

## INNOVATION MANAGEMENT (MG104)

**Course duration:** 54 hours lecture and class time (Over three weeks)

**LSE Teaching Department:** Department of Management

**Lead Faculty:** Dr Lourdes Sosa and Dr Susanna Khavul

**Pre-requisites:** None

### Summary:

This course introduces the fundamentals of innovation management. In particular, the course highlights the distinctive aspects of management (and policy) in high tech markets. Topics cover main concepts and known empirical trends in high tech markets along with their practical applications in business. For clarity, themes are organised per unit of analysis: industries, nations and regional clusters, firms and new ventures, teams, and scientists and entrepreneurs. That said, in innovation management it is impossible to understand the dynamics of one unit of analysis independently of those of the others. Consequently, interactions will be discussed, from the link between industry-level dynamics and firm-level competition, to the link between the characteristics of new ventures and of their entrepreneur founders. Because evidence related to innovation management is difficult to collect, emphasis in lecture will be given to its critical discussion. Lectures will make use of a combination of teaching methods, including practical applications based on handouts, electronic voting, and simulation. Classes will combine group exercises with in-depth discussion of case studies. Students are expected to come to classes prepared to actively participate in case discussions.

### Objectives:

The objective of the course is to explain how high tech innovation poses distinctive requirements on management demanding in turn that innovation management practices be different from those in general business. Accordingly, the course will, for example, discuss the effect of innovation on patterns of industry evolution to then review how firms can competitively manage through those patterns. Likewise, the course will discuss the unique preferences of scientists to then discuss how firms can adapt their human resource practices to most effectively manage their scientific talent. Because the course is organised in themes by unit of analysis, theoretical background will be drawn from appropriate disciplines in each case: microeconomic theory, the “resource-based view” of the firm, organisation theory, sociology and psychology.

The course emphasises critical thinking with the need for analytical reasoning (logic). Its rigorous approach does not require any previous knowledge of management, mathematics or economics. Information on high tech markets will be presented in plain terms with no need for any specific technical background. A basic review of research methodology will be offered at the beginning to support the discussion of the logic behind the evidence under examination. Students already familiar with innovation management may also benefit from the course, although they should keep in mind that the course is an introduction to the topic.

**Structure and Assessment:**

The course consists of 12 three-hour lectures and 12 90-minute classes, spread over a three-week period. Class work will relate to the material covered in lectures and concentrate on the discussion of thought-provoking cases.

Formal assessment will be based on a final two-hour written examination (80%) and a team project (20%).

**Readings:**

Case Studies: You will need to read all cases very carefully before the relevant class. Discussions will be based on these cases. Hard copies of the cases will be made available to you.

Lecture Slides: Electronic copies will be posted on the course's Moodle web page after lecture. Important announcements will also be posted on Moodle.

Books: There is no set text for this course. Students will be expected to make use of reading materials available electronically in the Library to learn theoretical concepts and will be given photocopied and any other practical materials for interactive work during lectures.

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**Lecture Topics:**

- **Lecture 1:** Introduction to Innovation Management.
- **Lecture 2:** Industrial Dynamics of Innovation.
- **Lecture 3:** Spatial Patterns of Innovation.
- **Lecture 4:** Innovation in Developing Economies.
- **Lecture 5:** Innovation in Industry and Academia.
- **Lecture 6:** The Effect of Innovation on Competition.
- **Lecture 7:** New Product Development.
- **Lecture 8:** Efficiency, Innovativeness and Organisational Ambidexterity.

- **Lecture 9:** Team Dynamics and Creative Environments.
- **Lecture 10:** Entrepreneurship and the Dynamics of New Ventures.
- **Lecture 11:** The Unique Preferences of Scientists and Entrepreneurs.
- **Lecture 12:** Final remarks.

### Instructions for the Team Exercise:

Working in teams, students are required to complete a project on innovation management. The project will involve the use of concepts from the course applied to the collection of data both from primary (e.g., interviews or questionnaires) and secondary sources (e.g., electronic database available from the Library).

At the end of the course, teams are expected to produce a brief video using regular equipment (e.g., a smartphone or iPad) to summarise their project. The video content is open to any format (e.g., verbal presentations, role playing, graphics, etc.). An exercise in class during the first week will offer the opportunity to practice the creation of a video for communication. Additional to the video submission, students are also expected to conduct a short presentation within class allowing other classmates to ask questions. Unlike the video, the format for this presentation will be standardised across groups, and power point templates will be provided.

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**Credit Transfer:** If you are hoping to earn credit by taking this course, please ensure that you confirm it is eligible for credit transfer well in advance of the start date. Please discuss this directly with your home institution or Study Abroad Advisor.

As a guide, our LSE Summer School courses are typically eligible for three credits within the US system and 7.5ECTS in Europe. Different institutions and countries can, and will, vary. You will receive a digital transcript and a printed certificate following your successful completion of the course in order to make arrangements for transfer of credit.

If you have any queries, please direct them to [summer.school@lse.ac.uk](mailto:summer.school@lse.ac.uk)