# Title of Course: Work, fire and health safety

- Code of course: MSB018ANVM
- Semester: Spring
- Number of credit: 3
- Lecture number a week: 2 lectures + 1 laboratory exercise
- Requirement: exam
- Language of course: English
- Majors, period: Electrical 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 security 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 safety 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 toxical 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%. Writing two test for signature. Complex exam (theoritical and practical exam together).

### **Purpose:**

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

### **Education method:**

Oral interpretation using Microsoft 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 test (min. 6 max. 10 points). Min. 12 points have to reach to make exam.

### **Requirements during examination season:**

Complex exam: theoritical (min. 21 max. 40 points) and practical (min. 21 max. 40 points).

# Supplement:

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

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

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

# Type of exam:

Oral and practical.

### **Evaluation:**

Warning! In the complex exam is not accepable if both of two part (theoritical and practical) are with minimum point! The final mark contains: two test points+exam point+activity on the lectures.

88-100 point	excellent (5)	77-87 point	good (4)
66-76 point	satisfactory (3)	55-65 point	pass (2)
12–54 point	unsatisfaying (1)	0–11 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. Storange 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 explosing. Basic definition, system and juristical control of fire safety.

- 8. 1th test, Definition, fields and system of fire protection.
- 9. Material and building classification by flammability. The flammable activity.
- **10.** Types of the fire fighting, extinguisher (types, using, checking).

**11.** *Spring autumn.* 

- **12.** Using of the gas cylinder. Fire instruction, fire alarm plan.
- **13.** Preventation of the accident. Definition of the first aid.
- 14. hét: 2nd test, Reanimation (BLS).
- **15. hét:** 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.** Fire accidents III.
- **11.** *Spring autumn.*
- **12.** Exercise of reanimation (BLS) I.
- 13. Exercise of reanimation (BLS) II.
- **14.** 2nd test.
- **15.** First supplements of tests.

All rigths reserved.

Pécs, 2020. február 05.

dr. Tibor Pécz PhD senior research fellow