

Study Program: Biology				
Type and level of studies: Bachelor studies				
Course name: Bioindicators and monitoring system				
Lecturer: Jakšić R. Tatjana				
Status: Elective				
ECTS: 7				
Attendance Prerequisites: Phytocology and Zoocology				
Course aims An integrated multi-, inter- and transdisciplinary approach to monitoring and controlling the environment quality, ecological status of natural areas and degraded areas strongly affected by the negative anthropogenic influence.				
Course outcome The students have mastered the contemporary methods of integrated quality control of the environment (soil, air, water) and are able to assess the ecological status of various types of natural and degraded ecosystems.				
Course content <i>Theoretical part</i> Multi-, inter- and transdisciplinary monitoring of environmental quality, environmental status and integrity of an ecosystem (the aims, planning, parameter and method choice, terrain reconnaissance, selecting an ecosystem of reference, collecting representative samples, defining the temporal and spatial dynamics, field research, laboratory analyses). Monitoring the environmental status of aquatic ecosystems (hydromorphological properties and the standard methods of their evaluation, physicochemical quality parameters, main and priority pollutants, methods and monitoring programs, biomonitoring of the residential biota). Monitoring air quality (physicochemical methods for emission and imission monitoring). Monitoring soil quality (physicochemical methods, pedological methods for soil bonification, biological methods for estimating soil quality). <i>Practical part</i> Bioindicators of pollution. Determining the catalase and peroxidase activity "within living systems" with regard to pollution. Detecting air, water and soil pollution. Determining BOD in water.				
Literature 1. Савић, Д., Степанов, Ј., Стевановић-Чарапина, Н. Оцена и свеобухватна оцена стања животне средине. Аналитички инструменти у области животне средине. (2013). 2. Рожаја, Д. Јаблановић М. : Загађивање и заштита животне средине. Завод за уџбенике и наставна средства ,САП Косово, Приштина. (1980). 3. Thomas, W.A., Goldstein, Gerald, Wilcox, W.H.:Biological indicators of environmental quality. „Ann arbor sc. publ. inc.“, Ann Arbor. (1973).				
Number of active classes				Other classes:
Lectures: 2	Practical classes: 2	Other forms of teaching: 0	Students' research work	
Teaching methods Fieldwork, working with collected samples, preparing herbarium specimens, determination, creating herbarium collections.				
Assessment (maximum 100 points)				
Course assignments	points	Final exam		points
activity during lectures	20	written exam		60
practical classes	20	oral exam		
Term test/s				
Seminars				
Total				60