

Level: master				
Course title: Chemistry of Oil		IHO-511		
Status: elective				
ECTS: 5				
Requirements:				
Learning objectives Acquiring broader knowledge about the significant branch of chemical industry such as oil, introduce students to the chemical composition and reactions of individual constituents of oil and theoretical foundations of some chemical processes of oil.				
Learning outcomes demonstrate knowledge of the structural and chemical properties of oil constituents and their usage.				
Syllabus <i>Theoretical instruction</i> The study of the chemical composition of paraffinic, naphthenic and aromatic oils. Separation methods, analysis, and control group-structural composition of hydrocarbon and non-hydrocarbon oil constituents. Thermal and catalytic processes for refining of narrower oil fractions. Organic synthesis based on petroleum products. Synthesis of surfactant. Biological markers in crude oils. <i>Practical instruction</i> Laboratory chromatographic separation of petroleum products and the determination of the group-structural composition. Synthesis of new products from selected oxygen derivatives isolated from oil.				
Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	