

Course guide

280694 - 280694 - Innovation Management

Last modified: 27/05/2024

Unit in charge: Barcelona School of Nautical Studies
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN MARINE TECHNOLOGIES (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN NAUTICAL SCIENCE AND MARITIME TRANSPORT (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN NAVAL SYSTEMS AND TECHNOLOGY ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2024 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: MARTA GONZÁLEZ PELÁEZ

Others: Segon quadrimestre:
MARTA GONZÁLEZ PELÁEZ - DT, GESTN, GNTM, GTM

PRIOR SKILLS

No previous knowledge is required.

REQUIREMENTS

No previous requirements are needed.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:

1. EFFICIENT ORAL AND WRITTEN COMMUNICATION. Communicating verbally and in writing about learning outcomes, thought-building and decision-making. Taking part in debates about issues related to the own field of specialization.
2. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.

TEACHING METHODOLOGY

The development of the subject is theoretical and also practical:

- 1) The theoretical part will be carried out based on the presentation of the content of the topics in order to configure the conceptual and doctrinal scheme of the objective problem of the discipline. Students will have to prepare (and expand) with the recommended bibliography.
- 2) In a coordinated way and parallel to the theoretical part, the development of the practical part is carried out according to the resolution by the students of the corresponding exercises and practical cases. The consideration of the errors and successes in the reasoning used, must allow each student a healthy self-assessment exercise of the understanding of the conceptual issues addressed by the course.

If possible, seminars will be organized with experts in the field.

LEARNING OBJECTIVES OF THE SUBJECT

The teaching of this subject is aimed at ensuring that students who successfully complete the course:

- 1) Acquire sufficient knowledge in the conceptual foundations of the strategic management of innovation, policies and tools for innovation.
- 2) Have a broad view of innovation processes, their characteristics and their impact on the competitiveness of companies.
- 3) Be able to identify the areas to be managed in the innovation process. Know the existing methodologies and tools for the development of the company's technology surveillance strategy. Know business practices.

STUDY LOAD

Type	Hours	Percentage
Hours large group	60,0	40.00
Self study	90,0	60.00

Total learning time: 150 h

CONTENTS

(ENG) 1. Competitiveness, economic growth and innovation

Description:

1. Introduction to the basic concepts of innovation.
2. Types and models of innovation
3. Innovation strategy in the business model
4. Importance of innovation in the competitiveness and economic growth of industries

Specific objectives:

To Know business practices through case analysis.

Understand and develop the methodology of the Canvas business model applied to innovation management

Related activities:

case reading, theoretical lectures, video viewing, performance of exercises

Full-or-part-time: 11h 40m

Theory classes: 11h 40m

(ENG) 2. Models i eines per a la recerca i la innovació

Description:

1. Innovation models
2. The actors involved
3. Creativity, a practical instrument
4. Basic tools to an innovation management system

Specific objectives:

To Know business practices through case analysis.

Obtain a general knowledge of the mechanisms that enable the appearance of new products and processes to the market, from the generation of ideas to design, testing and market launch.

To know the existing methodologies and tools for the development of the strategic management of the company's technology surveillance

Related activities:

case reading, theoretical lectures, video viewing, performance of exercises

Full-or-part-time: 11h 40m

Theory classes: 11h 40m

(ENG) 3.Evaluation of the monitoring and measurement of the innovation management process.

Description:

1. Importance of monitoring and measuring of innovation management processes
2. Indicators of innovative capacity
3. The R & D certification
4. The management of innovation projects.

Specific objectives:

1. To know business practices
2. To Aanalyze different types of indicators applied to innovation management
3. To acknowledge the importance of certification processes
4. Conduct an analysis of innovation management projects in different contexts.

Related activities:

case reading, theoretical lectures, video viewing, performance of exercises

Full-or-part-time: 11h 40m

Theory classes: 11h 40m

(ENG) 4.The implementation and financing of innovation

Description:

1. Creating new products, processes and services
2. Patents and trademarks (assurance of innovation)
3. Public / private financing

Specific objectives:

To acknowledge tools and the importance of innovation in the creation of new products, processes or services

Understand procedures for securing innovation through the management of patents and trademarks

To get to know and analyze typologies of public and private funding sources

Related activities:

case reading, theoretical lectures, video viewing, performance of exercises

Full-or-part-time: 11h 40m

Theory classes: 11h 40m

GRADING SYSTEM

Practices: 40% (of which is broken down as follows: exercises and cases 25%, individual project 15%)

Final Work: 60% (of which is broken down as follows: written report 40%, oral presentation 15%, cross evaluation 5%)

EXAMINATION RULES.

(1) The system of evaluation of the practices will consist of the realization and periodic delivery of the resolution of exercises and practical cases proposed in class. Its delivery will be an essential requirement to pass the course.

(2) The final work in a group, will be a research work for the development of an innovation plan, which will be proposed during the first month and will be developed during the semester.

(3) The student will be considered not presented if she/he does not present the practices or the final work.

(4) To pass the subject students must achieve a weighted average grade equal to or greater than 5.

BIBLIOGRAPHY

Basic:

- Tidd, Joseph; Bessant, John. Managing innovation : integrating technological, market and organizational change. 4th ed. Chichester: Wiley, 2009. ISBN 9780470998106.

- Ottosson, Stig. Developing and managing innovation in a fast changing and complex world : benefiting from dynamic principles [on line]. Cham: Springer, 2019 [Consultation: 01/09/2021]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=5441141>. ISBN 9783319940458.

Complementary:

- Escorsa, Pere; Maspons, Ramon. De la vigilancia tecnológica a la inteligencia competitiva. Madrid: Finantial Times : Prentice Hall, 2001. ISBN 8420530573.

- Carballo, Roberto. Innovación y gestión del conocimiento : modelo, metodología, sistemas y herramientas de innovación. Madrid: Díaz de Santos, 2006. ISBN 8479787570.

- Christiansen, James A. Building the innovative organization : management systems that encourage innovation. Houndmills: Macmillan, 2000. ISBN 9780333804834.

- Osterwalder, Alexander; Pigneur, Yves. Business model generation : a handbook for visionaries, game changers, and challengers [on line]. Hoboken: John Wiley & Sons, 2010 [Consultation: 30/05/2022]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=581476>. ISBN 780470876411.

- Hidalgo Nuchera, A.; León Serrano, G.; Pavón Morote, J. La Gestión de la innovación y la tecnología en las organizaciones. Madrid: Pirámide, 2002. ISBN 8436817028.

- Archibald, Russell D.; Archibald, Shane C. Leading and managing innovation: what every executive team must know about project, program, and portfolio management [on line]. 2nd ed. Boca Raton: CRC Press, 2016 [Consultation: 01/09/2022]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=4089985>. ISBN 9781498751209.

- Fernex-Walch; Sanne. The Multiple facets of innovation project management [on line]. London: John Wiley & Sons, 2017 [Consultation: 01/09/2022]. Available on: <https://onlinelibrary-wiley-com.recursos.biblioteca.upc.edu/doi/book/10.1002/9781119453284>. ISBN 9781786300676.

- Midler, Christophe; Jullien, Bernard; Lung, Yannick. Rethinking innovation and design for emerging markets: inside the Renault Kwid Project. Boca Raton: CRC Press, 2017. ISBN 9781138037205.

- Terré i Ohme, Eugeni; Escandell, Víctor. Guia per gestionar la innovació. Barcelona: CIDEM, 1999.

- Osterwalder, Alexander; Pigneur, Yves. Business model generation : a handbook for visionaries, game changers, and challengers [on line]. Hoboken: John Wiley & Sons, 2010 [Consultation: 31/07/2020]. Available on: <https://ebookcentral-proquest-com/lib/upcatalunya-ebooks/detail.action?docID=581476>. ISBN 9780470876411.

- Phani, B.V.; Khandekar, Sameer (eds). Innovation, incubation and entrepreneurship : case studies from IIT Kanpur. Singapore: Springer Singapore, 2017. ISBN 9789811033346.

- Vermeulen, Ben; Paier, Manfred. Innovation networks for regional development : concepts, case studies, and agent-based models [on line]. Cham: Springer International Publishing, 2017 [Consultation: 01/09/2022]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=4700026>. ISBN 9783319439402.

- Cortés-Robles, Guillermo; García-Alcaraz, Jorge Luis; Alor-Hernández; Giner. Managing innovation in highly restrictive environments : lessons from Latin America and emerging markets [on line]. Cham: Springer International Publishing, 2019 [Consultation: 01/09/2022]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=581476>.

31/07/2020]. Available on: <https://doi.org/10.1007/978-3-319-93716-8> . ISBN 9783319937168.

- Leitão, João. Open innovation business modeling : gamification and design thinking applications [on line]. Cham: Springer, 2019
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