|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Occupational Safety in Niš | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Fire Protection Engineering | | |
| Study Module (if applicable) | | | | / | | |
| Course title | | | | Fire toxicology | | |
| Level of study | | | | ☐Bachelor ☒ Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒ Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | 1st | | |
| Number of ECTS allocated | | | | 4 | | |
| Name of lecturer/lecturers | | | | Danilo Popović, Tatjana Golubović | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work ☒ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☒ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Course objective: Acquiring knowledge about fire parameters and products of uncontrolled combustion. Conclusions about toxic load of occupational and living environment. After the course students will be able to understand phenomena, principles, and laws in toxicology and to propose sustainable solutions for safe work with fire‐ toxic substances.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Theoretical lessons: Introduction to general toxicology (term and definition of toxic substance; classification and characteristics of toxic substances; exposure to toxic substances; toxic effect, toxicokinetics, and toxicodynamics); Combustion mechanisms of gaseous, liquid, and solid toxic substances; Flammability and fire hazard criteria; Hazards from substance leakage and chemical accidents accompanied by fire; Generation and chemical composition of a fire atmosphere; Primary and secondary fire protection; Inorganic and organic products of uncontrolled combustion of various materials.  Practical lessons: Measuring concentration of fire‐toxic substances in air, water, and soil. | | | | | | |
| **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** | **5** | | **Written examination** | | |  |
| **Practical teaching** | **10 (project work) + 15 (term paper)** | | **Oral examination** | | | **40** |
| **Teaching colloquia** | **30** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |