Syllabus
Course description

<table>
<thead>
<tr>
<th>Course title</th>
<th>Economics</th>
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<tbody>
<tr>
<td>Course code</td>
<td>27173 (Erasmus M1 27183 – M2 27184)</td>
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<tr>
<td>Scientific sector</td>
<td>SECS-P/01</td>
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<tr>
<td>Degree</td>
<td>LM 77 – Master in Entrepreneurship and Innovation</td>
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<tr>
<td>Semester and academic year</td>
<td>1st and 2nd semester, 2018/2019</td>
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<tr>
<td>Year</td>
<td>1st year</td>
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<tr>
<td>Credits</td>
<td>12</td>
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<tr>
<td>Modular</td>
<td>Yes</td>
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| Total lecturing hours | 72                                           |
| Total lab hours       | 12                                           |
| Total exercise hours  | -                                            |

Attendance suggested, but not required

Prerequisites Attendance of the course is suggested. Knowledge of calculus and of the basics of optimization theory helps, but not it is not a requirement.


Specific educational objectives The course refers to the typical educational activities and belongs to the scientific area of Economics.

The course gives a general overview of the issues of microeconomic theory pertinent to the analysis of entrepreneurial and innovative activities.

The educational objectives are to provide students with a good grasp of microeconomic tools that are needed to analyze firm behavior and optimization.

Module 1 27173 – M1-Business economics


Scientific sector of the lecturer SECS-P/01

Teaching language English

Office hours https://www.unibz.it/en/timetable/?department=26&degree=12835
### Lecturing assistant
Stefano Castriota

### Teaching assistant
None

### Office hours
-

### List of topics covered
Basic principles of Business Economics: Industrial Organization and Competitive Strategy. In particular:
The course will cover the following topics:
1) Market structure and market power
2) Competition and differentiation
3) Vertical differentiation and price discrimination under competition
4) Horizontal differentiation under competition
5) Search and switching costs
6) Capacity constraints and competitions
7) Barriers to competition
8) Price discrimination with market power
9) Two sided markets
10) Entry and entry deterrence
11) Predation
12) Collusion
13) Introduction to demand estimation

### Teaching format
Frontal lectures and exercises.

### Module 2
27173 – M2-Innovation economics

### Lecturer
Federico Boffa, [Federico.Boffa@unibz.it](mailto:Federico.Boffa@unibz.it),
+39 0471 013278,

### Scientific sector of the lecturer
SECS-P/06

### Teaching language
English

### Office hours
https://www.unibz.it/en/timetable/?department=26&degree=12835

### Lecturing assistant
none

### Teaching assistant
none

### List of topics covered
1) Introduction to economics of innovation: radical vs incremental innovation and incentives to innovate
2) Research and development: policies
3) Research and development: effects
4) Introduction to history of innovation
5) Complement products and network externalities
6) Net neutrality
7) Platform competition
8) Patents and patent policy
9) Standardization
### Learning outcomes

**Knowledge and understanding:**
- M1: Fundamental knowledge of general microeconomic theory
- Fundamental knowledge of general microeconomic models applied to economic problems
- Advanced knowledge of general microeconomic models applied to economic problems
- M2: Fundamental knowledge of general microeconomic theory
- Fundamental knowledge of general microeconomic models applied to economic problems
- Advanced knowledge of general microeconomic models applied to economic problems
- Explain key economic theories.
- Demonstrate an understanding of the workings of markets, the economy, and firm behaviour in the economy.
- Knowledge of the measurement of the level of innovative activity
- Understanding of the relation between innovation and economic growth
- Understanding of the relation between market structure and incentives to innovate
- Knowledge of the tools to protect and foster innovation (intellectual property rights, patents, licensing arrangements, and innovation networks)
- Understanding of innovation applied to ICTs: effects of network externalities, standard complementarity on the application of new technologies.
- Knowledge of the innovation policy tools

**Applying knowledge and understanding:**
- M1: Apply economic theory in the analysis of problems or issues
- Employ marginal analysis for decision making
- Analyze operations of markets under varying competitive conditions.
- Ability to thoroughly understand the drivers and the effects of innovation, both within firms and within organizations
- M2: Apply economic theory in the analysis of problems or issues
Employ marginal analysis for decision making
Analyze operations of markets under varying competitive conditions.
Ability to thoroughly understand the drivers and the effects of innovation, both within firms and within organizations
Ability to assess, within a managerial perspective, costs and benefits of innovative activity within a firm, both in the short and in the medium-long run
Ability to identify, from the viewpoint of a manager, the innovation protection tools that best fit the different contexts, assessing their costs and benefits
Ability to assess, within a policy-maker perspective, effectiveness and efficiency of the various industrial policy instruments for innovation.
Ability to analyze, from the viewpoint of a policy-maker, the impact of regional policy to promote and support innovation on local development

Making judgments:
M1: the student should, based on key issues presented, be able to reflect on specific problems and formulate judgments that include reflection on the relevant problems under consideration
M2: the student should, based on key issues presented, be able to reflect on specific problems and formulate judgments that include reflection on the relevant problems under consideration. Students should also be able to assess regional policies to promote innovation.

Communication skills:
M1 and M2: students should be able to communicate the content, the key concepts, ideas, and their solutions to the problems to both a specialist and a non-specialist audience.

Learning skills:
M1: The student should have a broad understanding of the economic principles that are important for business management. She/he should be able to apply essential elements of core business principles to (case studies of) the business environment.
M2: students are expected to develop learning skills necessary to continue to undertake further study with a high degree of autonomy.

Assessment
The assessment takes into consideration the combined acquisition of the learning outcome reached by the students in the two modules.
Over the course, students are expected to participate to class discussion based on readings and topic assigned in advance. They are also given written final exam, project
<table>
<thead>
<tr>
<th>Assessment language</th>
<th>works, and oral presentations</th>
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<tbody>
<tr>
<td>M1 English, M2 English</td>
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<tr>
<th>Evaluation criteria and criteria for awarding marks</th>
<th>The final grade will be the arithmetic average of the grade in M1 and in M2.</th>
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<tr>
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<td>For M1 and M2: For attending students: individual written final exam test (at least 70%); course work (at least 30%). For not attending students: final exam 100%</td>
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<td>The final exam, will assess the following skills:</td>
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<td>Ability to understand the impact of firms’ incentives in designing firms’ competitive strategy (pricing, entry)</td>
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<td>Ability to understand incentives for firms to collaborate and to innovate in environments characterized by complementarities and network externalities</td>
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<td>Ability to understand both the private incentives and the welfare consequences of firms’ strategies</td>
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<td>Ability to assess, within a managerial perspective, costs and benefits of innovative activity within a firm, both in the short and in the medium-long run</td>
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<td>Ability to identify, from the viewpoint of a manager, the innovation protection tools that best fit the different contexts, assessing their costs and benefits</td>
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<td>Ability to assess, within a policy-maker perspective, effectiveness and efficiency of the various industrial policy instruments for innovation.</td>
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<td>Ability to assess the role of institutions (private sector vs public sector) in promoting and supporting innovation</td>
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<td>Students are expected both to be able to solve formal economic models, and to discuss their implications.</td>
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|-------------------| For M2: S. Comino, F. Manenti, “The Industrial Organisation of High-Technology Markets: The Internet and Information Technologies” |

| Supplementary readings | Additional handouts will be distributed in class or on Reserve Collection. Slides will always be uploaded on Reserve Collection before class. |