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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 | Risk Assessment Methods |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☒ Autumn ☐Spring |
| Year of study  | Fourth year |
| Number of ECTS allocated | 5 |
| Name of lecturer/lecturers | Evica Stojiljković |
| 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 features, advantages, and drawbacks of methods used in the risk assessment process. Students will be able to correctly choose and practically apply risk assessment methods.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Basic risk terminology. Risk assessment – approaches and determinants. Basic risk assessment stages. Division of risk assessment methods. Methods for risk assessment of technical systems: Energy Analysis, Hazard and Operability Analysis, Failure Mode and Effects (and Criticality/Detection) Analysis, Fault Tree Analysis, Event Tree Analysis. Methods for human reliability assessment: Human Error Analysis, overview of methods for Human Reliability Assessment. Methods for accident analysis: Change Analysis, Safety Function Analysis, Deviation Analysis, Job Safety Analysis, The complex Method for Assessment of Overall Hazard of an Accident. Methods for managemant risk assessment: Audits, Safety, Health, and Environmental Managemant System, Managemand Oversight and Risk Tree. Methods for environmental risk analysis: Life Cycle Analysis, Exergetic Life Cycle Analysis. Synergy of methods. Case studies – practical application of methods. |
| **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** | **20** |
| **Practical teaching** | **20 (term paper)** | **Oral examination** | **20** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |