

## Syllabus

### Course description

<b>Course title</b>	<b>Economics for Management</b>
<b>Course code</b>	<b>25558 (27234 for students enrolled before 2022)</b>
<b>Scientific sector</b>	SECS-P/01 module 1 (Business Economics) SECS-P/06 module 2 (Innovation Economics)
<b>Degree</b>	LM 77 – Master in Entrepreneurship and Innovation
<b>Semester and academic year</b>	module 1 - 1 <sup>st</sup> semester, module 2 - 2 <sup>nd</sup> semester ay 2022-23
<b>Year</b>	1 <sup>st</sup> study year
<b>Credits</b>	12
<b>Modular</b>	Yes

<b>Total lecturing hours</b>	72
<b>Total lab hours</b>	-
<b>Total exercise hours</b>	-
<b>Attendance</b>	Suggested, but not required
<b>Prerequisites</b>	Knowledge of calculus and of the basics of optimization theory helps, but it is not a requirement.
<b>Course page</b>	<a href="#">Course Offering - enrolled before 2022 / Free University of Bozen-Bolzano (unibz.it)</a>

<b>Specific educational objectives</b>	<p>The course refers to the typical educational activities and belongs to the scientific area of Economics.</p> <p>The course gives a general overview of the issues of microeconomic theory pertinent to the analysis of entrepreneurial and innovative activities.</p> <p>The educational objectives are to provide students with a good grasp of microeconomic tools that are needed to analyze firm behavior and optimization.</p>
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<b>Module 1</b>	<b>25558A – M1 Business Economics</b>
<b>Lecturer</b>	Alessandro Fedele, <a href="mailto:alessandro.fedele@unibz.it">alessandro.fedele@unibz.it</a> Office: E205 Tel.: +39 0471 013 298 <a href="https://www.unibz.it/en/faculties/economics-management/academic-staff/person/32469-alessandro-fedele">https://www.unibz.it/en/faculties/economics-management/academic-staff/person/32469-alessandro-fedele</a>

<b>Scientific sector of the lecturer</b>	SECS-P/02
<b>Teaching language</b>	English
<b>Office hours</b>	<a href="https://www.unibz.it/en/timetable/?department=26&amp;degree=12835">https://www.unibz.it/en/timetable/?department=26&amp;degree=12835</a>
<b>Lecturing assistant</b>	None
<b>Teaching assistant</b>	None
<b>Office hours</b>	18
<b>List of topics covered</b>	<p>Basic principles of Business Economics: Industrial Organization and Competitive Strategy. In particular:  The course will cover the following topics:</p> <ol style="list-style-type: none"> <li>1) Industrial organization: what, how, and why</li> <li>2) Market structure and market power</li> <li>3) Monopolistic price discrimination: linear pricing; group pricing; nonlinear pricing</li> <li>4) Monopolistic pricing in digital markets</li> <li>5) Competition and differentiation: static games and Cournot competition; oligopolistic price competition and Hotelling competition; dynamic games and Stackelberg competition</li> </ol>
<b>Teaching format</b>	Frontal lectures and exercises.

<b>Module 2</b>	<b>25558B – M2 Innovation Economics</b>
<b>Lecturer</b>	<p>Levi Eugenio, <a href="mailto:eugenio.levi@unibz.it">eugenio.levi@unibz.it</a>  +39 0471 013525  <a href="#">Eugenio Levi / Free University of Bozen-Bolzano (unibz.it)</a></p> <p>Federico Boffa, <a href="mailto:Federico.Boffa@unibz.it">Federico.Boffa@unibz.it</a>,  +39 0471 013278,  <a href="#">Alessandro Fedele / Libera Università di Bolzano (unibz.it)</a></p>
<b>Scientific sector of the lecturer</b>	SECS-P/06
<b>Teaching language</b>	English
<b>Office hours</b>	18 <a href="https://www.unibz.it/en/timetable/?department=26&amp;degree=12835">https://www.unibz.it/en/timetable/?department=26&amp;degree=12835</a>
<b>Lecturing assistant</b>	none
<b>Teaching assistant</b>	none
<b>List of topics covered</b>	<ol style="list-style-type: none"> <li>1) Introduction to economics of innovation: radical vs incremental innovation and incentives to innovate</li> <li>2) Research and development: policies</li> </ol>

	<ol style="list-style-type: none"> <li>3) Research and development: effects</li> <li>4) Introduction to history of innovation</li> <li>5) Complement products and network externalities</li> <li>6) Net neutrality</li> <li>7) Platform competition</li> <li>8) Nurturing innovation – inventions, ideas and institutions</li> <li>9) Patents and patent policy</li> <li>10) Standardization</li> <li>11) Asymmetric information and financing innovation</li> <li>12) Diffusion of new technologies</li> <li>13) Innovation and market dynamics</li> <li>14) Artificial intelligence and innovation</li> <li>15) Innovation in the pharmaceutical sector</li> </ol>
<b>Teaching format</b>	Frontal lectures and exercises.
<b>Learning outcomes</b>	<p><u>Knowledge and understanding:</u></p> <p>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</p> <p>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</p> <p>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</p> <p><u>Applying knowledge and understanding:</u></p> <p>M1: Apply economic theory in the analysis of problems or issues  Employ marginal analysis for decision making</p>

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.

<b>Assessment</b>	<p>The assessment takes into consideration the combined acquisition of the learning outcome reached by the students in the two modules.</p> <p>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 works, and oral presentations</p>
<b>Assessment language</b>	M1 English, M2 English
<b>Evaluation criteria and criteria for awarding marks</b>	<p>The final grade will be the arithmetic average of the grade in M1 and in M2. A minimum grade of 15 in both modules is required</p> <p>For M1 and M2: For attending students: individual written final exam test (at most 70%); course work (at least 30%). For not attending students: final exam 100%</p> <p>The final exam, will assess the following skills:</p> <ul style="list-style-type: none"> <li>Ability to understand the impact of firms' incentives in designing firms' competitive strategy (pricing, entry)</li> <li>Ability to understand incentives for firms to collaborate and to innovate in environments characterized by complementarities and network externalities</li> <li>Ability to understand both the private incentives and the welfare consequences of firms' strategies</li> <li>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</li> <li>Ability to identify, from the viewpoint of a manager, the innovation protection tools that best fit the different contexts, assessing their costs and benefits</li> <li>Ability to assess, within a policy-maker perspective, effectiveness and efficiency of the various industrial policy instruments for innovation.</li> <li>Ability to assess the role of institutions (private sector vs public sector) in promoting and supporting innovation</li> </ul> <p>Students are expected both to be able to solve formal economic models, and to discuss their implications.</p>
<b>Required readings</b>	<p>For M1+M2: Lynne Pepall, L., Richards, D., Norman, G., "Industrial Organization: Contemporary Theory and Empirical Applications", Wiley, 2014</p> <p>For M2: S. Comino, F. Manenti, "The Industrial Organisation of High-Technology Markets: The Internet and Information Technologies"</p>
<b>Supplementary readings</b>	<p>Additional handouts will be distributed in class or on Reserve Collection. Slides will always be uploaded on Reserve Collection before class.</p>