Name of subject: **Environmental Studies**	*NEPTUN-code:* RKXKT1ABNE	*Number of hours:* *lec+gs+lab* 2+0+0	*Credit:* 3 *Requirements:* examination
Course coordinator: Konrád Lájer PhD	*Title:* associate professor	*Prerequisite:* -	

Course Description

The purpose of the course in environmental engineer training is to review the basic knowledge about elements of environmental system, the basic environmental concepts, to disclose antropogenous effects those influence unfavourable way the state of environment. Reviewing basic principles which can be used for diminishing unfavourable effects that influence environmental systems, to familiarize requirements that are necessary in favour of sustainability. Types of environmental harms, the process of contamination. Causes of global issues, their effects and possibilities of reducing. Means which are used for enhancing the effectiveness of environmental protection: ecological footprint calculation, lifecycle analysing, eco-label. Characterize biotic and abiotic factors of ecological system, importance of biological-geochemical cycles research. Features, harms and protection of atmosphere, hydrosphere and litosphere. Specific effects of noise and vibration caused by human activities and its alleviating possibilities. Reviewing elements of waste management pyramid. Application effects of different types of energy sources.

Competences to be mastered:

a) knowledge

- Knowledge of general and specific mathematical and natural scientific principles, rules, relations, and procedures as required to pursue activities in the special field of product design.
- Knowledge of expectations and requirements prevailing in the areas of health and safety, fire protection and safety engineering as related to the relevant special field, as well as applicable environmental regulations.
- Knowledge of the basics, limitations and requirements of the special fields of marketing, management, environment protection, quality assurance, information technology, law, and economics, intrinsically linked to the special area of product design.

b) capabilities

- Able to design the form and construction of relatively simple products by taking into account the limits of production technology, the costs expected, and impacts on the environment.

c) attitude

- Market, environment, and customer oriented.
- Complying and ensuring compliance with the applicable requirement systems of security, health and safety, environment protection, quality assurance and inspection during work.

d) autonomy and responsibility

- Acting as expected by quality and environment control systems.

Bibliography

1. Visualizing Enviromental Sience, 4th 2014, Wiley

2. PPS file sin moodle and recomended literure sources