**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Title of a course** | **Computers in safety science** | | | | |
| **Study programme** | **Professional undergraduate study Occupational Safety** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 1. | **Semester** | S | **ECTS credits** | 5 |
| **Teaching plan**  **(L + E + S+ Pr)** | 2+0+3+0 | | | | |
| **Goals of a course** | | | | | |
| Students acquire the basic knowledge, skills and competencies necessary to understand the application of computers in the occupational safety and health business, as well as to continue their studies and lifelong education. | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Razlikovati osnovne pojmove vezane uz računalne sustave i područja njihove primjene. 2. Usporediti osnovne komponente računalnog sustava (sklopovlja i programske podrške) i njihovu funkciju. 3. Upotrijebiti napredne mogućnosti mrežnih servisa za pretraživanje informacija, komunikaciju i dijeljenje sadržaja. 4. Upotrijebiti odabrane programe za naprednu obradu tekstualnog sadržaja s grafičkim elementima i tablicama. 5. Upotrijebiti odabrane programe za naprednu obradu numeričkih podataka i grafički prikaz.   1. Distinguish and explain the basic concepts of information and computer technology.  2. Explain the basic concepts of computer systems (hardware and software) required for operation in the field of safety and occupational safety.  3. Define a business information system supported by information technology and categorize and describe related elements.  4. Explain the basic concepts of computer networks.  5. Define and explain the basic concepts of databases.  6. Interpret modern technologies and evaluate the possibilities of their application in the field of safety and occupational safety.  7. Apply the desktop and mobile versions of advanced level text processing computer tools and spreadsheets and other selected computer tools to organize tasks and time for work in the field of safety and occupational safety. | | | | | |
| **Content of a course** | | | | | |
| Informatics. Information. Information society. Information technology. A computer. Program support. Communications. Organization and information. System concept and definition. Theory of organization, management and decision-support models. Information systems. Expert systems. Development of data processing. Computer systems and their development. Choice of computer facilities. Mathematical and logical fundamentals of a computer. Presenting and organizing data. Redundancy. Program support for computer functioning. The evaluation of software facilities. Computer networks. Multimedia. Information system security. User information systems.  Windows, Word, Excel, Access and Internet. | | | | | |
|  | | | | | |