Course Unit Descriptor

Study Programme: Energy And Process Engineering
Course Unit Title: Environmental Analysis in Energy and Process industry
Course Unit Code: M3225
Name of Lecturer(s): Sokolović Dunja
Type and Level of Studies: bachelor
Course Status (compulsory/elective): compulsory
Semester (winter/ summer): summer
Language of instruction: english
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 5
Prerequisites: none
Course Aims:. Introduction to the basic principles and modern methods of sustainable development in energy production and process industry
Learning Outcomes: Ability to work independently on designing, management and application of integrated environmental projects in energetics and process industry for sustainable development concept implementation.
Syllabus. Sustainable development, energy and process industry. Indicators of sustainable development. Systems of environmental management. Basic principles of environmental analysis of energy and process industry. Trends in EU and domestic legislation. Climate changes and industry. Strategy. Identification of pollution sources and emissions in the process research of oil and gas, preparation for transport, processing of oil and gas, distribution and application and thermal power plants. Basic principles of environmental risk assessment. Modern methods in environmental/ecologic risk assessment and their application in energy and process industry. Waste materials management in industry. IPPC and Seveso directive. HSE systems in industry. Analysis of HSE system in the leading world companies. Analysis of the most famous environmental catastrophe in the field of oil and gas. Standards of environmental reporting.
Required Reading: Relevant literature in English, tbd

Weekly Contact Hours: 3	**Lectures: 3**	**Practical work: 0**

Teaching Methods: Lectures and Practice, Consultations, Computer work
Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			