

Title Environmental in Management (Zarządzanie w środowisku)	Code 1010401131010240782
Field EDUCATION IN TECHNOLOGY AND INFORMATICS	Year / Semester 2 / 3
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 of the study for Education in Technology and Informatics, Faculty of Technical Physics.

Assumptions and objectives of the course:

The student should acquire knowledge of: basic concepts of environmental, local and global threats arising from anthropogenic emissions, methods and devices that reduce the effects of pollution of the atmosphere, lithosphere and hydrosphere, the legal aspects of environmental protection and environmental management systems.

Contents of the course (course description):

Definition of basic ecological concepts. Legal aspects of environmental protection legislation concerning environmental protection in Poland and the European Union. State environment. causes and effects of pollution. Main sources of threats of environments. The impact of industry on the atmosphere, hydrosphere and soil. Gas cleaning processes of industrial gases. Classification of water quality. Sources of pollution and the effects of water degradation. Recondition processes and water treatment. Water and waste water engineering in plants. Causes and effects of pollution of the lithosphere. Urban and industrial waste. Devices protect water and soil from pollution, erosion and devastation. Nuisance civilizations: noise, vibration, electromagnetic radiation. The nature and functions of environmental management. Sustainable development - the principles and rules. Instruments of system managements environment. EMAS and ISO14000 family of standards, components of environmental management system.

Introductory courses and the required pre-knowledge:

Basic knowledge of : biology, physics. chemistry and geography.

Courses form and teaching methods:

Lectures supported by audiovisual assistance.

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

Written test

Basic Bibliography:

1. Zarzycki R., Imbierowicz M., Stelmachowski M.: Wprowadzenie do inżynierii i ochrony środowiska. Cz. I i II. WNT. Warszawa 2007.

2. Gajdzik B., Wycislik A.: Wybrane aspekty ochrony środowiska i zarządzania środowiskowego. Wyd. Politechniki Śląskiej. Gliwice 2007
3. Poskorbko B.: Zarządzanie środowiskiem. PWE. Warszawa 2007.
4. Stefanowicz T.: Wstęp do ekologii i podstawy ochrony środowiska Wyd. Politechniki Poznańskiej. Poznań 1996
5. Kłos Z. Feder S. Ochrona środowiska w budowie maszyn i transporcie. Wyd. Politechniki Poznańskiej. Poznań 2002.

Additional Bibliography:

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