**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Chemical and biological noxiousness** | | | | |
| **Study programme** | **Professional undergraduate study Occupational Safety** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 2. | **Semester** | W | **ECTS credits** | 5 |
| **Teaching plan**  **(L + E + S+ Pr)** | 3+1+0+0 | | | | |
| **Goals of a course** | | | | | |
| To acquaint students with basic chemical and biological hazards and their impact on human health and the possibility of applying preventive measures. | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Define basic chemical and biological noxiousness. 2. Analyse the basic differences between chemical and biological noxiousness. 3. Compare health consequences between chemical and biological noxiousness. 4. Substantiate the needs for preventive measures. 5. Use manuals with information on chemical and biological noxiousness characteristics. | | | | | |
| **Content of a course** | | | | | |
| Chemical hazards: noxious and toxic chemical substances; entry, absorption, bio-transformation and effects on human organism; excretion; cumulative effects. Chemical hazards in working environment; toxicants, mutagens, cancer genes, theratogenes. Occupational diseases caused by chemical substances; poisonings by metals, diseases caused by aerosols, poisonings by gasses and vapours, poisonings by pesticides; irritative and allergic dermatoses. Prevention of exposure to chemical hazards.  Biological hazards: microorganisms and parasites, mechanism of pathogen affection. Natural process, symptoms and results of infectious diseases. Spread of infectious diseases; epidemiological chain; carrier state; anthropozoonoses; disease vectors, contagious diseases. Resistance to infectious diseases; immunity. Occupational bacterial, viral, micotic and parasitic diseases. Occupational dermatoses caused by biological hazards. Prevention of exposure to biological hazards. | | | | | |
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