

Introduction to Innovation Management

Code: 102163
ECTS Credits: 6

Degree	Type	Year	Semester
2501232 Business and Information Technology	OB	3	2
2501233 Aeronautical Management	OT	4	0

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Other comments on languages

There is a significant amount of materials in Spanish

Teachers

Ramon Salabert Parramon

Prerequisites

There are no prerequisites to take this subject, but it is recommended to have taken the courses Strategic Management, Introduction to Information Systems and Processes Management.

Objectives and Contextualisation

OBJECTIVES FOR THE STUDENT:

- A vision of innovation as an integrated business process in the context of the company, deepening the development of organizational competencies to innovate and the specific dynamics of technological innovation.
- Address the issue from a strategic, organizational and operational perspective.
- Understand the importance of managing innovation in a business environment characterized by uncertainty.
- Identify the vectors that organizations have to manage to achieve successful innovation.
- Understand innovation as a result of a business strategy.
- Understand the legal mechanisms of intellectual property.
- Value the talent of people and work teams, as a key factor in an innovative process.

KEY VECTORS THAT SHOULD BE REINFORCED TO STUDENTS TO GET SUCCESS IN THIS AREA:

- Knowing what innovation is and how it is embedded in productive processes

- Different models of innovation and when applied: entrepreneurship, open innovation, corporate innovation, technology transfer
- Analyze the keys to disruptive technologies and exponential organizations
- Include innovation in the strategy of companies
- Draw up an innovation roadmap aligned with the strategy of the organizations
- What role the customer plays in innovation and what are the tools of a generation of insight customer
- The role of the work teams and the talent to obtain the maximum performance of the innovation
- Analyze the different financing models of innovation
- Knowledge of the most relevant tools used for the generation of innovation in both industrial and service organizations

Competences

Business and Information Technology

- Demonstrating a comprehension of the individual and collective human behaviour in professional environments.
- Demonstrating a concern for quality in the objectives and development of the work.
- Proving they know the dynamic nature of technology and innovation and their effect in the change of organisations.
- Students must be capable of adapting to new situations and new knowledge that may lead to new analysis and different stances.
- Students must be capable of searching and analysing information of different sources.
- Students must prove they know where and why organizations use technology, emphasizing the integrative role of technology in organisations.
- Using the more effective and up-to-date technical means in oral and written communication.
- Working in teams, sharing knowledge and communicating it to the rest of the team and the organisation.

Aeronautical Management

- Apply specific software for solving problems in the aeronautical sector.
- Communication.
- Thinking skills.
- Work in teams.

Learning Outcomes

1. Accept and respect the role of the various team members and the different levels of dependence within the team.
2. Appreciate the strategic role of technology and innovation in organisations.
3. Communicate knowledge and findings efficiently, both orally and in writing, both in professional situations and with a non-expert audience.
4. Demonstrating a comprehension of the individual and collective human behaviour in professional environments.
5. Demonstrating a concern for quality in the objectives and development of the work.
6. Develop systemic thinking.
7. Develop the ability to analyse, synthesise and plan ahead.
8. Make efficient use of ICT in communicating ideas and results.
9. Students must be capable of adapting to new situations and new knowledge that may lead to new analysis and different stances.
10. Students must be capable of searching and analysing information of different sources.
11. Students must prove they know where and why organizations use technology, emphasizing the integrative role of technology in organisations.
12. Understand the dynamic nature of technology.
13. Understanding the dynamic nature of technology.
14. Using the more effective and up-to-date technical means in oral and written communication.
15. Valuing the strategic role of technology and innovation in an organisation.
16. Work cooperatively.
17. Working in teams, sharing knowledge and communicating it to the rest of the team and the organisation.

Content

1. What is innovation? Introduction and conceptual aspects
2. Technology as a strategic resource
3. The process of technological innovation in organizations
4. The strategy of innovation in a competitive environment
5. Technology exploitation and legal protection
6. Innovation, globalization and the new economy
7. Innovation and competitiveness
8. Innovation and Marketing
9. Disruptive innovation
10. Open Innovation
11. Cooperation as a vector of innovation
12. Innovation in exponential organizations
13. Introduction to innovation models: Scamper, Service Design, Design Thinking, Manual Thinking.
14. Financing tools for innovation

Methodology

Teacher-pupils relationship

The general and relevant information about the subject that details the contents of the teaching guide, such as the dates of continuous assessment and dates and conditions of the work assignments, will be published on the virtual campus (or equivalent site) and may be subject to changes of programming for reasons of adaptation to possible incidents; the virtual campus will always be informed about these changes as it is understood that the virtual campus is the usual mechanism for exchanging information between teacher and student.

Languages

The classes will be done mostly in Catalan or Spanish, although the appearance of terms in English is very common. The written material or support for the subject (notes, bibliography, references or even statements of practices, exercises or cases) can be provided either in Catalan or Spanish or in English and in this case the use of the English language can be not exceptional but usual. The final test and the re-evaluation will be written in Catalan or Spanish. The answers to the tests and the exercises can be delivered (and if applicable) indistinctly in Catalan, Spanish or English.

Theoretical classes

It is in these sessions that present the basic contents that students need to enter into the topics that make up the program. At the same time, they will indicate the possible ways to complete or deepen the information received in these sessions.

During the sessions, discussions will be generated and students' participation will be promoted both individually and in groups.

Workshops

In these sessions, the practical implementations of the concepts treated in theory classes will be made and challenges and exercises that can be both group and individual will be developed and will be developed through the use of active learning tools.

Master Class

Experts from the sector will be invited, who, under the guidance of the teachers, will be able to transfer knowledge of innovation management very applied to their field of expertise. Approximately 3 sessions are planned.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Master class	6	0.24	15, 2, 13, 12, 5, 11, 6, 7, 10
Theoretical classes	27	1.08	15, 2, 13, 12, 9, 11, 6, 7, 16
Workshops	13	0.52	2, 9, 7
Type: Supervised			
Tutorship	15	0.6	15, 2, 13, 12, 9, 5, 11, 6, 7, 16
Type: Autonomous			
Preparation and elaboration of classwork's and homework's	35	1.4	1, 3, 9, 5, 4, 7, 8, 10, 16, 17, 14
Study and information search	50.5	2.02	15, 2, 13, 12, 9, 11, 4, 6, 7, 8, 10, 16

Assessment

General Conditions to Approve

- At least 5 out of 10 must be taken to pass
1. Continuous assessment (60%) two parts:
 1. CA1: Workshops (40%). 6 workshops on the topics of the course and a final workshop to evaluate this part. You must have participated in at least 5 workshops to be evaluated.
 2. CA2: Participation, Exercises and classwork (20%): Problem-based learning exercises, case discussion, individual or teamwork, presentation in class of the results and other tests that are determined. Class participation will also be valued.
 3. On the Continuous Assessment part, it is necessary to have a 5/10 to pass the subject and given its diversity cannot be recovered. If you do not have a 5/10 note, the resulting score of CA will be the minimum between the mark obtained and 3/10
 3. Exams (40%):
 1. Partial exam in the week set by the dean. 50% of the note (variable according to contingencies that did not allow the planned course)
 2. Final exam divided into two parts:

Students who have not passed the first part or want to raise a note (they must notify them beforehand) can be presented again in the first part. The resulting grade will be the highest of the two exams.

The second part corresponds to the rest of the syllabus.

The resulting grade from the part of the exams will be the weighted average of the two parts.
 5. Calculation of the final grade:
 1. If $AC > 5$, the final grade of the subject (N) will be: $N = 40\%$ (exams) + 60% (continuous assessment). The student passes the course if $N \geq 5$, and does not pass if $N < 3.5$. In the intermediate case, the student can do the recovery process detailed below.
 2. If $AC < 5$, fail the course, but if from the previous calculation [by placing AC the minimum between the grade obtained for the continuous assessment and 3], a value of N exceeding 3.5 is obtained, the student can go to the recovery process.

Calendar of evaluation activities

The dates of the evaluation activities (midterm exams, exercises in the classroom, assignments, ...) will be announced well in advance during the semester.

The date of the final exam is scheduled in the assessment calendar of the Faculty.

"The dates of evaluation activities cannot be modified unless there is an exceptional and duly justified reason why an evaluation activity cannot be carried out. In this case, the degree coordinator will contact both the teaching staff and the affected student, and a new date will be scheduled within the same academic period to make up for the missed evaluation activity." **Section 1 of Article 115. Calendar of evaluation activities (Academic Regulations UAB)**. Students of the Faculty of Economics and Business, who in accordance with the previous paragraph need to change an evaluation activity date must process the request by filling out an Application for exams' reschedule https://eformularis.uab.cat/group/deganat_feie/application-for-exams-reschedule

Grade revision process

After all grading activities have ended, students will be informed of the date and way in which the course grades will be published. Students will be also be informed of the procedure, place, date and time of grade revision following University regulations.

Retake Process

"To be eligible to participate in the retake process, it is required for students to have been previously been evaluated for at least two-thirds of the total evaluation activities of the subject." Section 3 of Article 112 third The recovery (UAB Academic Regulations). Additionally, it is required that the student to have achieved an average grade of the subject between 3.5 and 4.9.

The date of the retake exam will be posted in the calendar of evaluation activities of the Faculty. Students who take this exam and pass will get a grade of 5 for the subject. If the student does not pass the retake, the grade will remain unchanged, and hence, the student will fail the course.

Irregularities in evaluation activities

In spite of other disciplinary measures deemed appropriate, and in accordance with current academic regulations, *"in the case that the student makes any irregularity that could lead to a significant variation in the grade of evaluation activity, it will be graded with a 0, regardless of the disciplinary process that can be instructed. In case of various irregularities occur in the evaluation of the same subject, the final grade of this subject will be 0"*. **Section 10 of Article 116. Results of the evaluation. (UAB Academic Regulations)**.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Exams	40%	3.5	0.14	15, 2, 13, 12, 3, 11, 6, 7
Participation, exercises and classwork	20%	0	0	15, 2, 13, 12, 3, 9, 5, 11, 7, 8, 14
Workshops	40%	0	0	15, 2, 1, 13, 12, 3, 9, 5, 11, 4, 6, 7, 8, 10, 16, 17, 14

Bibliography

Barceló i Roca, M. (2016) *Citynomics: economia, innovación y territorio*.

Borghino, M. (no date) *Disrupcion: mas alla de la innovacion*.

Domingo, C. (2013) *El viaje de la innovacion: la guia definitiva para innovar con exito*. Gestión 2000.

Hidalgo Nuchera, A., León Serrano, G. and Pavón Morote, J. (2002) *La gestion de la innovacion y la tecnologia en las organizaciones*. Ediciones Pirámide.

Ismail, S. *et al.* (2016) *Organizaciones exponenciales*. Bubok Publishing S.L.

Kotler, P. 1931- *et al.* (2018) *Marketing 4.0*. LID.