Jan Amos Komeński
STATE UNIVERSITY
OF APPLIED SCIENCES
in Leszno

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Course syllabus for Erasmus+ incoming students

Course Title	
Health Innovation and Medical Entrepreneurship Technology, Economics and Implementation	
Academic Teacher	Adam M. Adamek, DrSc, MPH
E-mail	adam.adamek@ansleszno.pl
ECTS credits	5
Number of hours	120 h total | 30 contact + 90 self-study
Course code	INT-IZKFP-HIME-26
Course description	
First-cycle level; teaching language English B2. The course takes students from a patient or team need to a service concept and implementation plan. Cases cover clinics, home care, rehabilitation and applications of AI, automation and robotics. Students identify a problem, design a response, calculate costs and revenue, plan a pilot and present their proposal to a partner. User experience, evidence and economic feasibility inform their decisions. Prerequisites: English B2 and basic familiarity with health services.	
Learning outcomes and course content	
LO1 Distinguishes problem, solution, benefit and evidence and the interests of patient, user, buyer and payer. LO2 Frames a need from observation or interviews and maps stakeholders. LO3 Builds a value proposition and a simple service or business model. LO4 Calculates fixed and variable costs, contribution margin, break-even and basic cash flow. LO5 Designs a pilot with stopping rules, measures and evidence, data and regulatory questions. LO6 Presents a recommendation with explicit assumptions and limitations and works responsibly in a team.	

Course content: Finding the right health problem; Patient user and payer; Service and process design; Value proposition and business model; Clinic and service economics; Automation robotics and AI; Evidence safety and regulatory awareness; Negotiation procurement and change; Pilot funding and measures; Health Innovation Pitch Day.

Student workload and self-study description

Contact teaching 30 h; Reading and evidence review 15 h; Problem and stakeholder work 20 h; Service or venture project 35 h; Pitch preparation 10 h; Assessment preparation 10 h.

Assessment: Problem discovery 15%; Value proposition and model 20%; Individual financial and implementation case 20%; Final team project and pitch 35%; Reflection and contribution account 10%.

Literature

WHO Ethics and governance of artificial intelligence for health 2021
https://www.who.int/publications/i/item/9789240029200
Stanford Biodesign Needs based innovation methodology
https://biodesign.stanford.edu/
Osterwalder A and Pigneur Y Business Model Generation 2010
https://www.strategyzer.com/library/the-business-model-canvas