Course Unit Descriptor

Study Programme: Doctoral Academic Studies in Environmental Protection

Course Unit Title: Environmental Monitoring (advanced course)

Course Unit Code: DZZS-707

Name of Lecturer(s): Full Professor Milena Bečelić-Tomin

Type and Level of Studies: PhD degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 15

Prerequisites: None

Course Aims:

Training students for individual decision-making in the design of environmental monitoring with the aim of successful environmental management.

Learning Outcomes:

Training students to use the information from monitoring programs in order to manage the different environmental media.

Syllabus:

Theory

Providing quality environmental analysis - determination of the required information for environmental management, and information that can be obtained by monitoring. Designing a monitoring network to assess the state of the environment. Data collection, dissemination and application of information (analysis using software application, forms for data). Case study - monitoring project.

Practice

Case studies: the application of the learned knowledge in developing the optimized monitoring program from the analysis of the current state, through sampling and analysis in the laboratory to the use of information obtained by monitoring. The application of information systems in monitoring.

Required Reading:

- 1. P. Quevauviller: Quality Assurance for Water Analysis, 2002.
- 2. F.R. Burden, D. Donnert, T. Godish, I. Mckelvin: Environmental Monitoring Handbook, McGraw-Hill, 2004.
- 3. J. Artiola, I. L. Pepper, M. L. Brusseau: Environmental Monitoring and Characterization, Elsevier Science & Technology Books, 2004.

Weekly Contact Hours: 10 Lectures: 5 Practical work: 5

Teaching Methods: Desk study projects

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Active class participation	/	Written exam	50
Practical work	/	Oral exam	50