

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	Book Chapter 7 <i>John Bessant. Knowledge dimensions and space</i> <i>Harvard case Moingeon, B., Dessain, V., Edmondson, A., & Jensen, A. D. (2011). Global Knowledge Management at Danone .</i> <i>Nonaka, I., & Konno, N. (1998). The concept of "Ba": Building a foundation for knowledge creation. California management review, 40(3), 40-54.</i>
8. Innovation networks and partnerships. Open innovation. Innovation ecosystem	4	Book Chapter 8 <i>Dahlander, L., & O'Mahony, S. (2017). A study shows how to find new ideas inside and outside the company. Harvard Business Review Digital Articles, 2- 5.</i>
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
12. Final exam (Chapters 7-11)		
13. Review session for the final exam.	2	
	Total: 48 hours	
14. 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

RETAKE POLICY

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 point to the final grade.

USE OF GENERATIVE ARTIFICIAL INTELLIGENCE

Generative AI is treated in this course as a working tool and, at the same time, as one of the technologies the course studies. Students are expected to become competent users of these tools and equally competent at judging where their output is generic, outdated or wrong. The guiding rule is simple: AI may support your thinking, but it may not replace it. Students remain fully responsible for everything they submit or present, including any factual error, fabricated reference, misattributed idea or unexamined assumption produced by an AI tool.

Individual task

Where the individual task takes the form of an essay, analytical paper, written report or topic analysis, students may use AI tools:

- to deepen their understanding of the topic, identify relevant theories and frameworks, and find applicable examples;
- to work more efficiently with literature and data, including locating, structuring and comparing sources;
- to test their own argument, generate counter-arguments and identify weaknesses in their reasoning;
- to improve the quality of written English, including grammar, style and clarity.

Information obtained from AI tools must be cross-verified against the course book, academic literature and other credible sources before it is used. AI-generated content is not a reliable academic source and must not be cited as such; the original source should be located, read and cited instead. Particular care is needed with references: AI tools routinely produce citations that look correct but do not exist, or attribute real ideas to the wrong author. The submitted paper must be written by the student, and the inclusion of AI-generated text in the final submission is not permitted. Where the individual task takes the form of participation or in-class problem solving, AI tools may be used only for clarification or advice, unless the task description states otherwise.

Group task: book review and guest speakers

The book review assesses the group's own engagement with the book. Students are expected to read it themselves; an AI-generated summary is not a substitute and a review built on one will be evident in the thinness of its judgement. AI tools may be used to clarify concepts, to structure the review, to surface points of comparison with the course material, and to prepare and improve slides and language. The assessment, critique and connection to innovation theory must be the group's own.

Where the group task involves identifying and approaching guest speakers, AI tools may be used to research candidates and to help draft correspondence. Any message sent in the group's name must be accurate about the course, the audience and what is being asked, and the students remain personally responsible for its content. Claims about a prospective speaker's work should be verified before the message is sent — an approach built on an AI-generated inaccuracy reflects on the group and on the university.

Declaration of AI use

Written individual submissions and group task deliverables must include a short declaration of AI use, stating which tools were used, for what purposes, and what the student or group did to verify or correct the output. The declaration is not graded on how much or how little AI was used, and honest declaration is never penalised. Undeclared, misrepresented or prohibited use of AI tools is a breach of academic integrity and will be handled under the ISM Code of Ethics.

Midterm and final examination

The midterm and the final examination are individual and closed. Generative AI tools, AI-enabled devices, browser assistants

and any other form of automated support are not permitted during them, and their use is treated as cheating. This applies equally to multiple-choice and essay questions. AI tools may of course be used in preparation — to generate practice questions, to test one's own understanding or to explain a model differently — provided the understanding demonstrated in the examination is the student's own.

Verification and oral defence

The course instructor may ask any student or group to explain the reasoning, sources, concepts or choices behind submitted work, in class or in a short discussion. This applies to all assessed work, whether or not AI tools were used. Being unable to explain or defend submitted work — including work produced with the help of AI — will be reflected in the grade and may be treated as a case of academic dishonesty and reported to the ISM Committee of Ethics.

Any use of AI tools beyond the purposes described above must be agreed with the course instructor in advance. Students who are uncertain whether a particular use is acceptable should ask before submitting.

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