Syllabus
Course description

<table>
<thead>
<tr>
<th>Course title</th>
<th>INNOVATION MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course code</td>
<td>27182</td>
</tr>
<tr>
<td>Scientific sector</td>
<td>SECS-P/08</td>
</tr>
<tr>
<td>Degree</td>
<td>Master Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>Semester and academic year</td>
<td>1st semester, ay 2016-17</td>
</tr>
<tr>
<td>Year</td>
<td>2nd</td>
</tr>
<tr>
<td>Credits</td>
<td>7</td>
</tr>
<tr>
<td>Modular</td>
<td>No</td>
</tr>
<tr>
<td>Total lecturing hours</td>
<td>42</td>
</tr>
<tr>
<td>Total lab hours</td>
<td>--</td>
</tr>
<tr>
<td>Total exercise hours</td>
<td>9 (Microstories of Innovation and Firms Series)</td>
</tr>
<tr>
<td>Attendance</td>
<td>suggested, but not required</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>not foreseen</td>
</tr>
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<td>Course page</td>
<td><a href="https://www.unibz.it/en/economics/progs/master/entrepreneurship/courses/default.html">https://www.unibz.it/en/economics/progs/master/entrepreneurship/courses/default.html</a></td>
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Specific educational objectives
The course refers to the typical educational activities and belongs to the scientific area of Business Administration.

To learn models, tools, methods to manage innovation within organizations. To develop critical and analytical reasoning about firms innovation management. To analyze and solve problems that arise in organizations that work on innovative projects. To learn how read, summarize and present scientific papers on innovation management.

Lecturer
Alessandro Narduzzo, E508, anarduzzo@unibz.it; lecturer’s page http://www.unibz.it/en/economics/people/StaffDetails.html?personid=5125&hstf=5125

Scientific sector of the lecturer
SECS-P/08

Teaching language
English

Office hours
please refer to the lecturer’s web page

Lecturing assistant
Not foreseen

Teaching assistant
Not foreseen

Office hours
21

List of topics covered
Innovation in a systemic view - Sources of innovation - Types of innovation - Patterns and models of innovation - Timing of entry - Technological
cycles – Technological speciation – Management innovation – Design Thinking - Managing innovation in open and close innovation systems - Innovation management in complex systems - Managing innovation through experimentation - Managing innovation through improvisation - Championing innovation - Building innovative organizations.

Teaching format

The course is based on both theoretical lectures and the discussion of case-studies and other empirical materials, and it requires the active participation of students in class discussions. **Microstories of innovation and firms** (25.10, 14.11, and 6.12 2016, h 16-20) are also connected to the content of this course. Both attending and non-attending students are welcome to participate to these events in an active way.

Learning outcomes

Knowledge and understanding of innovation as a systemic phenomenon involving the creation and the development of novel organizational knowledge that is commercialized into innovative products and services. Applying knowledge and understanding to confront and analyse different models, to suggest the proper tools for specific situations, to understand how new products, organizational knowledge and managerial approach to innovation may create new value for the customers and new opportunities for the firm.

Making critical and autonomous judgments in the analysis of empirical cases of innovation and in the comparison of theoretical models and perspectives. Communication skills to describe concepts and models and to present in a persuasive and proper way the results of critical analyses of innovation cases.

Learning skills to deepen in an autonomous way a critical understanding of theoretical models on innovation and of the complex interaction between entrepreneurship and innovation.

Assessment

All students are regarded as attending students, unless they explicitly ask (by email to the professor within December 1, 2015) to be treated as non-attending students.

<table>
<thead>
<tr>
<th></th>
<th>WORKLOAD FOR ATTENDING STUDENTS</th>
<th>WORKLOAD FOR NON-ATTENDING STUDENTS</th>
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<tbody>
<tr>
<td></td>
<td>Hours # Total</td>
<td>Hours # Total</td>
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<tr>
<td>Lectures</td>
<td>3 14 42</td>
<td>0 0</td>
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<tr>
<td>Readings</td>
<td>3 27 81</td>
<td>4 33 132</td>
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<tr>
<td>Presentation and Workshop</td>
<td>9 1 9</td>
<td>0</td>
</tr>
<tr>
<td>Wrap-up report</td>
<td>5 1 5</td>
<td>0</td>
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<tr>
<td>Exam preparation</td>
<td>2 14 28</td>
<td>3 14 42</td>
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<tr>
<td>Microstories</td>
<td>3 3 9</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL (hours)</td>
<td>174</td>
<td>174</td>
</tr>
<tr>
<td>Standard effort (hours)</td>
<td>175</td>
<td>175</td>
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Assessment language

English

Evaluation criteria and criteria for awarding

**Attending students’ evaluation.** The program covers the required readings ONLY:
<table>
<thead>
<tr>
<th>Marks</th>
<th>Final exam: 50%</th>
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<tbody>
<tr>
<td></td>
<td>Class leadership: presentation, workshop and post-class wrap-up report: 30%</td>
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<tr>
<td></td>
<td>Class participation (class discussion, questions, answers to “cold” questions): 20%</td>
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**Class leadership:** During the first class, each student is assigned to a group that is in charge of one of the lectures (from L4 to L14) of the course. Each group is expected:

a) to summarize and to comment the readings marked with (P);
b) to design and to manage discussions, exercises, workshops to foster the class understanding on the topic of the day.

The presentations assume that all the students in class have read in advance the readings. The suggested time for presenting the assigned readings is about 15’ (with obvious exceptions). Slides of the presentations need to be sent to prof. Narduzzo at least two days before the class date. To evaluate the presentations the following criteria are considered:

1. Completeness. The presentations covered all the major topics introduced in all the readings.
2. Clarity. The presented topics were understandable.
3. Connections among the readings and with other contents of this course.
4. Time management. The assigned time was well organized and balanced.

To design the exercises/workshops you are invited to consult prof. Narduzzo in advance, during the office hours. To evaluate the exercise/workshop the following criteria are used:

1. Relevance of the topic selected for the exercise/workshop
2. Ability to stimulate and enable insightful reasoning on the selected topic
3. Ability to involve the class
4. Time management.

**Post-class wrap-up report:** At the end of the led class, each group writes a short report (about 2,000 words) that summarizes the main issues (e.g. concepts, problems, phenomena) presented and discussed. The report should be a stand-alone document (i.e. please include references and other details that makes meaningful the document) that ideally can be used to external readers to approach the topic and to gain some understanding (e.g. to be upload in Wikipedia as a contribution on a particular topic).

**Non-attending students’ evaluation.**
Non-attending students do not have to write any report or assignment. Final exam: 100%. The program covers both required and supplementary readings listed in this syllabus. To evaluate non-attending students preparation, final exams for attending and non-attending students do not have exactly the same questions.
Required and supplementary readings


ONLY the Selected Chapters indicated for each topic of this course.

List of readings for each topic of the course is provided below. For each topic, readings are listed in the suggested order of reading.

For each topic readings are listed in the suggested order of reading.

1. Innovation, innovative firms, innovation management – An introduction ()
Why does innovation matter? How practitioners and scholar think about innovation? Why and how do organizations want to manage the innovation journey.

Supplementary readings:

Additionally suggested readings:

2. Innovation: background and conceptualizations ()
In this class we introduce and discuss standard definitions, conceptualizations and models. The Kodak case assigned for this class will be used to comment and discuss the concepts. In general we are going to refer to the cases also in later classes: so, do not forget them and bring your copy of the cases in next classes.
- Schilling 2013, Chapter 3.
- CASE: KODAK (6 documents).

Supplementary readings:

3. Innovation management: problems, myths, traps ()
This class offers a problematic perspective to frame innovation management and to provide a model for further theorizing.
- CASE: Google.

Supplementary readings:

Additionally suggested readings:

4. Managing innovation as exaptation ()
Innovation management through an evolutionary perspective. Innovation management consists of managing a system of interdependent and evolving components. Innovation as exaptation will be discussed.
5. Innovation management: techniques and tools

We review a repertoire of tools traditionally associated to innovation management. We discuss to what extent they cope with the problems introduced in Class 3. In particular, we wish to focus on those tools that deal with complexity and uncertainty.


Additionally suggested readings:


6. Innovation management measurement

Measuring innovation is a tricky issue. On the one hand, there is a need to assess the impact of innovation; on the other hand, the complexity of the phenomenon suggests avoiding simplistic solutions. The most common measures of innovation look at input (e.g. intensity of R&D investment) or output (e.g. number of patents). The approach proposed for this class is radically different and is grounded on the conceptualization of innovation as a process.

- Gamal D. 2011. How to measure organizational innovativeness? An overview of Innovation framework and Innovation audit. TIEC.

Additionally suggested readings:


7. Management innovation

Management innovation is the invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals.


Additionally suggested readings:


### 8. Managing innovation through experimentation

Innovation is conceived as a process of trial and error. Its effectiveness depends on the organizations’ ability to adapt to this logic/practice.


### 9. Building innovative organizations

Firms may adopt organizational arrangements that support innovation. Through the concepts of organizational ambidexterity and organizational bricolage we discuss how firms may combine exploration and exploitation.


**Supplementary readings**


### 10. Managing innovation and creativity

We discuss how organizations may succeed in fostering innovativeness: If ad wow individuals and organizational creativity can be managed.


**Additionally suggested readings:**


### 11. Design Thinking

This approach to innovation combines creative and analytical approaches, and requires collaboration across disciplines. This process—which has been called design thinking—draws on methods from engineering and design, and combines them with ideas from the arts, tools from the social sciences, and insights from the business world.


**Supplementary readings**

12. Open and closed innovation systems

To innovate, firms often need to draw from a wide number of different sources of knowledge from outside their organization. At the same time as firms need to be open to external sources, they also need to be focused on capturing returns to their innovative ideas. This gives rise to a paradox of openness - the creation of innovations often requires openness and commercialization of innovations requires appropriability.


Supplementary readings:

Additional suggested readings:


13. Managing Technological Innovation


Additional suggested readings:
- Schilling 2013, Chapter 1.

14. Strategic innovation management: Timing of entry

This class is aimed at analyzing the temporal dimension of innovation, both from a strategic and from an managerial perspective. The discussion will cover themes like innovation S-cycles, innovation adoption and market entry timing.

- Schilling, 2013, Chapter 5. (P)