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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 | | | | Chemistry | | |
| Level of study | | | | ☒Bachelor ☐ Master’s ☐ Doctoral | | |
| Type of course | | | | ☒ Obligatory ☐ Elective | | |
| Semester | | | | ☒ Autumn ☐Spring | | |
| Year of study | | | | 1st | | |
| Number of ECTS allocated | | | | 7 | | |
| Name of lecturer/lecturers | | | | Marina Stojanović, 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)** | | | | | | |
| *Acquiring basic knowledge of chemistry necessary to understand conditions and processes in the occupational and living environment. Students will be able to understand and apply basic chemical knowledge in applied and specialised chemical disciplines in occupational and environmental safety, protection from fire and explosions, communal system management and emergency management.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Fundamental terms and laws of chemistry, Atomic molecular theory, Periodic table of the elements, Chemical kinetics, Chemical equilibrium, Thermochemistry, Dispersions, Electrolytes, Environmentally significant chemical elements and compounds, Molecular properties of organic compounds, Organic reactions, Functional groups and classes of organic compounds, Environmentally significant organic compounds, Harmful effects of chemical compounds and basic counter‐measures.  Fundamental terms and laws of chemistry, Stoichiometry, Chemical thermodynamics and kinetics, Redox reactions, Gas laws, Dispersions, Solutions, pH value, Electrolytic dissociation, Analytical methods in organic chemistry. | | | | | | |
| **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** | | | **20** |
| **Practical teaching** | **10 + 5 (term paper)** | | **Oral examination** | | | **20** |
| **Teaching colloquia** | **40 (20 + 20)** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |