


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Chemical business design		13.3.0740	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	all
Faculty of Chemistry	Chemical Business	form	all
		specjalty	all
		specialization	all
Teaching staff			
prof. dr hab. inż. Adriana Zaleska-Medynska; dr inż. Anna Gołębiewska; prof. UG, dr hab. Przemysław Kulawczuk; dr Andrzej Poszewiecki; dr inż. Joanna Nadolna; dr inż. Beata Bajorowicz			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		3	
Auditorium classes, Lecture		classes - 45 h	
The realization of activities		tutorial classes – 5 h	
classroom instruction		student's own work – 25 h	
Number of hours		Total: 75 h - 3 ECTS	
Auditorium classes: 30 hours, Lecture: 15 hours			
The academic cycle			
2024/2025 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	
<ul style="list-style-type: none"> - Auditorium seminar: case studies analysis, business project method, discussion - seminar lecture 		Final evaluation	
		<ul style="list-style-type: none"> - Graded credit - Examination 	
		Assessment methods	
		<ul style="list-style-type: none"> - assignment work – project or presentation - oral exam 	
		The basic criteria for evaluation	
		Final grade will be issued based on the students' activity during classes and based on the group projects prepared by students. The grades from the activity in the classroom and project presentation will be in accordance with the guidelines defined by the "UG Study Regulations".	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			
Principles of general chemistry, start-up design.			
B. Prerequisites			
Basic knowledge of English language.			
Aims of education			
Aims of education			
<ul style="list-style-type: none"> - Acquainting with the principles of designing of small production installations; 			

- Acquainting with the principles of economical analysis / determining the profitability of a new production installation	
Course contents	
<p>Course contents</p> <p>Lecture program:</p> <p>Business planning process (economical and technological aspects)</p> <p>The structure of the technological process</p> <p>Business plan structure</p> <p>The essence of the strategic and marketing analysis</p> <p>Financial analysis of the planned project</p> <p>Seminar program:</p> <p>1. Development of a preliminary process design for a selected company operating in the field of cosmetics, medicines, plant protection products, paints, varnishes, biotechnology, waste processing, etc.,:</p> <p>Development of chemical concept for selected technological process</p> <p>Development of technological concept of the process (process diagram flow, mass and energy balance, technological diagram)</p> <p>2. Development of preliminary business plan for selected small company</p> <p>Choice and justification of business concept model for a start up</p> <p>Development of market and financial for a start up</p>	
Bibliography of literature	
<p>Bibliography of literature</p> <p>Literature required to pass the course</p> <p>E.Pawłowski, K. Pawłowski, J. Trzcielińska, S. Trzcieliński, Projektowanie biznesu i ocena przedsięwzięć inwestycyjnych, Wydawnictwo Politechniki Poznańskiej, Poznań 2010, publikacja elektroniczna https://www.researchgate.net/publication/269332977_projektowanie_biznesu</p> <p>Extracurricular readings</p>	
The learning outcomes (for the field of study and specialization)	Knowledge
	<p>Knowledge</p> <p>Distinguishes the patentability of products/ technologies</p> <p>Prepares the business plan for the small company</p> <p>Identifies and recognizes market needs</p> <p>Designs small production installations and determines their profitability</p>
	Skills
	<p>Skills</p> <p>Group co-working</p> <p>Prepares business plan</p> <p>The ability to briefly and simply presents idea</p> <p>Evaluates the technology readiness level</p> <p>The ability to choose a chemical and technological concept</p>
	Social competence
	<p>Social competence</p> <p>Understands the benefits of teamworking</p> <p>Understands the needs of systematic literature study</p> <p>Shows responsibility for time oriented tasks realization</p> <p>Is aware of the needs of critical own work analysis</p> <p>Is aware of the needs for honest and reliable work.</p>
Contact	
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