

# **Title of Course: Work, fire and health safety**

- Code of course: MSB018ANEP
- Semester: Spring
- Number of credit: 3
- Lecture number a week: 2 lectures + 1 laboratory exercise
- Requirement: exam
- Language of course: English
- Majors, period: Civil Engineering, full time education
- Advance subjects: -
- Tutor Department: Environmental Engineering
- Subject supervisor: dr. Tibor Pécz PhD
- Tutor: dr. Tibor Pécz PhD
- Day, room: Every Wednesday 7.45–10.15, A204

## **Short description:**

The fields and basics of the work safety. Institutes and regulation in Hungary and the EU. The main role of work and fire safety in the system of human. Definitions of the prevention system. Job hazards and hurts. Prevention of the accidents. Human health. Types of the fire and the classes of flammability. Rules of the fire safety. Methods and Equipments of the fire fighting. Important accidental and fire prevention rules on the work places. Requirements of the work safety and the using of the life support system. Transport and storage of the dangerous and toxic materials. Ergonomical views and rules. Types of coveralls. First aid. The using of BLS (Basic Life Support), reanimation technics, rules and the life supporting systems.

## **General Requirements:**

Visiting lectures minimum 70%. *In online education:* Writing two online tests for signature and one online health exam test. *In normal education:* Writing two online tests for signature and make an complex (oral and practical) health exam.

## **Purpose:**

To give a basic knowledge of work safety and fire prevention to engineering students. The students can make a reanimation for anybody.

## **Education method:**

Oral interpretation on MS Teams/personal using MS Power Point presentation and consultation. Practical exercises for reanimation.

## **Course materials:**

Lecture presentations.

## **Requirements during semester:**

Visiting lectures, max. number of missing 3. Writing two online test (work safety and fire prevention) (one by one min. 16 max. 30 points). Min. 32 points (two tests together) have to reach to make any exam.

## **Requirements during examination season:**

***In online education:*** one online health exam test (min. 21 max. 40 points).

***In normal education:*** one complex (oral and practical) health exam (min. 21 max. 40 points).

### **Supplement:**

Students can make up for the tests and the exam 2 times. Once in the semester, once on the first week of the examination season.

### **Number and type of control in the semester:**

The 1st (work safety) online test is on the 8th tutorial week, the 2nd (fire prevention) online test is on the 14th tutorial week. The 1st supplement online test is on the 15th tutorial week, the 2nd supplement online test is on the first week of the examination season.

### **Type of exam:**

***In online education:*** online written exam. ***In normal education:*** personal oral and practical exam.

### **Evaluation:**

Attention! The evaluation is not acceptable if both of the two parts (tests and exam) are with minimum point! The final mark contains: two tests points+exam points+activity on the lectures.

88–100 point	excellent (5)	77–87 point	good (4)
66–76 point	satisfactory (3)	53–65 point	pass (2)
32–52 point	unsatisfying (1)	0–31 point	no signature (0)

### **Schedule (presentations):**

#### **Tuitional weeks:**

1. Introduction and the basic definitions of the work safety.
2. Juristical regulation. Work accident and disease and theirs relationship.
3. Work health care. Work and health safety.
4. Work disease, qualification, notice and consequences of the accident, the question of responsibility.
5. Chemical safety. Storage and transportation of the chemical materials. The managing of dangerous materials.
6. Forming of the work environment (workshops, storages, workplaces with monitor). Ventilation, heating, air conditioner, noise, lighting, ergonomy, social support on the workplaces. Red lights (pictograms), collective and personal housings.
7. Burning and exploding. Basic definition, system and juristical control of fire safety.
8. **1th test (work safety)**, Definition, fields and system of fire protection.
9. Material and building classification by flammability. The flammable activity.
10. *Spring autumn*.
11. Types of the fire fighting, extinguisher (types, using, checking).
12. Using of the gas cylinder. Fire instruction, fire alarm plan.
13. Prevention of the accident. Definition of the first aid.
14. **2nd test (fire prevention)**, Reanimation (BLS).
15. First supplements of tests.

## **Schedule (laboratory exercise):**

### **Tuitional weeks:**

1. Introduction, accidents.
2. Work accidents and disease I.
3. Work accidents and disease II.
4. Work accidents and disease III.
5. Chemical accidents I.
6. Chemical accidents II.
7. Fire accidents I.
8. *1st test.*
9. Fire accidents II.
10. *Spring autumn.*
11. Fire accidents III.
12. Exercise of reanimation (BLS) I.
13. Exercise of reanimation (BLS) II.
14. *2nd test.*
15. First supplements of tests.

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Pécs, 05/02/2021

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