Environmental Engineering
(143ENE)

Winter 2016/17

Tomáš Dostál

dostal@fsv.cvut.cz

room: B602

Martina Sobotková

martina.sobotkova@fsv.cvut.cz

room: B775

David Zumr

david.zumr@fsv.cvut.cz

room: B608

Jakub Jeřábek

jakub.jerabek@fsv.cvut.cz

room: B670

Department of Irrigation, Drainage and Landscape Engineering

Environment

Place we live in

All living and non living things including culture, social interactions, constructions etc.

Influence in everyday life, work, in all scientific fields

Whatever we do impacts the environment

World – very complex, heterogeneous, complicated, interconnected, linked

Environmental engineering – integrates science and engineering to improve the natural environment (urban structures, air, water, waste, law, etc.). Studies the effect of technological advances on the environment.

- Interdisciplinarity
- Specialists in more fields
- Communication

-> sustainable design, management, hazards

(always with feet on the ground)

Schedule / Scope:

		lec. #	week	
Theory to Environmental Engineering				Course scope, brief technical information
				Ecology, basic terminology, biodiversity, invasive species,interactions between living and non-living species
				Introduction to Environmental Engineering;
				...Social, Political, Economical and Environmental aspects, Sustainable development
Waste				Waste management, Environment and transportation (+ structures, noise etc.)
Components of En.				Water 1 (intro, water budget, resources, water quality, pollution, oxygen sag curve, water and ecology, drinking water, waste water treatment)
				Water 2 (floods, rainfall-runoff processes and models,...)
				Soil (inc. pollution, contamination, threads, reclamation, erosion...)
				Athmosphere 1 (intro, ozon, greenhouse, pollution, mitigation)
				Athmosphere 2 (Kyoto, Montreal) + Waste 1 (intro)
Applied EnEn				GIS, remote sensing, lidar, large scale models + intro to EIA
				Landscape recultivation and rehabilitation
	ENEN	13	21	test

Form:

Lectures – every week, Presence is not obligatory

.....discussion is welcome

handouts: http://storm.fsv.cvut.cz/

Seminars – biweekly, active presence is obligatory

- group project on EIA (app 5 students per group)
- finishes with a brief report and presentation
- report + presentation = assessment + bonus points for the exam (max 30 p./person)
- details will be given on the seminar

The end..... written test from the presented topics (100 p., 60 p. needed to pass)

Deadlines:

EIA report

– progress will be monitored during the semester (will be specified on the seminar)
- must me submitted before the exam!
- latest term for the submission is on 10.1.2017 (later for 0 p.)

EIA presentations

- 20.12.2016

Exam

- 1st term 20.12.2016 (only if the EIA report is submitted), no retakes before Xmas!
- more terms in the exam period (Jan 2017)