

FUC - Ficha de Unidade Curricular

Curricular Unit's File

Code	L5020
Name (PT)	Economia da Inovação e do Conhecimento
Name (EN)	Economics of Innovation and Knowledge
Regime	Semestral
Level	1.º Ciclo
Teaching language	Inglês
School	Escola de Ciências Sociais e Humanas (ECSH)
Departament	DEP
Scientific area	Economia (Econ)
Responsible academic staff	Isabel Salavisa de Oliveira Lança
Pre-requisites	Microeconomics I and II
Objectives	This course aims to develop skills that allow developing knowledge and understanding of the major role played by knowledge and innovation in contemporary economies, at country, region and firm levels, in order to be able to critically analyze European and domestic standing and policies and to mobilize innovation for economic and social problem solving at different levels.
Learning outcomes	<p>Learning Outcomes (LO) are:</p> <p>A. Knowledge and understanding of:</p> <ol style="list-style-type: none"> 1) The current role and process of knowledge and innovation creation; 2) The process of innovation creation and absorption in the firm; 3) Innovation and diffusion models; 4) General aspects of innovation and S&T policies; 5) European and domestic innovation and S&T policies. <p>B. Knowledge application to using:</p> <ol style="list-style-type: none"> 1) Main data sources and indicators; 2) Main specialized publications. <p>C. Judgement of:</p> <ol style="list-style-type: none"> 1) Technological trends and their impact on a country, region or firm; 2) The impact of new technologies on environmental sustainability; 3) The impact of innovation and S&T policies. <p>D. Communication</p> <ol style="list-style-type: none"> 1) Ability to elaborate and present well grounded arguments; 2) Ability to communicate clearly his/hers analyses and conclusions. <p>E. Learning</p> <ol style="list-style-type: none"> 1) Ability to develop autonomy in study and research; 2) Ability and motivation to lifelong learning.

Syllabus	<p>1. Introduction</p> <p>1.1 An overview of the knowledge economy</p> <p>1.2 The current role of knowledge and innovation</p> <p>1.3 Long cycles</p> <p>2. Main Concepts and Indicators</p> <p>2.1 Innovation, technology and knowledge</p> <p>2.2 Intellectual property rights</p> <p>2.3 Indicators and sources</p> <p>2.4 The cases of Portugal and the EU</p> <p>3. Innovation and Diffusion Process</p> <p>3.1 Innovation models</p> <p>3.2 Innovation systems</p> <p>3.3 Diffusion models</p> <p>3.4 Technological catching-up</p> <p>4. Firms and Innovation</p> <p>4.1 The innovative firm</p> <p>4.2 Technological and academic entrepreneurship</p> <p>4.3 Sectors and technologies</p> <p>5. Innovation and Environmental Sustainability</p> <p>5.1 Socio-technical systems and energy system's transitions</p> <p>6. S&T, Innovation and Diffusion Policy</p> <p>6.1 Rationale for public intervention: market and system failures</p> <p>6.2 Innovation and S&T policy</p> <p>6.3 Diffusion policy</p> <p>6.4 The EU case</p> <p>6.5 The Portuguese case</p>
Assessment	<p>Performance evaluation includes the following elements:</p> <p>A mid-term test (30%), a group work (40%) and a final test at the end of the term (30%). The minimum grade of each is 8.0.</p> <p>Minimum attendance rate required in this course: 80% of the lectures.</p> <p>Or</p> <p>A final exam.</p>
Teaching methodology	<p>Expositional and practice oriented classes (TP); search for information on the Net and in libraries; elaboration and presentation of a written work group by the students; individual tests; tutorial support.</p>
Demonstration of the syllabus coherence with the curricular unit's objectives	<p>The syllabus deals transversally and in an integrated manner with the different objectives and specific competencies which the course seeks to impart.</p> <p>Correspondence of Objectives and skills with Syllabus:</p> <p>LO A1 to A5: 1, 2, 3, 4, 5, 6</p> <p>LO B1 and B2: 1, 2, 3, 4, 5, 6</p> <p>LO C1, C2 and C3: 1, 2, 3, 4, 5, 6</p> <p>LO D1 and D2: 1, 2, 3, 4, 5, 6</p> <p>LO E1 and E2: 1, 2, 3, 4, 5, 6</p>
Demonstration of the coherence between the teaching methodologies and the learning outcomes	<p>Teaching methodologies attempt at developing research skills and critical examination of relevant theoretical and empirical frameworks. The aim is also to provide students with information about the data and references on the European and domestic policies and programmes aiming to support innovation and S&T. In this regard, expositional classes contribute to all learning outcomes. Practice oriented classes and more autonomous work target particularly the learning outcomes B1 and B2; C1, C2 and C3; D1 and D2; and E1 and E2. Self-study is crucial in this course and targets all learning outcomes.</p>
Main Bibliography	<p>A apresentação do trabalho de grupo é um aspeto dinâmico e muito interessante.</p>
Complementary Bibliography	<p>The work group presentation by the students organized in teams of 3 or 4 is a dynamic and interesting experience.</p>