

Level: bachelor				
Course title: Demonstration experiments in teaching physics II				
Status: obligatory				
ECTS: 4				
Requirements: none				
Learning objectives The aim of the course is thematic approach to teaching physics. Topics will be selected based on the classic experiments combined with simple experiments related to the content, with the aim of contributing to better understanding of physical phenomena and processes.				
Learning outcomes Students are expected to develop: - General skills: use literature, scientific terminology and simple experiments related to physical facilities in science teaching. - Subject-specific skills: knowing to demonstrate physical phenomena and laws related to the properties of water and air movement, fluids, heat, optics, sound, electricity, electricity, magnetism. Understand the role of the experiment, evidence and creative thought in the development of scientific ideas.				
Syllabus <i>Theoretical instruction</i> Properties of water and air, thematic approach to teaching mechanics, statics and fluid dynamics, heat waves and vibrations, sound, optical phenomena of electricity and magnetism and electricity. Each topic will be presented together with theoretical background explanation and analysis of simple experiments with the use of necessary mathematical apparatus necessary for a detailed explanation of the demonstrated phenomenon. <i>Practical instruction</i> Demonstration experiments suitable for the treatment of topics: mechanics, fluid statics and dynamics, heat waves and vibrations, sound, optics, electricity, and electricity and magnetism.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 1	Other forms of teaching: 1	Student research:	