

Level: specialist				
Course title: REPRESENTATION OF KNOWLEDGE IN CHEMISTRY (SPH602)				
Status: elective				
ECTS: 5				
Requirements: none				
Learning objectives Understanding specificity of knowledge in chemistry and functions of different presentations of chemical knowledge in educational process.				
Learning outcomes Mastering the methodology of presenting chemical knowledge for the needs of various levels of chemical education.				
Syllabus <i>Theoretical instruction:</i> Levels of knowledge presentation in chemistry. Macroscopic, sub-microscopic and symbolic level. Learning at macroscopic, sub-microscopic and symbolic level. Associating chemical opinion through various levels of knowledge representation. Selection of educational media for presenting and for associating chemical knowledge at different levels of representation. Evaluation of chemical knowledge and estimation of cognitive load in various levels of chemical knowledge representation. Levels of representation in tricyclic curriculum of chemistry teaching. <i>Practical instruction:</i> Three project tasks according to the defined topics of theoretical instruction. Each project task is planned with 8 lessons.				
Weekly teaching load				Other:
Lectures: 2	Exercises:	Other forms of teaching: 2	Student research:	