

Level: master				
Course title: Photochemistry				
Status: elective				
ECTS: 5				
Requirements: none				
Learning objectives To acquire broad theoretical and practical knowledge about the main photochemical principles and phenomena, as well as their application to techniques and environmental protection; To enable the students for experiments in this field by mastering the appropriate methodology; To develop theoretical and practical knowledge useful for further chemical education and professional practice.				
Learning outcomes Students should be able to: Define the important photochemical terms and laws and illustrate their application to the environment; demonstrate the acquired knowledge and comprehension of facts and principles in solving photochemical problems; successfully apply the appropriate methodology in experiments using photochemical effects; analyze the experimental results independently and calculate the characteristic parameters of photochemical processes.				
Syllabus <i>Theoretical instruction</i> Selected subjects from the following fields: photochemical reactions as a consequence of activation of molecules, basic photochemical laws, quantum yield, primary and secondary photochemical processes, photographic processes, photochemical transformation in atmosphere, photocatalysis and photosynthesis, transformation of solar energy to electric in photoelectrochemical cells, application of photocatalytic reactions to treatment of waste water, potable water and other materials.. <i>Practical instruction</i> Selected experiments to follow the theoretical instruction.				
Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	