

Title Environmental Protection	Code 1010101221010100334
Field Environmental Engineering First-cycle Studies	Year / Semester 1 / 2
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: - Projects / seminars: -	Number of credits 2
	Language polish

Lecturer:

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Status of the course in the study program:

-Core course

Assumptions and objectives of the course:

-The ability of understanding of processes, phenomena and interactions in environment; recognition of short and long-term processes course; understanding the significance of global effects in relation to anthropopression.

Contents of the course (course description):

-Basic terminology: environmental protection, environmental engineering, ecology, sustainable development. Basic flows in the environment: heat and mass exchange, diffusion, evaporation. The energy- balance of the Earth. Protection of hydrosphere: water balance in Poland, water pollution, eutrophication, water quality and protection. Soil protection: definitions, types of degradation. Waste: classification of waste and types of landfills, methods of wastes disposal. Air protection: sources of air pollutant, activities for the improvement of the air quality. Renewable and un-renewable sources of energy. The influence of the use from the energy on the environment quality. The influence of environmental pollution to human health. The legal and economical aspects of environmental protection.

Introductory courses and the required pre-knowledge:

-Physics, chemistry and biology of high school program.

Courses form and teaching methods:

-Physics, chemistry and biology of high school program.

Form and terms of complete the course - requirements and assessment methods:

-Colloquium on the end of I led semester.

Basic Bibliography:

1. Alloway B.J., D.C. Ayres Chemiczne podstawy zanieczyszczenia środowiska PWN Warszawa 1999
2. Głowniak B., Kempa E., Winnicki T. Podstawy ochrony środowiska PWN Warszawa 1985
3. Stefanowicz T. Wstęp do ekologii i podstaw ochrony środowiska Wyd. PP Poznań 1996

4. Zakrzewski S.F. Podstawy toksykologii środowiska Wyd. Naukowe PWN Warszawa 1995
5. O'Neill P. Chemia środowiska, Wyd. Naukowe PWN Warszawa 1997

Additional Bibliography: