30%
Peer Review	-	20%
Homework	-	40%
Attendance	-	10%
		100%

* *There will be 40% discount for homework late submission.*

8. Schedule (subject to change)

Week	Date	Subject	Methods	Contents Dev. Plan	Homework	Additional Resources & Etc.
1	Sept. 1	Introduction to Innovation Studies	**Online Live Class (ZOOM)**	-My Lecture 1	**- Homework #1** Book summary: "New Ideas from Dead Economists (Todd G. Buchholz)" Ch. 2, 6, 8. Due March 25th	-Intro to the class Other web resource search & upload to KLMS by TAs - Book: "High-tech, High-touch (John Naisbitt)" Prolog, Ch. 1, 2 – material distribute
	Sept. 3	Introduction to Innovation Studies	**Online Live Class (ZOOM)**	Video: Lecture 2-1 Intro to Innovation		SNS-based Q&A available at Facebook
2	Sept. 8	Sources of Innovation I - History of Innovation	**Video Class**	Video: Lecture 2-2~2-3 Intro to Innovation: History of Innovation	**- Homework #2**: Video 3-1 ~ 3-5 Submit examples of products or services that went through switching of technology S-curve. Due April 2nd , 2 a.m.	**Group preference email (due by April 2nd, 2 a.m.)** Makeup class with additional 1 hour (video)
	Sept. 10	Sources of Innovation I - History of Innovation	**Online Live Class (ZOOM)**		**- Homework #3** Book summary, "Innovator's Dilemma" (by Christensen Clayton), Chapter 1, 2. Due April 6th, 2 a.m.	- Book: "Schumpeterian Analysis of Economic Catch-up (Ken Lee)" Ch. 1, 2, 5, 6, 7
3	Sept. 15	Sources of Innovation II - Sources of Creative Destruction	**Video Class**	Video: Lecture3-1~3-5 Sources of creative destruction	**- Homework #4**: Video 4-1~4-6 Submit three examples of disruptive innovation or examples of different types of innovation with explanation. Due April 8th, 2 a.m.	Makeup class with additional 1 hour (video)
	Sept. 17	Sources of Innovation II - Sources of Creative Destruction	**Online Live Class (ZOOM)**	Video: Lecture3-6~3-7 Sources of creative destruction	**- Homework #5:** Book summary, "Blue Ocean Strategy" (by Chan Kim & Renee Mauborgne), Chapter 1, 2. Due April 20th, 2 a.m.	- (Reference) MIT Lecture: http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-901-inventions-and-patents-fall-2005/
4	Sept. 22	Types and Patterns of Innovation I	**Video Class**	Video: Lecture4-1~4-6 Types and Patterns of Innovation	**- Homework #6**: Video 4-7~4-8 Submit two examples of blue ocean strategy. Due April 15th, 2 a.m.	**Group formation announcement** Makeup class with additional 1 hour (video)
	Sept. 24	Types and Patterns of Innovation I	**Online Live Class (ZOOM)**			
5	Sept. 29	Types and Patterns of Innovation II	**Video Class**	Video: Lecture4-7~4-8 Types and Patterns of Innovation	**- Homework#7: Term Project Idea** Due April 23nd, 2 a.m.	
	Oct. 1	Thanksgiving				

6	Oct. 6	Types and Patterns of Innovation II	**Online Live Class (ZOOM)**		**- Homework #8: Harvard Business Press Simulation: Back Bay Battery, Inc. Individual simulation 5 times. Due April 23rd**	
	Oct. 8	Types and Patterns of Innovation II	**Online Class Simulation (HBS Case)**	**Harvard Business Press Simulation Introduction**		
7	Oct. 13	Types and Patterns of Innovation II **Term Project Discussion**	**Online Live Class (ZOOM)**		**Term Project Proposal due** **-Homework #9:** Submit 1 page summary: Poter96_What is strategy. Due May 11th, 2 a.m.	- Group project rubrics - (Reference) MIT Lecture: http://ocw.mit.edu/courses/sloan-school-of-management/15-351-managing-innovation-and-entrepreneurship-spring-2008/
	Oct. 15	**Harvard Business Press Simulation**	**Online Class Competition** **Online Live Class (ZOOM)**		**- Homework #10**: Video 5-1~5-3 Submit generic strategy, porter's 5 forces of your term project in brief (no more than 1 page). Due May 13th, 2 a.m.	
8	Oct. 20	Midterm Exam				
	Oct. 22					
9	Oct. 27	Firm Strategic Innovation Management I	**Video Class**	Video: Lecture 5-1~5-3 Firm Strategic Innovation Management /Business Model Innovation	**- Homework #11**: Video 5-4~5-6 Submit Value Chain analysis of your term project. Due May 20th, 2 a.m.	
	Oct. 29	Firm Strategic Innovation Management I **Term Project Discussion**	**Online Live Class (ZOOM)** **Online team meeting**			
10	Nov. 3	Firm Strategic Innovation Management I	**Video Class**	Video: Lecture 5-4~5-6 Firm Strategic Innovation Mgt.	**- Homework #12**: Video 6-1~6-8 Submit your analysis of First Mover/Platform Strategy for your term project item. Due May 27th, 2 a.m.	
	Nov. 5	Firm Strategic Innovation Management I **Term Project Discussion**	**Online Live Class (ZOOM)** **Online team meeting**			
11	Nov. 10	Firm Strategic Innovation Management II	**Video Class** **Online team meeting**	Video: Lecture 6-1~6-8 First Mover Advantage	**- Homework #13**: Video 7-1~7-7 Please submit your team's results of the analysis of Behavioural Change x Innovativeness matrix. Due June 3rd, 2 a.m.	
	Nov. 12	**Special Lecture: Innovation Management in Practice**	**Online Live Class (ZOOM)**	**Dr. Seungheon Song, McKinsey and Company**	**Special Lecture: Innovation Management in Practice** **- Homework #14:**	

					Book review: one page summary of "Crossing the Chasm (G. Moore)" Part 1. Due. June 4th, 2 a.m.	
12	Nov. 17	Demand-Side and Innovation: Diffusion of Innovations **Term Project Discussion**	**Video Class** **Online team meeting**	Video: Lecture 7-1~7-7 Diffusion of Innovation	**- Homework #15:** Please submit the preliminary presentation of your term project. Due June 11th, 2 a.m.	-MIT Lecture: 1 http://ocw.mit.edu/courses/sloan-school-of-management/15-356-how-to-develop-breakthrough-products-and-services-spring-2012/ 2. Product Design and Development: http://ocw.mit.edu/courses/sloan-school-of-management/15-783j-product-design-and-development-spring-2006 - Book: "Marketing of High-Technology Products and Innovation (J. Mohr, S. Sengupta, & S. Slater)" Ch. 1, 2, 7
	Nov. 19	Demand-Side and Innovation: Diffusion of Innovations **Term Project Discussion**	**Online Live Class (ZOOM)** **Online team meeting**			
13	Nov. 24	**Term Project Discussion**	**Online team meeting by team**		**- Homework #16:** After viewing the Video 8-1~8-4. Please submit three examples of market failures. Due June 17th, 2. a.m.	
	Nov. 26	**Preliminary Presentation**	**Online Live Class (ZOOM)**		**Online Presentation by Team (7 min by team, PPT less than 10 pages)**	
14	Dec. 1	Supply-Side and Innovation **Term Project Discussion**	**Video Class** **Online team meeting**	Video: Lecture 8-1~8-4 Market Structure and Innovation	-MIT Lecture: http://ocw.mit.edu/courses/sloan-school-of-management/15-020-competition-in-telecommunications-fall-2003/	**Term Paper submission due**
	Dec. 3	**Term Project Discussion**	**Online Live Class (ZOOM)** **Online team meeting**			
15	Dec. 8	**Term Project Discussion**	**Online Live Class (ZOOM)** **Online team meeting**		**- Final Presentation & Peer Review Submission** Submit your semi-presentation of your term project item. **Due June 25th, 2 a.m. (Final Presentation)** **Due June 26th, 2 a.m. (Peer Review)**	
	Dec. 10	**Final Presentations**	**Online Presentation**		10:30 a.m. – 12:50 p.m.	
16	Dec. 15	Final Exam Period				
	Dec. 17					

*FYI:

- MIT Lecture Video: http://ocw.mit.edu/courses/find-by-topic/#cat=business
- MIT Lecture Video: http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-901-inventions-and-patents-fall-2005/

- MIT Lecture Video: http://ocw.mit.edu/courses/sloan-school-of-management/15-351-managing-innovation-and-entrepreneurship-spring-2008/
- MIT Lecture Video: http://ocw.mit.edu/courses/sloan-school-of-management/15-356-how-to-develop-breakthrough-products-and-services-spring-2012/
- MIT Lecture Video: http://ocw.mit.edu/courses/sloan-school-of-management/15-783j-product-design-and-development-spring-2006/