

Course Unit Descriptor

Study Programme: Bachelor Academic Studies in Environmental Protection – Environmental Protection Analyst, Bachelor Academic Studies in Chemistry - Quality Control and Environmental Management			
Course Unit Title: Quality and Resource Management			
Course Unit Code: IKK-305			
Name of Lecturer(s): Full Professor Milena Bečelić-Tomin, Associate Professor Aleksandra Tubić			
Type and Level of Studies: Bachelor of Science Degree			
Course Status (compulsory/elective): Compulsory for Bachelor Academic Studies in Environmental Protection – Environmental Protection Analyst Elective for Bachelor Academic Studies in Chemistry - Quality Control and Environmental Management			
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: Provide knowledge of standards requirements in the field of quality management and environmental management. Introducing students to spatial distribution, quality and instruments for managing of natural resources.			
Learning Outcomes: Ability to recognize quality characteristics. The course provides the knowledge about standard of quality management, best laboratory practices and environmental management (international standards ISO 17025, ISO 9001, ISO 14001). Students are prepared to analyse and recognize the quality of natural resources.			
Syllabus: <i>Theory</i> Quality basis-terms and labels. Defining and determination of quality aspects. Quality management, policy and goals. The system of quality management. Standardized management systems (ISO 17025, ISO 9001, ISO 14001). Identification and classification of resources. Resource management (mineral, forest resources, protected areas, biodiversity, geodiversity and landscape diversity, water and fish resources, land). <i>Practice</i> Standardized management system ISO 17025 – problems and challenges in practice. Quality assurance in the analytical laboratory. Elements of quality control in the laboratory. Quality control analysis (errors in the analytical system, choice of test methods, validation of analytical methods, laboratory equipment management, traceability of measurements, reporting of results).			
Required Reading: 1. D.C.Montgomery: Statistical Quality Control, John Wiley & Sons, Inc, 2009. 2. J. Brady: Environmental Management in Organization, Earthscan, 2005.			
Weekly Contact Hours: 5	Lectures: 2	Practical work: 3	
Teaching Methods: Lectures, practical exercises.			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Active class participation	5	Written exam	40
Practical work	15	Oral exam	20
Preliminary exam(s)	20		