Title (Metody kontroli wód, powietrza i gleby)					Code 1010702321010720736		
Field Technologie ochrony środowiska - stacionarne II stopnia					Year / Semester	1/2	
Specialty Monitoring					Course	core	
Hours						Number of credits	
Lectures: 2 Clas	sses: -	Laboratory:	3	Projects / seminars:	1		7
						Language	
						polish	

# Lecturer:

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## Faculty:

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## Status of the course in the study program:

fundamental

## Assumptions and objectives of the course:

The student should obtain knowledge of examination methods of organic pollutants in water, air and soil (basic regulations concerning pollutants in environment, water, air and soil sample treatment methods connected with final analysis using chromatographic methods, advantages and disadvantages of various sample pre-treatment methods, development tendency).

#### Contents of the course (course description):

During theoretical lectures the following problems are presented: basic regulations concerning pollutants in environment, water, air and soil sample treatment methods connected with final analysis using chromatographic methods, problems associated with trace analysis using chromatographic separation techniques (injection methods, separation and detection techniques), advantages and disadvantages of various sample pre-treatment methods, method development tendency.

Practical exercises give students the possibility to use different sample treatment methods applied in trace analysis of pollutants in water, air and soil connected with final analysis using chromatographic separation techniques. Moreover exercises allow knowledge extension concerning characteristics of various pre-treatment methods.

The objective of projects is presentation in detail sample treatment and separation of selected pollutants in environment based on prepared reports.

# Introductory courses and the required pre-knowledge:

Basic knowledge of analytical chemistry and chromatographic methods

# Courses form and teaching methods:

Lectures, laboratory, project

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

Current exercise checking, evaluation of a report on a selected pollutants examination method, final written exam.

# **Basic Bibliography:**

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Additional Bibliography:

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http://www.put.poznan.pl/