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

Course title	Work, Fire and Health Safety
Course Code	MSB018ANEP
Hours/Week: le/pr/lab	2/0/1
Credits	3
Degree Programme	Civil Engineering BSc
Study Mode	full time
Requirements	exam
Teaching Period	6th (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

LECTURE

week	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	Introduction and the basic definitions of work safety.	lecture presentations on Teams	…	…
2.	Legal regulations. Work accidents, injuries and theirs relationship.	lecture presentations on Teams		
3.	Work health care. Work and health safety.	lecture presentations on Teams		
4.	Work qualifications, notices and consequences of an accident, the question of responsibility.	lecture presentations on Teams		
5.	Chemical safety. Storage and transportation of chemicals. Managing hazardous materials. 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 equipments.	lecture presentations on Teams		
6.	***National Day***			
7.	Fires and explosions. Basic definitions, systems and legal requirements of fire safety.	lecture presentations on Teams	***1st test (work safety)***	on lecture
8.	Definition, fields and systems of fire protection.	lecture presentations on Teams	***1st supplementary test of work safety***	on lecture
9.	***Spring Break***			
10.	Materials and building classification by flammability. Flammability exercise.	lecture presentations on Teams		
11.	Types of the firefighting, extinguishers (types, using, checking).	lecture presentations on Teams		
12.	Using gas cylinders, fire instructions, fire alarm plan.	lecture presentations on Teams		

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

LABORATORY PRACTICE

week	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	Introduction, accidents.	lecture presentations on Teams		
2.	Work accidents and injuries I.	lecture presentations on Teams		
3.	Work accidents and injuries II.	lecture presentations on Teams		
4.	Work accidents and injuries III.	lecture presentations on Teams		
5.	Chemical accidents I.	lecture presentations on Teams		
6.	***National Day***			
7.	Chemical accidents II.	lecture presentations on Teams	***1st test (work safety)***	on lecture
8.	Fire hazards I.	lecture presentations on Teams	***1st supplementary test of work safety***	on lecture
9.	***Spring Break***			
10.	Fire hazards II.	lecture presentations on Teams		
11.	Fire hazards III.	lecture presentations on Teams		
12.	Exercise of Rautek, Heimlich, Esmarch technique.	lecture presentations on Teams		
13.	Exercise of resuscitation (BLS) I.	lecture presentations on Teams		
14.	Exercise of resuscitation (BLS) II.	lecture presentations on Teams	***2nd test (fire prevention)***	on lecture
15.	Special Rescues Techniques.	lecture presentations on Teams	***1st supplementary test of fire prevention***	on lecture

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

Type	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