INFORMATION ABOUT THE COURSE

Environmental health

1. Basic information

Field of studies field of medical and health sciences, discipline: medical sciences **Unit responsible for the field of studies** Faculty of Medicine Bydgoszcz University of Science and Technology **Level of studies** Uniform master's studies **Profile of studies** General academic **Form of studies** Full-time	**Studies cycle** …….. **Course code** …… **Language** English **Obligatory** Yes

Prerequisites	No requirements
Introductory courses	-
Coordinator	Magdalena Banach-Szott, PhD

Study period	**Form of assessment** **Form and hours of classes**	**ECTS credits**
Winter semester	Lecture 10h Exercise 35h	**4**

2. Learning outcomes

Code	**Description of learning outcomes**	**Learning outcomes reference**
Knowledge (student knows and understands):		
W1	Student knows the methods and instruments used to measure a range of physical quantities, including those used in medicine and environmental protection. Demonstrates in-depth knowledge of the potential applications of physical phenomena to environmental processes. Knows and understands the relationships between various natural science disciplines.	ZS_01_K_W03
Abilities (student can do/perform):		
U1	Student possess the ability to measure basic physical quantities, process and interpret the obtained results, and acquire the ability to understand physical phenomena and processes occurring in nature and their relationship to health.	ZS_01_K_U01
Social skills (the student is ready to):		
K1	Students understands the need to improve his competences. Student is ready to critically evaluate the knowledge and content received regarding the impact of environmental factors on human health.	ZS_01_K_K01

3. Programme contents

No.	Programme contents	Form of studies	Learning outcomes covered by the programme content
1.	Natural and anthropogenic factors contributing to environmental degradation. Waste in the environment—classification of waste, components, and properties. Particulate matter emissions into the environment and their impact on health (modeling of particulate matter concentrations as a function of distance from the emiter). Prevention of environmental degradation. Research methods in environmental analysis.	Lecture	W1, U1, K1
2.	Application of potentiometry in environmental analysis. Application of conductivity measurements in environmental analysis. Application of UV-VIS methods in the quantitative analysis of organic and inorganic compounds. Application of nephelometric methods. Polarimetric measurements. Refractive index measurements. Determination of biochemical oxygen demand.	Exercise	W1, U1, K1, K2

4. Methods of verifying and assessing the learning outcomes achieved by the student

Form of studies		
Lecture	**Methods of studies form:**	
	Lecture	
	Methods of verification:	**Involvement:**
	Test	100%
	Conditions for passing the course:	
	Written examination in the form of a single-choice test (100 questions). Pass mark 60%. Assessment criteria in accordance with the Academic Regulations. Only students who have passed the exercises will be admitted to the exam	
Exercise	**Methods of studies form:**	
	Laboratory exercise, Showcase, Discussion	
	Methods of verification:	**Involvement:**
	Report	60%
	Presentation	40%
	Conditions for passing the course:	
	Laboratory exercise, Showcase, Discussion.	

Learning outcomes	Methods of verification		
	Test	Report	Presentation
W1	x	x	x
U1	x	x	x
K1	x		x

5. Literature

The list of required and recommended literature will be provided by the lecturer at the first meeting.

6. Student workload – balance of hours and ECTS credits

Students activity		Student workload Number of hours
Classes conducted with the direct participation of an academic teacher or other persons conducting classes	Lecture	10
	Exercise	35
Student's own work	Preparing for classes	15
	Studying literature	10
	Preparing for a test	20
	Preparing a presentation	10
Total student workload		100
ECTS		4

One (teaching) hour is 45 minutes.