



IDENTIFYING DATA

Knowledge and technological innovation management

Subject	Knowledge and technological innovation management			
Code	V03G020V01925			
Study programme	(*)Grao en Administración e Dirección de Empresas			
Descriptors	ECTS Credits 6	Choose Optional	Year 4th	Quadmester 1st
Teaching language	Galician English			
Department	Business Organisation and Marketing			
Coordinator	Vázquez Vicente, Xosé Henrique			
Lecturers	Sartal Rodríguez, Antonio Vázquez Vicente, Xosé Henrique			
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General description	The course highlights the challenges posed by the knowledge economy, justifies the need to innovate in this context, and deepens into the tools available to sistematize R&D and innovation within organizations. Although we will mainly focus in private firms, the course will show that the management of knowledge and innovation finds a wide field of application beyond the business arena. The rationale of the course will thus play an important role in the dynamization of change in any type of organization; from an NGO or a trade union, for instance, to the very same public administration.			

Competencies

Code				
A2	Students need to be able to apply the knowledge acquired to their work or vocation in a professional manner, and should have the skills normally demonstrated through the ability to develop and defends points of view and to solve problems related to their field of study.			
A3	Students should be able to collect and interpret relevant data (usually within their field of study) in order to make judgements that include a reflection on the relevant social, scientific or ethical issues.			
A4	Students should be able to transmit information, ideas, problems and solutions to both specialised and non-specialised audiences.			
B1	Ability to analyse and synthesise			
B2	Critical and self-critical thinking			
C1	Acquire and understand knowledge regarding: the relationships between the different subsystems that make up the business system			
C3	Acquire and understand knowledge regarding: Internal aspects, functions and processes of organisations including their nature, structure, direction, operation and management			
D2	Capacity for leadership, including empathy with others			

Learning outcomes

Expected results from this subject	Training and Learning Results			
Understand the Knowledge Economy and the role that the management of the innovation plays.	A3	B1 B2	C1 C3	
Capacity to analyze the main strengths that move the ecosystem of innovation	A2	B1 B2	C1 C3	
Capacity to analyse the internal processes of the company that influence the potential of innovation	A4	B2	C1 C3	D2
Creative capacity to distinguish new projects of innovation, evaluate them with rigour, and implement them.	A2 A3	B1	C1	D2

Contents	
Topic	
1.- Why innovation management? From an industrial to a knowledge economy.	The world economy. The rationale of growth and convergence. The new technological system: microelectronics and biotechnology. Knowledge economy: more than bytes. The firm in a new context: the innovation plan.
2.- Technological change and National Systems of Innovation.	Technology and innovation: definitions and typologies. The configuration of National Systems of Innovation. The system Science-Technology-Industry: the role of universities.
3.- How to protect intellectual property rights (IPRs).	What are IPRs. Patents. Utility models. Industrial models and draws. Know-how. Brands and other symbols.
4.- The elaboration of a diagnosis: from environmental insights to new ideas for the market.	Competitive intelligence. Technological prospection. Technological audit.
5.- The importance of designing a strategy to develop a project portfolio.	Strategic coherence. Innovation strategies. Technological strategies. What comes first?
6.- How to implement a project? Organizational structure, control and leadership.	Organizational structures to stimulate change and innovation. Coordination mechanisms to innovate. The technological perspective of control systems and incentives. Participation systems for the workforce. The flow of change: training, communication and leadership.

Planning			
	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	29	30	59
Problem solving	10	10	20
Supervised work	10	20	30
Others	0	10	10
Objective questions exam	2	28	30

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
	Description
Introductory activities	Presentation of contents and goals. Teaching methodology and evaluation systems.
Lecturing	Presentation of the theoretical basis and guidance on program contents. Before lectures, students should read and work on the material prepared for each session.
Problem solving	Each of these sessions consist of an activity to apply the knowledge developed in master sessions.
Supervised work	Students will work cooperatively in small groups in order to carry out (1) an analysis of a particular innovation topic; (2) develop simulations of tools and techniques that were studied in the theoretical lectures, and (3) elaborate an Innovation Plan for any business or industry.
Others	Analysis and presentations from readings and complementary exercises.

Personalized attention	
Methodologies	Description
Problem solving	Several problems and exercises will be addressed in class.
Supervised work	The innovation plan will be supervised by the teacher.

Assessment			
	Description	Qualification	Training and Learning Results
Supervised work	There are three types of tutored works: (1) Analysis and presentations of readings; (2) simulations led by the teacher; and (3) an Innovation Plan. The Innovation Plan follows a model that is available in FAITIC. The assesment of these Plans will be based on its formal presentation, its analytical quality, and its public presentation.	40	A2 B1 C1 D2 A3 B2 C3 A4
Others	Proactive attitude throughout the theoretical and practical lectures, complementary readings or oral presentations.	10	A4 B1 D2 B2
Objective questions exam	The exam will consist of 20 test questions with 4 possible answers each. One correct answer adds one point; one incorrect answer subtracts 0,33. This test-type exam may be substituted by short questions that students must deal with extensively in extraordinary sessions.	50	A3 B1 C1 B2 C3

Other comments on the Evaluation

The assesment method described in this guide is meant for students who will follow the **classroom-based teaching**.

Students need to pass the test and the daily assesment independently.

Any student taking part in 15% of the evaluation exercises will get a grade different from "not presented".

Students can find the calendar of available examinations in <http://fccee.uvigo.es/calendario-exames-201718.html>

Sources of information

Basic Bibliography

Complementary Bibliography

Tidd, Joe e Bessant, John, **Managing Innovation: Integrating technological, market and organizational change**, Wiley, 2013

Tidd, Joe e Bessant, John, **Managing Innovation: Integrating technological, market and organizational change**, Wiley,

Fernández Sánchez, Esteban, **Estrategia de innovación**, Thomson,

Antonio Davila, Marc J Epstein, and Robert D. Shelton, **Making Innovation Work: How to Manage It, Measure It, and Profit from it**, Pearson Education, 2013

Recommendations

Subjects that continue the syllabus

Investment decisions/V03G020V01402

Financing decisions/V03G020V01501

Subjects that are recommended to be taken simultaneously

Commercial Research/V03G020V01701

Subjects that it is recommended to have taken before

History: Economic history/V03G020V01103

Operations management/V03G020V01302

Accounting analysis/V03G020V01601