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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Occupational Safety in Niš |
| **GENERAL INFORMATION** |
| Study program  | Environmental Protection |
| Study Module (if applicable) | / |
| Course title | ***Ecological Risk*** |
| Level of study | ☒ Bachelor  ☐Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☐ Autumn ☒ Spring |
| Year of study  | **IV** |
| Number of ECTS allocated | **5** |
| Name of lecturer/lecturers | **Nenad Živković, Amelija Djordjević** |
| Teaching mode | ☒ Lectures ☐Group tutorials ☐ Individual tutorials☐Laboratory work ☒ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| ***Acquiring knowledge about characteristics and sources of hazards affecting environmental degradation (habitats, species, populations, communities, and ecosystem), which are implemented in ecological risk.******Acquiring skills to perform qualitative and quantitative assessment of ecological risks and hazards.*** |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Risk definition. Risk and risk event. Risk types and classification. Definition of ecological risk. Ecological risk analysis – hazard, vulnerability (threat), damage, risk formation. Ecological risk assessment – goals and function of ecological risk assessment. Ecological risk assessment stages – hazard formulation (identification of stressors, identification of potential ecosystem risk, ecological effects, goal selection in hazard assessment, comprehensive data model), risk analysis (Contamination source and its characteristics), exposure pathways (identification of possible sources and pathways of exposure, exposure intensity), risk characterization (risk assessment, risk description). Assessment of cumulative environmental risk. Ecological risk management. Specific forms of ecological risk – ecological risk caused by natural threats (earthquakes, floods, volcanoes, heavy weather), ecological risk caused by anthropogenic threats (chemical accidents, industrial accidents as environmental risk, fire and explosions as environmental risk). Hazard assessment. Health risk assessment (hazard identification, exposure assessment, dose‐response assessment, health risk characterization, health risk management).Quantification of environmental risk and/or health risk caused by certain accidents (receptor characterization – habitat, species, population, community, and ecosystem; exposure assessment, hazard assessment; risk characterization). Quantification of a specific analyzed ecological risk in real or predetermined time through a project assignment. |
| **LANGUAGE OF INSTRUCTION** |
|  ☒ Serbian (complete course) ☐ English (complete course) ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)☐Serbian with English mentoring ☐Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **10** | **Written examination** | **-** |
| **Practical teaching** | **-** | **Oral examination** | **40** |
| **Projected task** | **20** |  |  |
| **Teaching colloquia** | **2 x 15 = 30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |