

SYLLABUS and description of course

Title of course:	<i>Environmental Protection for Engineers</i>
Code of course:	<i>PMKKONB041HA</i>
Lecture numbers/week:	<i>2</i>
Number of credit:	<i>3</i>
Type of specialization:	<i>Computer Science Engineering BSc</i>
Form:	<i>obligatory</i>
Requirement:	<i>term mark</i>
Semester:	<i>Autumn</i>
Language:	<i>English</i>
Advance subjects (requirements):	-
Supervisor department(s):	<i>Environmental Engineering</i>
Subject supervisor:	<i>Dr Tibor Pécz PhD, senior research fellow</i>
Tutor(s):	<i>Dr Tibor Pécz PhD, senior research fellow</i>
Short description:	
Short history of the environmental protection (EP). Concepts and fields of the EP. The regulation and the institution of the EP in Hungary. The process of pollution. The elements of the environment, its characteristics and pollution data. New field in the EP. Global problems. Suggested solutions. Renewable energy sources.	
Purpose:	
To give a basic knowledge of environmental processes and environmental protection to any specialization of engineering student.	
Education method:	
Oral interpretation using Microsoft Power Point presentation and consultations. Working presentation of students on environmental fields.	
Requirements during semester:	
Visiting lectures, max. number of missing 3. Writing a test, an essay and making and interpreting a presentation in ppt/pptx file on an optional environmental problem.	
Requirements during examination season:	
Students can make up for the semester works.	
Supplement:	
Students can make up for the test, the essay and the presentation on the first week of examination season.	
Consultation:	
Personally every Tuesday from 10.00 am to 11.00 am and via e-mail (regruta@gamma.ttk.pte.hu).	
Controllation:	
<ul style="list-style-type: none"> • 1 test is from lectures materials. • 1 essay is from optional environmental fields. • 1 presentation is from the essay. 	
Type of exams and additional information:	
<ul style="list-style-type: none"> • The test is a written exam min. 2 max. 5. points. 	
Marks:	
<ul style="list-style-type: none"> • 5 points=5 (excellent) • 4 p=4 (good) • 3 p=3 (satisfactory) • 2 p=2 (pass) • 1/0 p=1 (unsatisfying) • The essay is an electronic script min. 10 max. 15 pages of A4 in Times New Roman 12 of letter size. 	

The essay min. 26 max. 50 points.

- The presentation is an oral exam in ppt/pptx file. The presentation min. 26 max. 50 points.
- Mark is going to be the essay and the presentation together:
- 100–88 points=5
- 87–77 p=4
- 76–66 p=3
- 65–53 p=2
- 52–0 p=1

Contains of term mark:

Test mark+essay and presentation mark.

Available literature:

Moser, M. (1997): Circulations in Nature and Society. Környezetvédelmi és Területfejlesztési Minisztérium. Budapest.

Rausz, A. (ed.) (2005): Environmental Statistical Yearbook of Hungary 2004. Hungarian Central Statistical Office. Budapest.

Miller, G. T.(1982): Living in the Environment. Wadsworth Publishing Company. Belmont. California.

2018-2019 Academic year Autumn semester

Type of course	Tutor(s)	Day/Hour	Location	Extra information
lecture	dr Tibor Pécz PhD	Tuesday from 9.30 am to 11.00 am	A214	-
Schedule of course				
Week	Lecture		Practice	Laboratory
1.	Introduction.		-	-
2.	The history of the environmental protection. Juristical regulation and institution of the environmental protection in Hungary.		-	-
3.	Basic concepts. Process of pollution.		-	-
4.	Atmosphere and its processes.		-	-
5.	Water protection.		-	-
6.	Land and soil protection.		-	-
7.	Waste treatment and management. Noise and vibration.		-	-
8.	New fields in the Environmental Protection.		-	-
9.	<i>Autumn Break.</i>		-	-
10.	Global problems. Renewable energy sources.		-	-
11.	Written test. Deadline of essay.		-	-
12.	Oral presentation of students I.		-	-
13.	Oral presentation of students II.		-	-
14.	First supplement of the test.		-	-
15.	First supplement of the presentation.		-	-

I reserve the right of changing the schedule of course.

Pécs, 05/09/2018

dr Tibor Pécz PhD
senior research fellow