

# Syllabus

## *Descrizione corso*

<b>Titolo insegnamento</b>	Innovation Management
<b>Codice insegnamento</b>	25563
<b>Titolo aggiuntivo</b>	
<b>Settore Scientifico-Disciplinare</b>	SECS-P/08
<b>Lingua</b>	Inglese
<b>Corso di Studio</b>	Corso di laurea magistrale in Imprenditorialità e Innovazione
<b>Altri Corsi di Studio (mutuati)</b>	
<b>Docenti</b>	prof. Alessandro Narduzzo, Alessandro.Narduzzo@unibz.it <a href="https://www.unibz.it/en/faculties/economics-management/academic-staff/person/5125">https://www.unibz.it/en/faculties/economics-management/academic-staff/person/5125</a>
<b>Assistente</b>	
<b>Semestre</b>	Secondo semestre
<b>Anno/i di corso</b>	1
<b>CFU</b>	5
<b>Ore didattica frontale</b>	30
<b>Ore di laboratorio</b>	-
<b>Ore di studio individuale</b>	-
<b>Ore di ricevimento previste</b>	15
<b>Sintesi contenuti</b>	<p>The course prepares students to analyze problems and make informed decisions related to innovation and its management. Students learn models, tools, and methods to manage innovation within organizations. In particular, the course covers the following topics:</p> <ul style="list-style-type: none"> <li>- Managing innovation in a systemic perspective</li> <li>- Sources of innovation</li> <li>- Types of innovation</li> <li>- Patterns and models of innovation</li> <li>- Technological cycles</li> </ul>

	<ul style="list-style-type: none"> <li>– Managing innovation in Open Systems</li> <li>– Managing exaptative innovation and technological speciation</li> <li>– Innovation management tools</li> <li>– Innovation management metrix</li> <li>- Building innovative organizations: experimentation and psychological safety</li> <li>– Ambidexterity.</li> </ul>
<b>Argomenti dell'insegnamento</b>	<p>0. Course presentation</p> <p>Learning goals, approach, teaching format, learning materials and how they are selected to be consistent with the nature of the course.</p> <p>1. Innovation, innovative firms, innovation management – An introduction.</p> <p>Why does innovation matter? How do practitioners and scholars think about innovation?</p> <p>Why and how do organizations want to manage the innovation journey?</p> <p>This first session introduces the framework adopted in this course to approach innovation and select the topics.</p> <p>2. Innovation management: problems, myths, traps.</p> <p>This part of the course offers a problematic perspective for framing the management of innovation, both as a phenomenon and as a domain of expertise; any further theorizing can be reconnected to this foundation.</p> <p>3. Innovation: models and conceptualizations.</p> <p>In this section, we review and discuss well-known definitions, conceptualizations, and models. Concepts and models provide complementary perspectives to understand innovation phenomena through multiple lenses.</p> <p>4. Managing innovation in open systems.</p> <p>To innovate, firms often need to draw from various outside sources of knowledge. At the same time, 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 the commercialization of innovations requires appropriability.</p> <p>5. Managing innovation as exaptation.</p> <p>Innovation management through an evolutionary perspective.</p> <p>Innovation management consists of managing a system of interdependent and evolving components. Innovation as exaptation</p>

	<p>will be discussed.</p> <p>6. Innovation management: techniques and tools. We review a repertoire of tools traditionally adopted by firms to manage innovation. 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.</p> <p>7. Innovation management: innovation measurements. 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 inputs (e.g. intensity of R&amp;D investment) or outputs (e.g. number of patents). The approach proposed for this class proposes to extend this repertoire by including the assessment of the innovation as a process.</p> <p>8. Building innovative organizations: experimentation. Innovation is conceived as a process of experimentation that is grounded on a trial-and-error logic. Its effectiveness depends on the organization's ability to adopt and adapt to this mindset consistently. Organizational culture may inhibit innovation. Building a psychologically safe environment is regarded as a contextual condition to nurture innovation.</p> <p>9. Building innovative organizations: ambidexterity. Firms may adopt organizational forms that are more suitable to support innovation. Through the concepts of organizational ambidexterity and organizational bricolage, we discuss how firms may combine exploration and exploitation.</p>
<b>Parole chiave</b>	innovation, innovation cycle, uncertainty, experimentation, exaptation, innovation management tools.
<b>Prerequisiti</b>	
<b>Insegnamenti propedeutici</b>	
<b>Modalità di insegnamento</b>	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.
<b>Obbligo di frequenza</b>	
<b>Obiettivi formativi specifici e risultati di apprendimento</b>	

attesi	
Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)	
Modalità di esame	Written (closed books) final exam (60 minutes). It consists of open questions to assess both acquired knowledge and analytical competencies. A case will be made available on the Teams platform a few days before the exam. Students are expected to read the case in advance and to bring a paper copy of the case to the exam. Some questions assess the students' ability to use the acquired knowledge to analyze the case.
Criteri di valutazione	<p>The evaluation criteria are the following:</p> <ul style="list-style-type: none"> <li>• Appropriateness of the answer and commanding the contents</li> <li>• Structure and coherence of the answer</li> <li>• Mastering critical analysis</li> </ul>
Bibliografia obbligatoria	<p><b>For each topic, the readings are listed according to the order of reading.</b></p> <p><b><i>Innovation, innovative firms, innovation management – An introduction.</i></b></p> <p><i>Baregheh A., Rowley J., &amp; S. Sambrook. 2009. Towards a multidisciplinary definition of innovation. Management Decision, 47, 8, 1323-1339.</i></p> <p><i>Cheng, J.Y.J. and Groysberg, B., 2018. Innovation Should Be a Top Priority for Boards. So Why Isn't It?. Harvard Business Review.</i></p> <p><i>Tidd, J., &amp; Bessant, J. 2020. Managing Innovation: Integrating Technological, Market and Organizational Change (6th ed.). Wiley. Chapters 1.</i></p> <p><i>Innovation reports issued by IBM, PwC and McKinsey, made available in the Team folder collecting the course readings.</i></p> <p><i>Banholzer, M., LaBerge, L., West, A. &amp; Williams, E. (2023). How innovative companies leverage tech to outperform. McKinsey Report.</i></p> <p><b><i>Innovation management: problems, myths, traps.</i></b></p> <p><i>Van de Ven A.H. 1986. Central Problems in the Management of</i></p>

*Innovation. Management Science, 32, 5, 590-607.*

*Williams T.M. 1999. The need for new paradigms for complex projects, International Journal of Project Management Vol. 17, No. 5, pp. 269-273.*

*Mendonca, L.T., Sneader, K.D. 2007. Coaching innovation: An interview with Intuit's Bill Campbell. The McKinsey Quarterly. February.*

### ***Innovation: models and conceptualizations.***

*Schilling, M. A. 2022. Strategic Management of Technological Innovation (7th ed.). McGraw-Hill. **Chapter 3.***

*Bagno, R.B., Salerno, M.S. and da Silva, D.O., 2017. Models with graphical representation for innovation management: a literature review. R&D Management, 47(4), pp.637-653.*

### ***Managing innovation in open systems.***

*Bogers, M., Chesbrough, H., & Moedas, C. 2018. "Open Innovation: Research, Practices, and Policies." California Management Review, 60(2), 5-16.*

*Von Hippel, E. 2019. The Free Innovation Paradigm. In **Chen, J., Brem, A., Viardot, E. and Wong, P.K.** eds. The Routledge companion to innovation management. Routledge. **Chapter 8.***

*Frank Piller, Sumit Mitra, and Susanna Ghosh Mitra Von Hippel, E. 2019. Bringing Open Innovation into Practice. In **Chen, J., Brem, A., Viardot, E. and Wong, P.K.** eds. The Routledge companion to innovation management. Routledge. **Chapter 10.***

### ***Managing innovation as exaptation.***

*Andriani, P., & Cattani, G. 2016. Exaptation as source of creativity, innovation, and diversity: Introduction to the special section. Industrial and Corporate Change, 25(1), 115-131.*

*Adner R., & D. A. Levinthal. 2002. The Emergence of Emerging Technologies. California Management Review, 45, 1, 50-66.*

### ***Innovation management: techniques and tools.***

	<p>Chen, J., Brem, A., Viardot, E. and Wong, P.K. eds., 2019. <i>The Routledge companion to innovation management</i>. Routledge.</p> <p><b>Chapter 26.</b></p> <p>Haefner, N., Wincent, J., Parida, V. and Gassmann, O., 2021. <i>Artificial intelligence and innovation management: A review, framework, and research agenda</i>. <i>Technological Forecasting and Social Change</i>, 162, p.120392.</p> <p>List of IM tools from <i>The Innovation Tools Handbook</i>.</p> <p><b>Innovation management: innovation measurements.</b></p> <p>Gamal, D. 2011. <i>How to measure organizational innovativeness? An overview of Innovation framework and Innovation audit</i>. TIEC.</p> <p>Björk, J., Frishammar, J., &amp; Sundström, L. 2023. <i>Measuring Innovation Effectively—Nine Critical Lessons</i>. <i>Research-Technology Management</i>, 66(2), 17-27.</p> <p><b>Building innovative organizations: experimentation.</b></p> <p>Thomke S. 2001. <i>Enlightened experimentation: The new imperative for innovation</i>. <i>Harvard Bus. Rev.</i> 79(2) 66–75.</p> <p>Edmondson A.C. 2011. <i>Strategies For Learning From Failure</i>. <i>Harvard Business Review</i>. April 48-55.</p> <p><b>Building innovative organizations: ambidexterity.</b></p> <p>Birkinshaw J., C. Gibson. 2004. <i>Building Ambidexterity Into an Organization</i>. <i>MIT Sloan Management Review</i>, Summer, 47-55.</p> <p>Pisano, G.P., 2019. <i>The Hard Truth About Innovative Cultures</i>. <i>Harvard Business Review</i>.</p>
<b>Bibliografia facoltativa</b>	<p>For each topic, the readings are listed according to the order of reading.</p> <p>Innovation, innovative firms, innovation management – An introduction.</p>

Baregheh A., Rowley J., & S. Sambrook. 2009. Towards a multidisciplinary definition of innovation. *Management Decision*, 47, 8, 1323-1339.

Cheng, J.Y.J. and Groysberg, B., 2018. Innovation Should Be a Top Priority for Boards. So Why Isn't It?. *Harvard Business Review*.

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Innovation management: problems, myths, traps.

Van de Ven A.H. 1986. Central Problems in the Management of Innovation. *Management Science*, 32, 5, 590-607.

Williams T.M. 1999. The need for new paradigms for complex projects, *International Journal of Project Management* Vol. 17, No. 5, pp. 269-273.

Mendonca, L.T., Sneader, K.D. 2007. Coaching innovation: An interview with Intuit's Bill Campbell. *The McKinsey Quarterly*. February.

Innovation: models and conceptualizations.

Schilling, M. A. 2022. *Strategic Management of Technological Innovation* (7th ed.). McGraw-Hill. Chapter 3.

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	<p>A., Viardot, E. and Wong, P.K. eds. The Routledge companion to innovation management. Routledge. Chapter 10.</p> <p>Managing innovation as exaptation.</p> <p>Andriani, P., &amp; Cattani, G. 2016. Exaptation as source of creativity, innovation, and diversity: Introduction to the special section. <i>Industrial and Corporate Change</i>, 25(1), 115-131.</p> <p>Adner R., &amp; D. A. Levinthal. 2002. The Emergence of Emerging Technologies. <i>California Management Review</i>, 45, 1, 50-66.</p> <p>Innovation management: techniques and tools.</p> <p>Chen, J., Brem, A., Viardot, E. and Wong, P.K. eds., 2019. The Routledge companion to innovation management. Routledge. Chapter 26.</p> <p>Haefner, N., Wincent, J., Parida, V. and Gassmann, O., 2021. Artificial intelligence and innovation management: A review, framework, and research agenda. <i>Technological Forecasting and Social Change</i>, 162, p.120392.</p> <p>List of IM tools from The Innovation Tools Handbook.</p> <p>Innovation management: innovation measurements.</p> <p>Gamal, D. 2011. How to measure organizational innovativeness? An overview of Innovation framework and Innovation audit. TIEC.</p> <p>Björk, J., Frishammar, J., &amp; Sundström, L. 2023. Measuring Innovation Effectively—Nine Critical Lessons. <i>Research-Technology Management</i>, 66(2), 17-27.</p> <p>Building innovative organizations: experimentation.</p> <p>Thomke S. 2001. Enlightened experimentation: The new imperative for innovation. <i>Harvard Bus. Rev.</i> 79(2) 66–75.</p> <p>Edmondson A.C. 2011. Strategies For Learning From Failure. <i>Harvard Business Review</i>. April 48-55.</p> <p>Building innovative organizations: ambidexterity.</p> <p>Birkinshaw J., C. Gibson. 2004. Building Ambidexterity Into an Organization. <i>MIT Sloan Management Review</i>, Summer, 47-55.</p> <p>Pisano, G.P., 2019. The Hard Truth About Innovative Cultures. <i>Harvard Business Review</i>.</p>
<b>Altre informazioni</b>	



Obiettivi di Sviluppo Sostenibile (SDGs)	Partnership per gli obiettivi, Innovazione e infrastrutture
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