



DIGITAL SKILLS AND CROSS-DOMAIN ENTREPRENEURIAL COMPETENCES
FOR GRAND CHALLENGES
Syllabus

Basic information

Field of study Electives		Didactic cycle 2025/26	
Speciality -		Subject code EKOPSW.S.M8.3741.25	
Organizational unit School of Undergraduate and Graduate Studies		Lecture languages English	
Study level graduate studies		Mandatory Elective	
Study form full-time		Block Free choice electives	
Education profile general academic/practical		Department responsible for the subject Department of Strategic and Regional Research	
		Subject related to scientific research No	
		Subject shaping practical skills No	
Coordinator	Artur Ochojski		
Teacher	Artur Ochojski		
Period Semester 4	Form of teaching, number of hours and method of examination • lecture: 14, Credit with grade	Number of ECTS points 3	
Sustainable Development Goals	SDGs (Social Development Goals)		

Goals

Code	Goal
C1	Through interdisciplinary learning, students strengthen awareness of digital and entrepreneurial competences required to tackle complex global challenges.
C2	Students engage in reflective practices to identify the interconnected nature of local and global situations

Recommended requirements

Basic knowledge on economics or markets

Subject's learning outcomes

Code	Outcomes in terms of	Major learning outcomes for the subject	Examination methods
Knowledge:			
W1	Understanding of major global (grand) challenges (e.g. climate change, inequality, digital divide, sustainability) and their systemic nature.	DEK.M_W07	Participation in class discussion, Participation in class debate
W2	Understanding of local-global dynamics and interdependencies in social, economic, environmental, and cultural contexts	DEK.M_W06	Participation in class discussion, Participation in class debate
W3	Awareness of data literacy, and understanding of interdisciplinary approaches to problem-solving	DEK.M_W07	Participation in class discussion, Participation in class debate
Skills:			
U1	Integrating knowledge from multiple disciplines to address complex, real-world challenges	DEK.M_U02	Participation in class discussion, Participation in class debate
U2	Critical thinking to compare perspectives and interpret complex information	DEK.M_U01	Participation in class discussion, Participation in class debate
Social competences:			
K1	Adaptability and resilience when approaching work in complex and uncertain global contexts	DEK.M_K01	Participation in class discussion, Participation in class debate
K2	Ability to engage in dialogue and constructive discussion on complex societal issues	DEK.M_K02	Participation in class discussion, Participation in class debate

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Grand societal challenges and competency - the introduction.	W1, W2, U1	lecture

No.	Course content	Subject's learning outcomes	Activities
2.	Population aging and poverty as societal challenge.	W1, W2, U1	lecture
3.	Industry 4.0, circular economy energy and climate change as societal challenge.	W1, W2, U1	lecture
4.	Urbanisation and technologization in cities as societal challenge.	W1, U1	lecture
5.	Contextualising the digital skills	W3, U1, U2, K1	lecture
6.	Contextualising the entrepreneurial competences	W3, U1, U2, K1	lecture
7.	Readiness for Grand Challenges: A Professional Perspective	U1, U2, K1, K2	lecture

Additional information

Activities	Methods of conducting classes
lecture	Lecture using multimedia techniques

Activities	Examination method	Percentage
lecture	Participation in class discussion	20%
lecture	Participation in class debate	80%

Activities	Credit conditions
lecture	Students will be asked to: <ul style="list-style-type: none"> • provide reflections on the challenges discussed during the lectures in either direct communication during the class or a short written format in-between the meetings (20%), • complete a Delphi study on global challenges and various skills and competences critical to address them. Once the delphi study (sent online before the last lecture) is completed, students will discuss the results in plenary meeting as a self learning experience (80%).

Literature

Obligatory

1. Ochojski A., Masana R. (eds.) (2023), Handbook on digital skills and cross-domain entrepreneurial competences for societal challenges, Bogucki Wydawnictwo Naukowe, Poznań, <https://doi.org/10.12657/978-83-7986-490-4>
2. Cosgrove, J. Cachia, R., (2025), DigComp 3.0: European Digital Competence Framework - Fifth Edition, Publications Office of the European Union, Luxembourg, <https://data.europa.eu/doi/10.2760/0001149>
3. Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. (2016), EntreComp: The Entrepreneurship Competence Framework. Luxembourg: Publication Office of the European Union; EUR 27939 EN, doi:10.2791/593884

Optional

1. https://joint-research-centre.ec.europa.eu/entrecomp-entrepreneurship-competence-framework_en
2. https://joint-research-centre.ec.europa.eu/projects-and-activities/education-and-training/digital-transformation-education/digital-competence-framework-digcomp_en
3. <https://infuture.institute/en/>

Calculation of ECTS points

Activity form	Activity hours*
lecture	14
Literature study	25
E-learning - solving tasks published in the form of e-learning materials	2
Field work - participatory observation	20
Analysis of lecture notes	15
Student workload	Hours 76
Number of ECTS points	ECTS 3

* hour means 45 minutes

Major learning outcomes for the subject

Code	Content
DEK.M_K01	Jest gotów do krytycznej oceny odbieranych treści, w tym zwłaszcza z obszaru ekonomii.
DEK.M_K02	Jest gotów doceniać znaczenie rzetelnej wiedzy w rozwiązywaniu problemów poznawczych i praktycznych, w tym zwłaszcza w obszarze gospodarki oraz jest przygotowany do zasięgnięcia opinii ekspertów.
DEK.M_U01	Potrafi identyfikować i interpretować zjawiska i procesy społeczno-ekonomiczne z wykorzystaniem pogłębionej wiedzy z zakresu ekonomii oraz uzupełniająco w zakresie finansów i zarządzania.
DEK.M_U02	Potrafi - wykorzystując posiadaną wiedzę - formułować oraz rozwiązywać (w tym innowacyjnie) złożone i nietypowe problemy gospodarcze, a także podejmować decyzje dotyczące procesów gospodarczych w warunkach niepewności z uwzględnieniem właściwego doboru źródeł, dokonywania ich oceny, syntezy i twórczej interpretacji wiedzy i informacji, doboru i stosowania, przystosowania lub opracowania nowych właściwych narzędzi, w tym zaawansowanych technik informacyjno-komunikacyjnych.
DEK.M_W06	Zna i rozumie w pogłębionym stopniu relacje zachodzące między podmiotami gospodarującymi oraz ich otoczeniem krajowym i międzynarodowym, a także zna i rozumie rolę otoczenia prawnego.
DEK.M_W07	Zna i rozumie w pogłębionym stopniu dylematy ekonomiczne i społeczne współczesnej cywilizacji, zwłaszcza w obszarze gospodarki.