Course Unit Descriptor

Study Programme: Environmental Engineering

Course Unit Title: Basic Principles of Water Management

Course Unit Code: Z420

Name of Lecturer(s): Assistant Professor Visnja Mihajlovic, PhD

Type and Level of Studies: Bachelor Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

The course aim is to introduce students to the concept of sustainable development, environmental protection system, legislation in the field of environment and global issues of environment. Master the course should enable students to understand complex relationships between stockholders of the sustainable development, as well as to point out the necessity of multidisciplinary approach to the problem.

Learning Outcomes:

Students should use acquired knowledge in further education, in professional courses above all. Mastering this course is the starting point in the courses which have the objective to solve existing problems in the field of environmental protection. Students will learn about different resources which are used today, their advantages and disadvantages regarding the environment and pollution.

Syllabus:

Theory

Natural resources, Fossil – renewable resources, EU thematic strategy as a frame for sustainable use of natural resources, Natural resources and national strategy of Serbia for the accession to the EU, Elements of the environment being regulated, Concepts of integral environmental protection and control; Rio conference and Agenda 21, Conference in Johannesburg, Environmental protection convention, International organizations, EU laws in the field of environmental protection, EU thematic strategies and strategy for accession of Serbia to the EU, National legislation in the field of environmental protection. Global atmospheric changes, Potential of global warming, Prediction of moderate global temperatures, Regional impact of temperature change, CDM change, Systematic connection of sustainable use of natural resources and the living environment, System of national accounts and increase in national income as a sustainable development indicator, Economic indicators,

Practice

During lectures, adequate examples related to the knowledge from the lectures are elaborated with active participation of students.

Required Reading:

1. López, Ramón, and Michael A. Toman. Economic Development and Environmental Sustainability - New Policy Options Oxford: Oxford University Press, 2006
2. Daniel B. Botkin, Edward A. Keller - Environmental Science John Wiley & Sons, 2003

<table>
<tr><td colspan="2">Weekly Contact Hours: 8</td><td colspan="2">Lectures: 4</td><td>Practical work: 4</td></tr>
<tr><td colspan="5">Teaching Methods:
Lectures and students group work</td></tr>
<tr><td colspan="5">Knowledge Assessment (maximum of 100 points): 100</td></tr>
<tr><td>Pre-exam obligations</td><td>points</td><td>Final exam</td><td colspan="2">points</td></tr>
<tr><td>Active class participation</td><td>10</td><td rowspan="2">written exam</td><td colspan="2" rowspan="2">70</td></tr>
<tr><td>Test I and Test II</td><td>20</td></tr>
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