

INNOVATION MANAGEMENT

Course code	<i>MNG162</i>
Compulsory in the programmes	<i>Innovation and technology management</i>
Level of studies	<i>Undergraduate</i>
Number of credits and	<i>6 ECTS (48 contact hours + 6 consultation hours + 2 hours of examination, 106 individual work hours)</i>
Course coordinator (title and name)	<i>Dr. Jelena Angelis</i>
Prerequisites	
Language of instruction	<i>English</i>

THE AIM OF THE COURSE:

The course focuses on how to manage innovation in today's competitive era and how firms should manage innovation-related activities at the strategic, organizational and managerial levels in order to sustain competitive advantage. After describing the concept of innovation and understanding why innovation is important for the competitiveness of the firm, the course will focus on three main areas: innovation theories and its implications on practical execution, innovation sources, innovation strategy, tools and models to create new innovative ideas. Purpose of this course is to introduce and explore innovation management concept, how to manage product innovation and product development and build competitiveness through innovation. The course provides knowledge about theoretical frameworks for innovation, innovation models.

MAPPING OF COURSE LEVEL LEARNING OUTCOMES (OBJECTIVES) WITH DEGREE LEVEL LEARNING OBJECTIVES (See Annex), ASSESMENT AND TEACHING METHODS

Course level learning outcomes (objectives)	Degree level learning objectives (Number of LO)	Assessment methods	Teaching methods
CLO1. To be able to recognise and to describe different types of innovation and main theoretical frameworks	BLO1.1	Final exam, group and individual tasks	Lectures, Case studies Reading and discussions
CLO2. To be able to recognise and apply the main models for innovation development	BLO1.1	Final exam, group and individual tasks	Individual study Reading and discussions
CLO3. To be able to implement methods and tools for innovation search, and apply methodological tools	BLO1.2 BLO4.2 BLO4.1 BLO4.3	Final exam, group and individual tasks	Individual research, analysis of situation, case studies, application of experimental research tools
CLO4. To be able to recognize the main sources of innovation	BLO1.1	Final exam, group and individual tasks	Individual study Reading and discussions

CLO5. To be able to see the big innovation picture from a technological and corporate perspective and evaluate the context for innovation management	BLO1.2.	Final exam, group and individual tasks	Individual study Discussions
CLO6. To be able to apply management practices to effectively implement innovations in the company context	BLO1.2.	Final exam, group and individual tasks	Individual study Discussions

ACADEMIC HONESTY AND INTEGRITY

The ISM University of Management and Economics Code of Ethics, including cheating and plagiarism are fully applicable and will be strictly enforced in the course. Academic dishonesty, and cheating can and will lead to a report to the ISM Committee of Ethics. With regard to remote learning, ISM remind students that they are expected to adhere and maintain the same academic honesty and integrity that they would in a classroom setting.

COURSE OUTLINE

Topic	In-class hours	Readings
1. Introduction. Innovation definition, types of innovation, technology stages and cycles. Technology trends.	4	Book Chapter 1
2. Global context for innovation. Innovative thinking. Global technology and consumer behavior trends. Opportunity identification and selection	4	Book Chapter 1,2 Internet sources: Scott, B., Loonam, J. and Kumar V. (2017). Exploring the rise of blockchain technology: towards distributed collaborative organizations. <i>Strategic Change</i> . 26:423–428
3. Innovation theories and models. Innovation process. Research and development process	4	Book Chapter 1,2 Additional sources: Tidd, J. (2006). A review of innovation models. <i>Imperial College London</i> , 16.
4. Innovation sources. Search for innovative ideas. Ideation process	4	Book Chapter 4 Additional sources: Professor Joe Tidd identifies different sources of innovation & tools to help to search for these: https://www.youtube.com/watch?v=IFck3eOwPnQ Where good ideas come from Steven Johnson
5. Performing innovation / technology audit. Selecting innovative ideas.	4	

6. Innovation processes. Design thinking concept for the new product development. Problem identification. Innovative research tools. Rapid prototyping	4	Book Chapter 5
Midterm	2	1-6 topics
7. Knowledge management for innovation. Managing different knowledge dimensions.	4	<p>Book Chapter 7 John Bessant. <u>Knowledge dimensions and space</u></p> <p>Harvard case Moingeon, B., Dessain, V., Edmondson, A., & Jensen, A. D. (2011). <i>Global Knowledge Management at Danone</i>.</p> <p>Nonaka, I., & Konno, N. (1998). The concept of "Ba": Building a foundation for knowledge creation. <i>California management review</i>, 40(3), 40-54.</p>
8. Innovation networks and partnerships. Open innovation. Innovation ecosystem	4	<p>Book Chapter 8 Dahlander, L., & O'Mahony, S. (2017). A study shows how to find new ideas inside and outside the</p>

		company. Harvard Business Review Digital Articles, 2- 5.
9. Innovation ecosystem	4	Book chapter 11
10. Intellectual property management. Intellectual property protection tools and strategies.	4	Book Chapter 6 Internet sources: https://www.wipo.int/ European Patent Office EPO - Home
11. Innovation financing. New business models.	4	Book Chapter 12
Final exam (Chapters 7-11)		
Review session for the final exam.	2	
	Total: 48 hours	
FINAL EXAM	2	

FINAL GRADE COMPOSITION

Type of assignment	%
<i>Individual activities</i>	80
Midterm	20
Individual task, e.g. essay/ analytical paper/ participation	20
Final exam	40
<i>Group activities:</i>	20
Group work, e.g. book review/ choosing and attracting guest speakers	20
Total:	100

DESCRIPTION AND GRADING CRITERIA OF EACH ASSIGNMENT

1. **Midterm (1-6 topics)** Midterm will count 20 % of the final grade. It may consist of multiple-choice and/or essay questions that will be based on the material presented in classes during the previous weeks of course material
2. **Individual task** will count for 20% of the final grade. It may include exercises, homework, selected topic analysis, individual problem solving tasks, written report. Details and tasks will be announced during the lectures. Individual task cannot be resubmitted.
3. **Group task** will count for 20% of the final grade. It may include book review and choosing/attracting guest speakers. Details and tasks will be announced during the lectures. Group task cannot be resubmitted.
4. **The final exam (7-11)** will count for 40% of the final grade. It may consist of multiple-choice and/or essay questions that will be based on the material presented in classes during last seven weeks of course material
Re-take of the final exam. Students who receive a failing final grade will have the right to re-take the exam
It will count for 60% of the final grade and will replace midterm and final exam grade and will cover content of

the entire course.

Bonus points. The instructor has the right to award active students with up to 1 extra points to the final grade.

REQUIRED READINGS

Trott, P. (2017). *Innovation management and new product development*. Pearson education.

ADDITIONAL READINGS

Sawhney, M., Wolcott, R. C., & Arroniz, I. (2006). The 12 different ways for companies to innovate. *MIT Sloan management review*, 47(3), 75

Cooper, R. G. (2006). Winning at new products: pathways to profitable innovation. In *Proceedings Project Management Research Conference, Montreal, Canada*.

Cooper, R. G., & Kleinschmidt, E. J. (1996). Winning businesses in product development: The critical success factors. *Research-technology management*, 39(4), 18-29.

Cooper, R. G. (2019). The drivers of success in new-product development. *Industrial Marketing Management*, 76, 36-47.

Cooper, R. G., & Edgett, S. J. (2010). Developing a product innovation and technology strategy for your business. *Research-Technology Management*, 53(3), 33-40.

Brown, T. (2008). Design thinking. *Harvard business review*, 86(6), 84.

Liedtka, J. (2018). Why design thinking works. *Harvard Business Review*, 96(5), 72-79.

Kolko, J. (2015). Design thinking comes of age. *Harvard Business Review*

ANNEX

DEGREE LEVEL LEARNING OBJECTIVES

Learning objectives for the Bachelor of Business Management

Programmes:

International Business and Communication,

Business Management and Marketing,

Finance,

Industrial Technology Management,

Entrepreneurship and Innovation

Learning Goals	Learning Objectives
Students will be critical thinkers	BLO1.1. Students will be able to understand core concepts and methods in the business disciplines
	BLO1.2. Students will be able to conduct a contextual analysis to identify a problem associated with their discipline, to generate managerial options and propose viable solutions
Students will be socially responsible in their related discipline	BLO2.1. Students will be knowledgeable about ethics and social responsibility
Students will be technology agile	BLO3.1. Students will demonstrate proficiency in common business software packages
	BLO3.2. Students will be able to make decisions using appropriate IT tools
Students will be effective communicators	BLO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations
	BLO4.2. Students will be able to convey their ideas effectively through an oral presentation
	BLO4.3. Students will be able to convey their ideas effectively in a written paper

Learning objectives for the Bachelor of Social Science

Programmes:

Economics and Data Analytics,

Economics and Politics

Learning Goals	Learning Objectives
Students will be critical thinkers	ELO1.1. Students will be able to understand core concepts and methods in the key economics disciplines
	ELO1.2. Students will be able to identify underlying assumptions and logical consistency of causal statements
Students will have skills to employ economic thought for the common good	ELO2.1. Students will have a keen sense of ethical criteria for practical problem-solving
Students will be technology agile	ELO3.1. Students will demonstrate proficiency in common business software packages
	ELO3.2. Students will be able to make decisions using appropriate IT tools
Students will be effective communicators	ELO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations
	ELO4.2. Students will be able to convey their ideas effectively through an oral presentation
	ELO4.3. Students will be able to convey their ideas effectively in a written paper