### **Course Content**

It is widely believed that innovation is the key driver behind economic growth in developed economies, and even more so in Western Europe, Japan and the US. All three economic areas are short of natural resources and their most important good is brain, e.g. a well educated labor force that creates innovations that can be sold on world markets.

Innovation sometimes is the offspring of coincidence but most often is the outcome of targeted research. Successful research in turn depends on human capital and on physical capital, for example research laboratories.

Innovations come in different shapes, most importantly as product innovation – new or markedly improved products – and process innovation – cost-reducing production technology. Both types of innovations have the same effect: they increase product demand, product innovation increase consumer utility while process innovation reduces prices.

Economic policy sets the framework for research and innovation. Intellectual property rights (e.g. patents and trademarks) ensure that innovators receive a fair share of their efforts and governments try to set standards such that new technologies can reach a critical mass as soon as possible. This course discusses the economics behind innovation. By contrast, it is not a "how to" course where students are told how to e.g. run an R&D department, invest in knowledge etc. "The Economics of Innovation" is concerned with the incentives to innovate and the business strategies associated with innovation. The course seeks to answer questions like:

- How do innovations arrive?
- To what extent do competing firms matter for innovation?
- What happens if R&D workers move between different firms?
- What are agency problems associated with innovation?
- How can innovation be protected?
- What type of incentives does public policy create for innovation?
- What are Intellectual Property Rights?
- How are Intellectual Property Rights designed?
- How can firms use Intellectual Property Rights as business strategy devices?
- Can patent protection have long-term consequences on industries?

- What is the role of innovation for entrepreneurship?
- How does a firm's innovation policy look like in a globalized economy?

This course hence endows students with the elementary skills necessary to understand the driving forces behind innovation at the firm level which enables them to judge and rate a firm's innovation policy.

# Target group

This course is aimed at graduate students of management and economics who plan to work with high technology firms or institutions that finance innovative firms such as banking, private equity or venture capital.

## Course readings

Required text book:

Scotchmer, Suzanne (2004), Innovation and Incentives, Cambridge, MA: MIT Press.

The book is supplemented by academic papers from both Economics and Management as well as by case studies and articles from the business press. For more information see the reading list on our homepage.

#### Course format

Every Tuesday during the spring semester

Lecture Room: KOL-H-317 Tu, 10:15 – 12:00 Prof. Dr. Ulrich Kaiser

Tutorials Room: KOL-F-104 Tu, 12:15 – 13:45 Susan J. Mendez

Tutorials start: 02.03.2010. New room for tutorials: KOL-F-104

## Grading

This class gives 6 ECTS points. Students can use the credits for the following modules:

• MA: Wahlpflichtbereich BWL 5

• MA: Pflichtmodule ME

The lecture and tutorials will be graded based on:

Final exam 80% Summary of book chapter 10% Homework assignment 10%

### Final exam

The final written exam is scheduled for June 15, 2010 from 10:15 to 12:00 am. in KOL-F-104. It will be a closed book exam and gives 80% of total points.

#### Summaries

Chapters of the book will be summarized weekly by student groups. You have to register in OLAT. The summary should be no more than 4 pages of text (double-spaced, 12 point), tables and figures can be appended at the end.

Deadline: The summary must be e-mailed to susan.mendez@isu.uzh.ch no later than 23:59 on Mondays before the tutorial, so that all students can download it on time. E.g., summary of Chapter 1 must be handed in on Monday March 08, 2010.

Summaries will be graded by students. These are the rules:

- 1. The summary must be presented during the first 10-15 minutes of the tutorial. This is mandatory to obtain points but will not be graded.
- 2. Each student must submit an evaluation of the summary in OLAT within one week of the presentation (the evaluation sheet in OLAT will be active only for one week).
- 3. A valid evaluation consists of awarded points (between 1 and 10) and a comment (of 30 words)
- 4. You will be credited the median of points reached by your group's summary, provided that you submitted at least 9 valid evaluations.
- 5. Summary comments and the median of the points will be forwarded to the authors.

### Homework assignment

On May 11, 2010 a homework assignment will be posted on OLAT. It is due May 18, 2010 no later than 10:15 at the beginning of the lecture.

The homework assignment can be solved in groups, but it has to be handed in individually. Collaborations must be acknowledged.

Assignments will be graded and give maximally 10% of total points. Late assignments will be penalized.

# Tutorials schedule

Date	Problem set	Summary
02.03.2010	Problem set 1	
09.03.2010	Problem set 2	Chapter 1
16.03.2010	Problem set 3	Chapter 2
23.03.2010	Problem set 4	Chapter 3
30.03.2010	Problem set 5	Chapter 4
06.04.2010	Eastern	
13.04.2010	Problem set 6	Chapter 5
20.04.2010	Problem set 7	Chapter 6
27.04.2010	Problem set 8	Chapter 7
04.05.2010	Problem set 9	Chapter 8
11.05.2010	No meeting	Homework Assignment
18.05.2010	Problem set 10	Chapter 9
25.05.2010	Problem set 11	Chapter 10
01.06.2010	Problem set 12	Chapter 11

# Contact

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Office hours: by appointment