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| <b>Title of the course:</b><br><b>Environmental studies</b>  | <b>NEPTUN-code:</b><br>RKXKT1ABNE       | <b>Weekly teaching hours:</b> <i>l+cw+lb</i><br>2+0+0 | <b>Credit:</b> 3<br><b>Exam type:</b> e |
| <b>Course leader:</b><br>Konrád Lájér, Dr.   | <b>Position:</b><br>associate professor | <b>Required preliminary knowledge:</b><br>-           |   |
| <b>Curriculum:</b>   |   |   |   |
| <p>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 lithosphere. 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.</p> |   |   |   |
| <b>Professional competencies:</b>  |   |   |   |
| <p>Comprehensive knowledge of the basic features and interrelations of environmental elements and systems, as well as of the environmentally harmful substances affecting them. Knowledge of the basics of energy management, options for energy production, their advantages and disadvantages, as well as the concept and feasibility options of sustainable development.</p> <p>Able to participate creatively in engineering work based on their multidisciplinary skills, as well as to adapt to continuously changing circumstances.</p> <p>Efforts to improve knowledge by on-going self-education and continuously update their knowledge of the world.</p>  |   |   |   |
| <b>Literature:</b>   |   |   |   |
| 1. Visualizing Environmental Science, 4th 2014, Wiley  |   |   |   |
| 2. PPS file sin Moodle and recommended literature sources  |   |   |   |
| Comments:  |   |   |   |