Title	Code
Environmental Physics (Fizyka środowiska)	**1010401261010410683**
Field: **Fizyka Techniczna**	Year / Semester: **3 / 6**
Specialty: **-**	Course: **core**
Hours: Lectures: **1** Classes: **-** Laboratory: **1** Projects / seminars: **-**	Number of credits: **3**
	Language: **polish**

Lecturer:

dr hab. Jacek Przemysław Goc, prof. nadzw. PP
Instytut Fizyki
tel. 61 6653177
ul.Nieszawska 13a
61-021 Poznań
jacek.goc@put.poznan.pl

Faculty:

Faculty of Technical Physics
ul. Nieszawska 13A
60-965 Poznań
tel. (061) 665-3160, fax. (061) 665-3201
e-mail: office_dtpf@put.poznan.pl

Status of the course in the study program:

Core course of the study for Technical Physics, Faculty of Technical Physics.

Assumptions and objectives of the course:

to acquaint students with the side nature phenomenons which are present at environment after exploitation by human resources and materials for their conversion on mechanical or electrical energy. Protection of disadvantageous effects and their neutralization. Exploitation a tools useful in various sections of physics and applied mathematical methods of physics.

Contents of the course (course description):

greenhouse model, elements of Feather and climate, heat exhange, mineral fuel, conversion of heat onto a work and work onto heat, egzergy loses at burning, conversion of chemical energy onto work, storage and transport of energy , refrigeration, transportation, renewable energy sources, wind energy, waves, bio-energy, water energy, fuel cells, nuclear energy, electromagnetic irradiation and health, fuel circulation management, wastes, pollution transportation (difusion), noise, the basics of environmental spectroscopy, LIDAR, protection of energy and natural resources

Introductory courses and the required pre-knowledge:

Basic knowledge of classical physics and molecular physics

Courses form and teaching methods:

lectures supported by multimedia presentation using PowerPoint and computer simulations of problems in the field of environmental engineering

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

final colloquy, test of simulations of surrounding problems

Basic Bibliography:

-

Additional Bibliography:

-