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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 | Ergonomics |
| Level of study | ☒ Bachelor ☐ Master’s ☐ Doctoral  |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☒ Autumn ☐ Spring |
| Year of study  | 4th |
| Number of ECTS allocated | 5 |
| Name of lecturer/lecturers | Sonja Pavlovic - Veselinovic |
| Teaching mode | ☒ Lectures ☐Group tutorials ☐ Individual tutorials☒ Laboratory work ☒ Project work ☒ Seminar ☐Distance learning ☒ Blended learning ☐ Other  |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Introducing students to problems of cognitive, physical, and organizational ergonomics. Acquiring knowledge about basic ergonomic information necessary for work conditions analysis and redesign, through learning about human capabilities and limitations and about a wide array of information (anatomic, physical, anthropometric, biomechanical, cognitive) required for ergonomic assessment of products and systems.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Origin and development of ergonomics, corrective and systemic ergonomics. Ergonomics aims and objectives. Physical,cognitive, organizational, and environmental ergonomics. Human- machine system. Anthropometry, basic dimensions,anthropometric measurement, data processing, human diversity. Reach, work positions, work spaces, workplace design(sitting and standing). Biomechanics, fundamental biomechanical principles. Sensory systems, sight analyzer, sound analyzer, touch analyzer. Field of vision, vision angles. Visual information coding. Indicators and displays. Informationreception and processing. Omission abilities of operators. Memory. Decision making. Control and management systems.Indicator ‐ command compatibility, population stereotypes. Biological rhythms, working hours, shift work, breaks, fatigue. Professional stress of operators. Psychological, physiological, mathematical, and imitative methods in ergonomics. Ergonomic risk. Ergonomic risk factors and their influence on musculoskeletal disorders. |
| **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** |  |
| **Practical teaching** | **20** | **Oral examination** | **40** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |