Title	Code
Chromatographic Methods in Environment Protection	**1010702311010720730**
Field: **Technologie ochrony środowiska - stacjonarne II stopnia**	Year / Semester: **1 / 1**
Specialty: **Monitoring**	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:

fundamental

Assumptions and objectives of the course:

Presentation of the fundamentals of chromatographic processes; their application in qualitative and quantitative analysis as well as physicochemical characterization of organic and inorganic substances. The chromatographic equipment is discussed and presented during Laboratory classes.

Contents of the course (course description):

Fundamental relationships in chromatography. The column and mobile phase in gas chromatography. Instrumental requirements for gas chromatography. High performance liquid chromatography. Instrumental requirements for HPLC. Qualitative and quantitative analysis in chromatographic techniques. Thin layer chromatography. Supercritical fluid chromatography. Hyphenated techniques. Sample preparation for chromatographic analysis. Other chromatographic techniques: gel-permeation chromatography, ion-chromatography, complexation chromatography.

Introductory courses and the required pre-knowledge:

Basic physical and organic chemistry on academic level

Courses form and teaching methods:

lectures

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

written control work

Basic Bibliography:

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Additional Bibliography:

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