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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** | Faculty of Occupational Safety in Niš |
| **GENERAL INFORMATION** |
| Study program  | Occupational Safety |
| Study Module (if applicable) | / |
| Course title | Fire and Explosions |
| Level of study | ☒ Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☒ Autumn ☐Spring |
| Year of study  | Third year |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Dušica Pešić, Emina Mihajlović |
| Teaching mode | ☒Lectures ☒Group tutorials ☒ Individual tutorials☐Laboratory work ☒Practicalwork ☐ Seminar☐Distance learning ☐ Blended learning ☒Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Acquiring knowledge about fire and explosions as physicochemical phenomena of mass and heat transfer under certain conditions of their development.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Basic terms and definitions of the process of uncontrolled combustion. Conditions for fire and explosions. Gas combustion. Fluid combustion. Flammable solid combustion. Selfcombustibility. Fire classification (based on point of origin, stability of materials during combustion, stage of development, time of heat dissipation, scope and size, etc.). Basic fire parameters marking its harmful effect on people and property: flame (dimensions, emissive properties, temperature, etc.), heating effect, on which the temperature regime of fire is directly dependent, temperature (local, in convective current, mean spatial, etc.), products of combustion (generation, properties, reduced visibility, control, etc.). Explosive combustion. Types of explosion: physical, nuclear, and chemical. Explosion parameters (heat, temperature, pressure, volume of gaseous products of explosion). Division of explosive materials (based on state of matter, usage, chemical composition, etc.). Protection from fire and explosions (fire extinguishing agents and processes, devices, and systems, protection against explosions). |
| **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 work** | **20** | **Oral examination** | **20** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |