

Management of Innovation

Course Objectives

This course examines the management of innovation in terms of its underlying dynamics as well as its wider socio-economic impact. It focuses in particular on technological change, the role of innovation systems herein, and the policy choices they introduce. The broad impact technological innovation can be observed in both historical transitions, such as the industrial revolution. Currently, digital technologies in particular are having wide ranging effects across a broad set of industries (such as media, transportation, hospitality) and issues (including privacy, trust, and coordination).

This course combines case studies, in-class exercises, group work, and lectures, to better understand these dynamics. The course focuses on innovative activities in technology-intensive firms, but also examines innovation in other industries such as design, consumer goods, retail, fashion, and manufacturing. It examines the unique challenges and opportunities during the early stage of new industries, and the changing nature of innovation as industries evolve. The course should be of interest to students aspiring to work in industry, public sector, non-profits, or startups.

Course Material

- Course readings (see LUISS Learn)
- Greenhalgh, Christine & Rogers, Mark (2010), *Innovation, Intellectual Property, and Economic Growth*, Princeton University Press (Background)

Teaching Method

One of the principal aims of this course is to teach you how to think about organizing innovation. The focus of the course therefore is on understanding different frameworks to analyze innovation, rather than providing set answers. To achieve this we use a combination of materials (including textbook, papers, videos, and cases), assignments (involving both group work and individual assignments), in-class exercises, and guest lectures.

This course involves a combination of groupwork and individual assignments.

Case Discussion (group)	5
Innovation Impact Report (group)	10
Final Written Exam (individual)	12
Class Participation (individual)	3

1. Case Discussion

The case discussion will help you better understand the impact and dynamics of innovation based on real-life examples, and the different challenges these introduce. Each case is organized around a particular set of questions that are meant to instigate a discussion, where each group needs to argue a position and motivate their reasons for doing so.

The cases are made available online. Cases and assignment questions will be posted 1 week in advance. To be able to successfully participate in class, everyone needs to have carefully read and considered the case and the questions before class.

Each group is randomly assigned to a case included in the syllabus. This group assignment involves the following two parts: (1) presentation of the assigned case and (2) leading and managing discussion for the assigned case session after the case presentation. The group presentation and class discussion should follow the discussion questions posted on the website for the case study analyzed. The group is responsible for stimulating class discussion. Therefore, credit will be given for raising issues and questions that go beyond what is obvious and for creativity in involving the class. You can use notes during presentation, but merely reading while presenting will negatively affect your evaluation.

2. Innovation Impact Report

The Innovation Impact Report will be conducted by the same group assigned at the beginning of the semester. In this report each group should choose a current topic that is related to the management of innovation. Examples of these include (but are not limited to): Advance Robotics/ Artificial Intelligence, Autonomous vehicles, Big data, Blockchain, Digital Currency, Digital Transformation of Work, Internet of Things, the Sharing Economy, etc. The Innovation Impact Report topics should not overlap between groups.

The report should contain at least the following elements:

- Introduction: Overview of the innovation (both descriptive and quantitative, e.g., relevant statistics on e.g. market size, revenues, etc).
- Impact Analysis: Apply key concepts from the course to analyze the impact of your innovation in terms of both opportunities and challenges, and which stakeholders are involved in these
- Consider the different policy choices these opportunities and challenges raise and highlight potential upsides and downsides of these policy choices
- Conclusion: Critical discussion about key concepts and how they apply to your topic, Lessons learned from analyzing your innovation

Where possible, groups are strongly suggested to get first-hand information (e.g. interviews) about the innovation, and present a mix of qualitative and quantitative information about the innovation analyzed. Using a range of data sources (books, academic and non-academic articles) is highly encouraged.

Students are required to hand in a 25-30 page paper including all figures, tables, and references (12 point Times New Roman, double spaced, regular margins,) that covers the above mentioned points, and give a presentation in class.

3. Final Written Exam

The format of the exam will be an in-class set of written questions. The questions will draw on the key concepts discussed in the textbook, papers/articles, case analyses, and guest lectures.

4. Class participation

An important aspect of learning by the case method is class discussion of the issues, problems, and solutions. This approach, however, depends on students being thoroughly familiar with the details of the

case under consideration. The quality of individual preparedness in case discussions is important. Attendance at all classes is expected. If you are not present, you cannot participate. Criteria which will be used to judge case preparedness include:

- Are the discussion points relevant to the case?
- Do the points go beyond recitation of the case facts?
- Are comments linked to those of others?
- Do comments further the class understanding of issues discussed during lectures and case discussion?
- Do comments raise interesting questions?
- Does the analysis make use of concepts from the readings or lectures?
- Are comments made in a respectful, professional, and constructive manner?

Please do not allow mobile phones/communication devices to disrupt class. Unnecessary class disruption of this kind will negatively impact your participation grade. To obtain the maximum score, you need to attend the classes regularly and consistently make insightful and meaningful contributions to class discussions.

Course outline & schedule

Management of Innovation	Time	Day & Date
Week 1	17:00 - 20:00	Tuesday 11-09-2018
1.1: Introduction 1.2: Chapter 1: The Nature and Importance of Innovation Ahlstrom (2010)		
Week 2	17:00 - 20:00	Tuesday 18-09-2018
2.1: Chapter 2: The Nature and Role of Intellectual Property Chapter 6: Intellectual Property Rights and Firms 2.2: Fauchart and Von Hippel (2008) Henkel et al., (2013) (optional)		
Week 3	17:00 - 20:00	Tuesday 25-09-2018
3.1: Chapter 4: The National Innovation System 3.2: Chapter 5: Innovative Firms and Markets		
Week 4	17:00 - 20:00	Tuesday 02-10-2018
4.1: Brynjolfsson and McAfee 2012 4.2: Gereffi and Lee (2012) Dedrick and Kraemer (2015) (optional) Chapter 7: Diffusion and Social Returns Chapter 9: Innovation and Globalization (optional)		
Week 5	17:00 - 20:00	Tuesday 09-10-2018
5.1: Case 1 5.2: Case 2		
Week 6	17:00 - 20:00	Tuesday 16-10-2018
6.1: Case 3 6.2: Case 4		
Week 7	17:00 - 20:00	Tuesday 23-10-2018
7.1: Case 5		

7.2: Case 6		
Week 8	17:00 - 20:00	Tuesday 30-10-2018
8.1 & 8.2: Midterm break		
Week 9	17:00 - 20:00	Tuesday 06-11-2018
9.1 & 9.2: Interim Presentations (preliminary results of Innovation Report)		
Week 10	17:00 - 20:00	Tuesday 13-11-2018
10.1 & 10.2: Simulation		
Week 11	17:00 - 20:00	Tuesday 20-11-2018
11.1 & 11.2: Wrap up		
Week 12	17:00 - 20:00	Tuesday 27-11-2018
12.1 & 12.2: Innovation Report – Final Group Presentations		

Course Policies

You must abide by University policy on academic dishonesty, including plagiarism, sabotage, falsification of material or information, bribery, as well as theft, damage, or misuse of University resources. Plagiarism and cheating indicate a lack of respect for ethical considerations and peer responsibilities and will result in an immediate failure grade for the course.

Being prepared for class: You should be ready to discuss any assigned readings and to answer any assigned questions for each class session, including being ready to open a case assigned for that day. Attendance for the entire session at every class is mandatory; should an emergency situation arise, students must notify me as soon as possible; attendance problems do not exempt you from turning in work on the due date; your grade for participation will be affected by absences and late arrivals.

Minimizing disruptions: All cell phones and other electronic devices should be turned off during class. You should not leave and re-enter the class. You should avoid engaging in side conversations during class.