UNIVERSITY OF NIŠ

Course Unit Descriptor	Faculty	Faculty of Mechanical Engineering

GENERAL INFORMATION	
Study Program	Mechanical Engineering
Study Module (if applicable)	-
Course Title	**Processes and Equipment in Environmental Engineering**
Level of Study	☐Bachelor ☐ Master's ☒ Doctoral
Type of Course	☐Obligatory ☒Elective
Semester	Autumn ☒Spring
Year of Study	I
Number of ECTS Allocated	10
Name of Lecturer/Lecturers	Assoc.Prof. Gordana Stefanovic
Teaching Mode	☒ Lectures ☐ Group tutorials ☐ Individual tutorials ☐ Laboratory work ☒ Project work ☒ Seminar ☐ Distance learning ☐ Blended learning ☐ Other

Purpose and Overview (max. 5 sentences)

The course is designed to introduce students of doctoral studies in the field of energy and process engineering with all aspects of environmental pollution and solving the problems on the principles of sustainable development.

Syllabus (brief outline and summary of topics, max. 10 sentences)

1)Technology and environmental protection, 2) The influence of the process engineering industry on the environment, 3)The consequences of pollution of air, water, soil; Emission and imission, 4) Air pollution, Dispersion of air pollutants; Modelling of air pollution dispersion; Processes and equipment for flue gas treatment, 5) Water pollution, Classification of sources of water pollutions; Parameters of water quality; Modelling of water pollution dispersion; Processes and equipment for waste water treatment, 6) Pollution and soil degradation, 7) Processes and equipment for solid waste treatment, 8) Processes and equipment in hazardous waste management, 9) Application of IT in the field of environmental protection, 10) Environmental pollution monitoring.

Language of Instruction

☒Serbian (complete course) English (complete course) ☐ Other _____ (complete course)

☐Serbian with English mentoring ☐Serbian with other mentoring _____

Assessment Methods and Criteria

Pre exam Duties	Points	Final Exam	Points

Term papers	**70**	**Oral Examination**	**30**
		Overall Sum	**100**
***Final examination mark is formed in accordance with the Institutional documents**			