COURSE SYLLABUS AND COURSE REQUIREMENTS ACADEMIC YEAR 2022-2023 SEMESTER SPRING

Course title	Work, Fire and Health Safety
Course Code	MSB018ANVM
Hours/Week: le/pr/lab	2/0/1
Credits	3
Degree Programme	Electrical Engineering BSc
Study Mode	full time
Requirements	exam
Teaching Period	6 th (Spring)
Prerequisites	_
Department(s)	Environmental
Course Director	dr Tibor Pécz
Teaching Staff	dr Tibor Pécz
Day/Time/Room	Every Wednesday 7.45–10.15 am, A204

COURSE DESCRIPTION

A short description of the course (max. 10 sentences).

Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description

This course provides an introduction to the different fields of work safety including the following topics: institutes and regulation in Hungary and the EU; the main role of work and fire safety in human systems; definitions in prevention systems; occupational hazards and injuries; accident prevention; human health; fires and classes of flammability; rules of fire safety; methods and equipment for fighting fire; accident and fire prevention regulations at the work places; requirements of work safety and using life support systems; transport and storage of hazardous materials; ergonomics and rules; protective clothing; first aid, BLS (Basic Life Support), resuscitation techniques, rules and life support systems.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

Goals, student learning outcome.

Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction

To provide a basic knowledge of work safety and fire prevention to engineering students. To give the students training to preform resuscitation.

2. COURSE CONTENT

Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content

TOPICS

LECTURE

- 1. Definition of WS
- 2. Work Legal Regulation
- 3. Work Health
- 4. Job Accident
- 5. Chemical Safety and Work Environment
- 6. National Day
- 7. 1st Test (WS), Fire Safety
- 8. 1st Supplementary Test of WS, Systems of Fire Protection
- 9. Spring Break
- 10. Flammability
- 11. Extinguishers
- 12. Fire Alarm
- 13. First Aid

14. 2nd Test (FP), BLS

15. 1st Supplementary Test of FP, Special Rescues

LABORATORY PRACTICE

- 1. General Accidents
- 2. Work Accidents I.
- 3. Work Accidents II.
- 4. Work Accidents III.
- 5. Chemical accidents I.
- 6. National Day
- 7. 1st Test (WS), Chemical accidents II.
- 8. 1st Supplementary Test of WS, Fire hazards I.
- 9. Spring Break
- 10. Fire hazards II.
- 11. Fire hazards III.
- 12. Rautek, Heimlich, Esmarch
- 13. BLS I.
- 14. 2nd Test (FP), BLS II.
- 15. 1st Supplementary Test of FP, Special Rescues

DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

<u>LE</u>CTURE

week	Topic	Compulsory reading;	Required tasks	Completion date,
		page number	(assignments,	due date
		(from to)	tests, etc.)	
1.	Introduction and the basic definitions of	lecture presentations		
	work safety.	on Teams		
2.	Legal regulations. Work accidents, injuries	lecture presentations		
	and theirs relationship.	on Teams		
3.	Work health care. Work and health safety.	lecture presentations		
		on Teams		
4.	Work qualifications, notices and	lecture presentations		
	consequences of an accident, the question of	on Teams		
	responsibility.			
5.	Chemical safety. Storage and transportation	lecture presentations		
	of chemicals. Managing hazardous materials.	on Teams		
	The work environment (workshops,			
	storages, workplaces with screen).			
	Ventilation, heating, air conditioning, noise,			
	lighting, ergonomics, social support in the			
	workplaces. Red lights (pictograms),			
	collective and personal protective			
6.	equipments. National Day			
о. 7.	Fires and explosions. Basic definitions,	lecture presentations	1 st test (work	on lecture
7.	systems and legal requirements of fire	on Teams	_ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	on lecture
	safety.	OII Teallis	safety)	
8.	Definition, fields and systems of fire	lecture presentations	1 st supplementary	on lecture
о.	protection.	on Teams	test of work safety	on lecture
9.	Spring Break	on reams	test of Work sujety	
10.	Materials and building classification by	lecture presentations		
20.	flammability. Flammability exercise.	on Teams		
11.	Types of the firefighting, extinguishers	lecture presentations		
	(types, using, checking).	on Teams		
12.	Using gas cylinders, fire instructions, fire	lecture presentations		
	alarm plan.	on Teams		

13.	Accident prevention and first aid.	lecture presentations		
		on Teams		
14.	Basic Life Support (BLS).	lecture presentations	2 nd test (fire	on lecture
		on Teams	prevention)	
15.	Special Rescues.	lecture presentations	1 st supplementary	on lecture
		on Teams	test of fire	
			prevention	

LABORATORY PRACTICE

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3. ASSESSMENT AND EVALUATION

 $(Neptun: Instruction/Subjects/Subject\ Details/Syllabus/Examination\ and\ Evaluation\ System)$

ATTENDANCE

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.

Method for monitoring attendance (e.g.: attendance sheet / online test/ register, etc.)
attendance sheet	

ASSESSMENT

Course-unit with final examination

Mid-term assessments, performance evaluation and their weighting as a pre-requisite for taking the final exam

Туре	Assessment	Weighting as a proportion of the pre-requisite for taking the exam
Test 1 of WS	min 16 max 30 points	50%
Test 2 of FP	min 16 max 30 points	50%

Requirements for the end-of-semester signature

Attending lectures, maximum number of missing absences 3. Completing two online tests (work safety and fire prevention), maximum 30 points per test. Minimum requirement: 16 points in one test and 32 points in both tests needed to qualify for the exam.

Re-takes for the end-of-semester signature (PTE TVSz 50§(2))

The specific regulations for grade betterment and re-take must be read and applied according to the general Code of Studies and Examinations. E.g.: all the tests and the records to be submitted can be repeated/improved each at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

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

Type of examination (written, oral): oral and practical (first aid)

The exam is successful if the result is minimum 40% (min 16 max 40 points). (The minimum cannot exceed 40%.)

Calculation of the grade (TVSz 47§ (3))

The mid-term performance accounts for **60**%, the performance at the exam accounts for **40**% in the calculation of the final grade.

Calculation of the final grade based on aggregate performance in percentage.

Course grade	Performance in %
excellent (5)	85%–100%
good (4)	70%–84%
satisfactory (3)	55%–69%
pass (2)	40%-54%
fail (1)	39%–0%

The lower limit given at each grade belongs to that grade.

4. Specified literature

In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY

[1.] Lecture presentations on Teams

RECOMMENDED LITERATURE AND AVAILABILITY

[2.] Jr. Bruni, Joseph V. (2011): Occupational Health and Safety for the Fire Service (Brady Fire Series) 1st Edition