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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Occupational Safety in Niš |
| **GENERAL INFORMATION** |
| Study program  | Environmental Engineering |
| Study Module (if applicable) | / |
| Course title | Human Reliability |
| Level of study | ☐Bachelor ☐ Master’s ☒ Doctoral |
| Type of course | ☐ Obligatory ☒ Elective |
| Semester  | ☒ Autumn ☐Spring |
| Year of study  | Second year |
| Number of ECTS allocated | 10 |
| 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 for practical implementation of human reliability assessment methods. Upon successful completion of this course, students should be able to: identify the nature of human behavior and describe the causes of human error; determine the factors that influence human reliability, as well as the main indicators of operator reliability; choose and apply the appropriate method for assessing human reliability; assess human reliability individually or as a team, depending on the nature of the job and the organization being analyzed; create database of human errors, formulate error mechanisms and performance shaping factors; design procedures and strategies for reducing human errors and explore new areas in which they can be applied; critically analyze and interpret significant facts about investigated accidents and human errors.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Development of methods human reliability assessment. Theories about accidents and disaster overview. Development of “human–machine system“. Reliability of “man – machine“ system. Probability of safety assessment. Identification and presentation of human error. Methods of human reliability: Cognitive Reliability and Error Analysis Method; Assessment method for the performance of safety operations; Technique for Human Error Analysis; Human Reliability Management System; Human Cognitive Reliability; Simplified Plant Analysis Risk Human Reliability Assessment; Nuclear Action Reliability Assessment; Controller Action Reliability Assessment, Socio‐Technical Assessment of Human Reliability, etc. Trends in the development of methods for human reliability assessment. Case studies ‐ practical application of commonly used 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** |  | **Written examination** | **30** |
| **Practical teaching** | **40** | **Oral examination** | **30** |
| **Teaching colloquia** |  | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |