

Curso Académico: (2023 / 2024)

Fecha de revisión: 25-05-2023

Departamento asignado a la asignatura: Departamento de Ingeniería Mecánica

Coordinador/a:

Tipo: Obligatoria Créditos ECTS : 3.0

Curso : 4 Cuatrimestre : 2

OBJETIVOS

El curso aspira a proporcionar a los estudiantes conceptos y herramientas para entender cómo las empresas pueden lograr ventajas competitivas sostenibles y mejores resultados a partir de tecnologías biomédicas. Por consiguiente, los estudiantes adquirirán las siguientes competencias:

- Comprenderán la función de los directivos y las principales áreas de la empresa
- Entenderán las causas y orígenes de la ventaja competitiva y la creación de valor
- Serán capaces de analizar la industria biomédica y sus principales características
- Comprenderán la importancia de la innovación para el éxito competitivo, así como los principales conceptos en gestión de la innovación, con especial atención a la propiedad industrial.
- Comprenderán cómo el derecho de propiedad industrial contribuye a proteger y explotar las innovaciones en el mercado.

DESCRIPCIÓN DE CONTENIDOS: PROGRAMA

1. Nature of the firm and the role of strategy
 - 1.1 The nature of the firm and the role of managers
 - 1.2 The role of strategy: creating and sustaining competitive advantage
 - 1.3 The nature and sources of business opportunities: the role of strategic analysis
 - 1.4 Business models: concept, components and applications
 - 1.5 Business models in the biomedical industry
2. Formulating and Implementing Technological Innovation Strategy
 - 2.1 Sources of Innovation
 - 2.2 Types and Patterns of Innovation
 - 2.3 Standards Battles and Design Dominance
 - 2.4 Timing of Entry
 - 2.5 Collaboration Strategies
 - 2.6 Managing the New Product Development Process
 - 2.7 Measuring Innovation success: a quantitative approach with applications in the biomedical industry
3. Intellectual property rights and technology exploitation
 - 3.1 Intellectual property rights in innovation systems
 - 3.2 Intellectual property management in biotechnology
 - 3.3 Protecting Innovation
 - 3.4 Principles of IPR law (national, European, international)
 - 3.5 Protecting Innovation: IPRs and the protection of biomedical technologies

ACTIVIDADES FORMATIVAS, METODOLOGÍA A UTILIZAR Y RÉGIMEN DE TUTORÍAS

The students will develop the competences aimed for this course by means of three main learning activities:

Theoretical lectures, which will consist in systematic explanations of the main concepts and analytical frameworks underlying the different topics covered along the course. Students will be given the appropriate bibliographic references in advance, so that they can study and prepare for each session.

Practical sessions, during which students will analyze real-life case studies applying the contents previously explained in the theoretical lectures. Students will prepare the case studies and submit their analysis in writing before the session, when they will be discussed under the teacher's supervision and

guidance. Active participation is expected from the students.

End-of-term Project (teamwork): The students will develop a business plan for a biomedical startup, in which they will apply the course contents to an original business project.

SISTEMA DE EVALUACIÓN

The competences acquired by the students will be assessed as follows:

End-of-term written exam: 60%

Written assignments (case studies): 20%

Final Project (business plan): 20%

Peso porcentual del Examen Final:	60
--	----

Peso porcentual del resto de la evaluación:	40
--	----

BIBLIOGRAFÍA BÁSICA

- Castle, D. The Role of Intellectual Property Rights in Biotechnology Innovation, Edward Elgar, 2009
- Grant, R. M. Contemporary strategy analysis: Text and cases edition, Wiley & Sons, 2016
- Schilling, M. A. Strategic Management of Technological Innovation. , McGraw-Hill Education, 2012