


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Commercialization of research outcomes		13.3.0492	
Name of unit administrating study			
Faculty of Chemistry			
Studies			
faculty	field of study	type	drugiego stopnia
Wydział Chemii	Chemia	form	stacjonarne
		specjalty	chemia biomedyczna, analityka i diagnostyka chemiczna, chemia i technologia środowiska, chemia obliczeniowa
		specialization	wszystkie
Teaching staff			
dr hab. Karol Krzywiński, profesor uczelni			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		1	
Lecture		Classes: 5 hours	
The realization of activities		Consultation: 2 hours	
classroom instruction		Student's own work: 18 hours	
Number of hours		TOTAL: 25 hours - 1 ECTS	
Lecture: 5 hours			
The academic cycle			
2022/2023 winter semester			
Type of course		Language of instruction	
obligatory		polish	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
multimedia-based lecture		Final evaluation	
		Graded credit	
		Assessment methods	
		assignment work – project or presentation	
		The basic criteria for evaluation	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements B. Prerequisites Communicative English skills; Ability to use MS Excel spreadsheet for simple calculations and any program for the presentation of results and ideas (e.g. MS PowerPoint).			
Aims of education			
To familiarize students with the issues listed in the course content; To acquaint students with the assumptions of the knowledge-based economy; To acquaint students with intellectual and industrial property issues; To acquaint students with the problems and formal issues of patent applications; Acquaintance with the principles of cooperation within the research group; Acquainting with problems of financing of research projects; The criteria for selecting the innovative research results for further funding targeted for implementation; Acquainted with the criteria for assessing the commercial potential of the project; Acquainting with the way of presenting the results of scientific research; Acquainting with the method of preparing research plan and its commercialization. Acquaintance with the project management in the organization.			
Course contents			
Basic concepts of commercialization and the research and development sector; Models and examples of commercialization; Stages of commercialization of innovative research; Knowledge-based economy; Financing research and scientific implementations; Patent law and patents; Marketing in science. Diagnosis of the situation in Poland in the R&D sector; Managerial competence; Management of scientific research and development.			

Bibliography of literature

Literature required to pass the course

A.1. Used during meetings

1. Original materials presented during lectures, prepared on the basis of the resources of the "Competence for Science and Business Cooperation", the project financed by the European Union under the European Social Funds (EU/ESF, 2012).
2. Problem issues, delivered in electronic form by the teacher necessary to complete the final thesis.

A.2. Extracurricular/additional readings

1. Nidzworski D., Kuźbicki M., Kowalczyk I., Matusiak K., Przybyłowski M., Kipiel K., Muzalewska M., Ciesielski S., "Bio Bussines School - Guide to the commercialization of research results from the life science industry", Chroma Publishing House, Gdańsk, Poland, 2010.
2. S. Łobejko, A. Sosnowska (ed.), "Commercialization of scientific research results. A practical guide for scientists", a collective work financed by the EU / EFZ, published by the Marshal's Office of the Mazowieckie Voivodeship, Warsaw, Poland 2013.

The learning outcomes (for the field of study and specialization)
Knowledge

Student describes stages of commercialization; Knows the mechanisms and models of commercialization; Identifies and recognizes recent market features; Knows basic requirements for patent application; Distinguishes between types of intellectual property; Knows the sources of financing of research projects; Understands the principles of cooperation in research team and effective communication in the group. Knows and understands Belbin's theory of individual roles in a group

Skills
Social competence
Contact

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