

DESCRIPTION OF A STUDY COURSE – SYLLABUS

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|--|---|----------|--|--------------|---|
| Title of a course | Fire protection at construction sites | | | | |
| Head of course | Veljko Pevalek, Lecturer | | | | |
| Study programme | Professional undergraduate study Occupational Safety | | | | |
| Status of a course | Obligatory | | | | |
| Year of study | 3. | Semester | V | ECTS credits | 3 |
| Teaching plan (L + E + S+ Pr) | 2+1+0+0 | | | | |
| Goals of a course | | | | | |
| Introduce students to construction fire protection measures as the most effective and justifiable fire protection measures, and their obligation to comply with applicable laws. | | | | | |
| Conditions for enrolling course | | | | | |
| No conditions | | | | | |
| Learning outcomes on a level of a study programme which includes course | | | | | |
| Outcome 4: Evaluate protective measures with respect to danger encountered in the work process. Outcome 12: Recommend solutions in the field of occupational ergonomics, security and safety in technological processes. Outcome 15: Identify the basic characteristics of production processes, machines and materials. Outcome 16: Identify safety factors in the field of fire protection and explosion protection. | | | | | |
| Expected learning outcomes on a level of a course | | | | | |
| 1. Define the procedure for ensuring the implementation of constructional and other fire protection measures. 2. Evaluate the requirements for maintaining the load-bearing capacity of building structures in the event of fire that are a part of the existing legislation. 3. Predict behaviour during fire and fire protection methods for building structures depending on their material. 4. Define types of constructional fire protection measures. 5. Based on the acquired knowledge, plan constructional fire protection measures. | | | | | |
| Content of a course | | | | | |
| Overview of legislative regulations, prescriptions and legal procedures for assessing construction measures in fire-protection. Principles of construction measures in fire protection prescribed by the fundamental European document, structure of documents and the new European system of labelling fire protection factors. Basic principles of construction measures in fire protection. Fundamental issues: fire burden, fire-protection walls, protection from smoke, protection from carrying fire to the neighbouring building, fire brigade access to buildings, net of hydrants, characteristics of construction materials. Calculating resistance to fire of carrying constructions and fire burden. Determining the size of fire sectors and the required fire resistance of carrying constructions. Calculating the ventilation needed to liberate from smoke. Determining fire exits and classes of combustion for construction materials used for fire exits. | | | | | |
| Teaching modes | <input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes | | <input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____ | | |
| Comments | | | | | |
| Students' obligations | | | | | |
| Prerequisite for passing the full exam is the achievement of 50% of the envisaged credits in Outcome 5 | | | | | |
| Grading, evaluation and monitoring of students' work continuously during lectures and exams | | | | | |

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

Continuous check-up:

| Outcomes | Pre-exam I | Pre-exam 2 | Home assignment (program) | Threshold | Max |
|--------------------|------------|------------|---------------------------|-----------|------|
| Outcome 1 | 12% | | | 6% | 12% |
| Outcome 2 | 12% | | | 6% | 12% |
| Outcome 3 | 11% | | | 5,5% | 11% |
| Outcome 4 | | 35% | 10% | 22,5% | 45% |
| Outcome 5 | | | 20% | 10% | 20% |
| Percentage of ECTS | 1,05 | 1,05 | 0.9 | | |
| Total | 35% | 35% | 30% | 50% | 100% |

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

| Outcomes | Written exam | Oral exam | Max |
|--------------------|--------------|-----------|-------|
| Outcome 1 | 10% | 10% | 20% |
| Outcome 2 | 10% | 10% | 20% |
| Outcome 3 | 10% | 10% | 20% |
| Outcome 4 | 20% | 20% | 40% |
| Percentage of ECTS | 1,5 | 1,5 | |
| Total | 50% | 50% | 100 % |

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

| Range of credits (percentages) | Numerical grade | ECTS grade |
|--------------------------------|------------------|------------|
| 90,00 – 100,00 | Excellent (5) | A |
| 75,00 – 89,99 | Very good (4) | B |
| 60,00 – 74,99 | Good (3) | C |
| 50,00 – 59,99 | Sufficient (2) | D |
| 0,00 – 49,99 | Insufficient (1) | F |

Obligatory literature

1. M. Carević, P. Jukić, Z.Sertić, B.Šimara: Tehnički priručnik za zaštitu od požara, Zagrebinspekt, Zagreb (str. 89-139)
2. V. Pevalek: Građevinske mjere zaštite od požara, – novelirani radni materijal prema „Tehničkom priručniku za zaštitu od požara“

Additional literature

