

| <b>OCCUPATIONAL MEDICINE</b>   |  |
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| <b>GENERAL INFORMATION</b>   |  |
| Course coordinator   | Professor Martina Smolić, MD, PhD                                  |
| Assistant/Associate  | Professor Davor Plavec, MD, PhD                                    |
| Study Programme  | Integrated undergraduate and graduate university study of Medicine |
| Status of the course   | Mandatory  |
| Year of study, semester  | 6 <sup>th</sup> year, 11 <sup>th</sup> semester                    |
| ECTS   | <b>1</b>   |
| Workload (hours)   | Lectures (5); Seminars (15)  |
| Expected number of students  | 70   |
| <b>COURSE DESCRIPTION</b>  |  |
| <b>Course objectives</b>   |  |
| <p>The students will acquire knowledge about basic terms in occupational and sports medicine, as well as the basic principles of work and sports psychology. The students will also learn about chemical, physical and biological factors of the working environment, acquire knowledge regarding work-related diseases and occupational diseases such as occupational dermatoses, occupational diseases of the respiratory system, occupational malignant tumours. The students will also be acquainted with common injuries at work and in sports and technical and personal protection at work. The students will learn to apply their knowledge for hazard assessment and workplace health assessment, as well as assessment of work ability.</p>  |  |
| <b>Enrolment requirements and entry competencies</b>   |  |
| There are no special requirements for this course except those defined by the curriculum of the entire study program.  |  |
| <b>Learning outcomes at the Programme level</b>  |  |
| <b>2.3., 3.2., 3.5.</b>  |  |
| <b>Learning outcomes (5-10)</b>  |  |
| <ol style="list-style-type: none"> <li>1. Determine the field of activity of occupational and sports medicine and its most important tasks.</li> <li>2. Interpret the basic principles of work and sports physiology.</li> <li>3. Assess risk factors for the occurrence of accidents at work and in sports.</li> <li>4. Interpret the possible causes and describe prevention methods of work injuries or occupational diseases that contribute to the morbidity of workers.</li> <li>5. Compare public health methods and actions that can be applied to improve the health of the population due to harmful environmental factors.</li> <li>6. Determine a multidisciplinary approach in solving the complex relationships of living conditions, work and knowledge.</li> <li>7. Predict how participation in the multidisciplinary teams can most effectively contribute to the preservation of health and improvement of prevention measures injuries at work and in sports.</li> </ol> |  |
| <b>Course content</b>  |  |
| <ol style="list-style-type: none"> <li>1. Introduction to occupational and sports medicine.</li> <li>2. Physiology of work and sports.</li> <li>3. Psychology of work and sports.</li> <li>4. Chemical factors of the working environment.</li> <li>5. Physical factors of the working environment.</li> <li>6. Biological factors of the working environment.</li> </ol>  |  |

7. Work-related diseases.
8. Occupational diseases.
9. Technical and personal protection at work.
10. Hazard assessment and health assessment of the workplace.
11. Assessment of work ability.

#### Mode of teaching

Lectures; Seminars

#### Student obligations

Students are expected to attend and actively participate in all forms of classes.  
The successful performance of the seminar requires prior preparation of the student.  
Uncompleted seminar must be passed.  
However, they are allowed for excused absences, totalling 30% of all classes.

#### Monitoring student work (*alignment of learning outcomes, teaching methods, and grading*)

| Teaching activity | ECTS     | Learning outcome | Student activity                            | Assessment methods          | Grade points |            |
|-------------------|----------|------------------|---|-----------------------------|--------------|------------|
|                   |          |                  |   |                             | Min.         | Max.       |
| Class attendance  | 0,10     | 1-7              | Class attendance                            | Evidence sheet              | 1            | 5          |
| Seminars          | 0,20     | 1-7              | Seminar attendance and active participation | Evaluation                  | 20           | 25         |
| Final exam        | 0,70     | 1-7              | Learning for the written exam               | Grading of the written exam | 39           | 70         |
| <b>Total</b>      | <b>1</b> |                  |   |                             | <b>60</b>    | <b>100</b> |

*Evaluation/grading of the final written examination:*

| Percentage of correct answers (%) | Grade points |
|-----------------------------------|--------------|
| 100%-95%                          | 70           |
| 94,99-90%                         | 66           |
| 89,99-85%                         | 63           |
| 84,99-80%                         | 59           |
| 79,99-75%                         | 55           |
| 74,99-70%                         | 51           |
| 69,99-65%                         | 47           |
| 64,99-60%                         | 43           |
| 59,99-55%                         | 39           |

**Calculation of final grade:**

Students' work is evaluated during classes and on the final exam.

During the course, the student will be able to collect a maximum of 100 evaluation points.

Students can earn a maximum of 30 points during classes through different forms of activities.

Students can obtain a maximum of 70 points on the final exam (70 points on the written part of the exam).

A student must collect a minimum of 21 points related to class attendance, discussion activities and seminar work in order to be able to take the written part of the exam.

The final exam is mandatory and consists of a written part. The written part of the final exam consists of 35 questions. The minimum criterion for obtaining evaluation points is 55% of correctly solved questions.

The oral exam can only be approved exceptionally, in cases where the student is not satisfied with the grade and when he has not passed the written exam.

**Formation of the final grade:**

The grades obtained during the class are joined by the points obtained in the oral exam.

Based on the total sum of the points awarded during the course and the final exam, the final grade is determined according to the following distribution:

A – excellent (5): 90-100 grade points; B – very good (4): 80-89,99 grade points; C – good (3): 70-79,99 grade points; D – sufficient (2): 60-69,99 grade points.

**Required reading (available in the library and through other media)**

| Title  | Number of copies in the library | Availability through other media |
|--|---------------------------------|----------------------------------|
| 1. Mustajbegović J, Milošević M, Brborović H. Medicina rada i sporta, Zagreb, Medicinska naklada, 2018       | 14                              |                                  |
| 2. Beritić-Stahuljak D, Žuškin E, Valić F, Mustajbegović J. Medicina rada. Medicinska naklada, Zagreb, 1999. | 0                               |                                  |

**Additional reading**

1. Valić F i sur. Zdravstvena ekologija. Medicinska naklada, Zagreb, 2001.
2. Šarić M, Žuškin E. Medicina rada i okoliša (Odabrana poglavlja). Medicinska naklada, Zagreb, 2002.
3. Recommended recent scientific research.

**Course evaluation procedures**

Anonymous, quantitative, standardized student survey providing feedback on the course as well as on the work of course coordinators and their assistants/associates is being conducted by the QA Office of the Faculty of medicine Osijek.

**Note /Other**

E-learning does not count towards course contact hours, but is being used in teaching and comprises links to various web pages, as well as video and audio materials available on web pages.