

Study program: Faculty of Environmental protection			
Type and level of study: Doctoral academic studies			
Course Title: SELECTED CHAPTERS IN MOLECULAR BIOLOGY			
Teacher(s): Dejana Panković			
Status: ELECTIVE, III semester			
ECTS: 15			
Prerequisite: None			
The goal of the course: Understanding of organism response to changes in environment on genetic level and using of molecular methods and concepts in environmental protection, with emphasis on pollution and remediation.			
The outcome of the subject: Students will be able to use practical knowledge about molecular and biological techniques in decreasing insecurities in risk detection and adoption of multidisciplinary approach in solving basic problems in environmental protection.			
Syllabus: Molecular biology of prokaryotes and eukaryotes. Fundamentals of genetics. DNA damage and mutations. The factors involved in carcinogenesis. Carcinogens in food. Recombinant DNA technology. Genetically modified organisms.			
Literature: Garte S.J. (1993) MOLECULAR ENVIRONMENTAL BIOLOGY, CRC 1st ed. Martin C.C. (2008) ENVIRONMENTAL GENOMICS, Humana Press 1st ed. SAVIĆ Pavićević Dušanka, Matić Gordana (2011) Molekularna biologija 1, 364 str. NNK internacional, Beograd.			
Number of lectures:			Other Classes
Lectures: 3	Practices:	Other forms of teaching:	
Student research work:7			
Teaching methods: Study process is interactive and multimedial, including power point presentations. Part of the teaching process are student seminar presentations, individual student work, lectures of national and international experts which leads to better understanding of problem complexity. Practical part includes laboratory work, watching film material and consultations.			
Score for grading (maximal 100 points)			
Pre-commitments	Poens	The final exam	Poens
Activity during lectures	10	Written exam	
Practical classes		Oral examination	40
Colloquia			
Seminars	50		
<i>Total</i>			