COURSE SYLLABUS AND COURSE REQUIREMENTS
ACADEMIC YEAR 2023/2024 SEMESTER 1 (AUTUMN)

Course title	*ENVIRONMENTAL PROTECTION FOR ENGINEERS*
Course Code	*MSB020ANEP*
Hours/Week: le/pr/lab	*2 le*
Credits	*2*
Degree Programme	*Civil Engineer BSc*
Study Mode	*full-time*
Requirements	*mid-term grade*
Teaching Period	*Autumn*
Prerequisites	*–*
Department(s)	*Environmental Engineering*
Course Director	*Dr Tibor Pécz PhD, senior research fellow*
Teaching Staff	*Dr Tibor Pécz PhD, senior research fellow*
Time and room of course	*every week, Monday, 9.30–11.00, PTE MIK A314*

COURSE DESCRIPTION

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

Short history of the environmental protection (EP). The future of humankind. Concepts and fields of the EP. The regulation and the institution of the EP in Hungary and EU. The process of pollution. The elements of the environment, its characteristics and pollution data. New fields in the EP. Global problems. Suggested solutions. Renewable energy sources.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

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

To give a basic knowledge of the natural processes and the environmental protection to engineering students.

2. COURSE CONTENT

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

	TOPICS
LECTURE	1. introduction of EP 2. definitions of EP 3. elements of enviroment 1 4. elements of enviroment 2 5. environmental problems 6. global problems and possibilities 7. test 8. break 9. essay submission, first supplement, presentation 1 10. presentation 2 11. presentation 3 12. presentation 4 13. second supplement, presentation 5

Including the right for change.

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.	Information about course. Introduction to EP. The history of the EP. Juristical regulation and institution of the EP in Hungary and EU.	published slides of lectures	…	…
2.	Basic concepts. Technical terms. Process of pollution.	published slides of lectures		
3.	Atmosphere and its processes.	published slides of lectures		
4.	Water protection. Land and soil protection.	published slides of lectures		
5.	Waste management. Noise, vibration and radiation. New fields in the EP.	published slides of lectures		
6.	Global problems. Renewable and alternative energy sources.	published slides of lectures		
7.	online test	published slides of lectures	test	
8.	national holiday	–	–	23rd of October
9.	Essay submission. First supplement of the online test. Oral presentation of students 1.	published slides of lectures	essay, re-takes, presentation	
10.	Oral presentation of students 2.		presentation	
11.	Oral presentation of students 3.		presentation	
12.	Oral presentation of students 4.		presentation	
13.	Second supplement of the online test. Oral presentation 5.	published slides of lectures	re-takes, presentation	

Including the right for change.

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

attendance sheet

ASSESSMENT

Course resulting in mid-term grade *(PTE TVSz 40§(3))*

Mid-term assessments, performance evaluation and their ratio in the final grade

Type	Assessment	Ratio in the final grade
online test	*max 40 points*	*40 %*
essay	*max 20 points*	*20 %*
presentation	*max 40 points*	*40 %*

Opportunity and procedure for re-takes (PTE TVSz 47§(4))

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved 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.

Grade calculation as a percentage

based on the aggregate performance according to the following table

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

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.] Slides of lectures – it can be reached in appropriate MS Teams Group.

RECOMMENDED LITERATURE AND AVAILABILITY

[1.] Environmental movies (E. g.: An Incovenient Truth, The Day After Tomorrow, A Life on our Planet etc.)
[2.] Marquita K. Hill (1997): Understanding Environmental Pollution. Cambridge University Press.
[3.] Houghton J. (2009): Global Warming – The Complete Briefing. Cambridge University Press.
[4.] Hanrahan G. (2012): Key Concepts In Environmental Chemistry. Elsevier Inc.
[5.] Moser, M. (1997): Circulations in Nature and Society. Környezetvédelmi és Területfejlesztési Minisztérium. (Ministry of Environmental Protection and Land Management) Budapest.
[6.] Miller, G. T. (1982): Living in the Environment. Wadsworth Publishing Company. Belmont. California.
[7.] Rausz, A. (ed.) (2005): Environmental Statistical Yearbook of Hungary 2004. Hungarian Central Statistical Office. Budapest.