

1.	Field of study	Biophysics
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2023/2024 (winter term), 2024/2025 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

7. General information about the module	
Module name	Visual Optics
Module code	W4-BF-OO-S1-4-23-38
Number of the ECTS credits	1
Language of instruction	Polish
Purpose and description of the content of education	The purpose of the module is to provide information on the optics of vision, allowing students to understand and solve problems related to image formation, in a qualitative and quantitative way, as well as with the optics of the human visual system and optical correction. During the course, the student will acquire knowledge and understanding in the following thematic areas: eye model, powers of the optical elements of the eye, retinal image quality, radiation and the eye.
List of modules that must be completed before starting this module (if necessary)	not applicable

8. Learning outcomes of the module			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)
E1	The student knows and is capable of explaining in an understandable way (both orally and in writing): components of the optical system of the eye, schematic eye models, dioptrics of the eye, quality of retinal image, and effects of radiation on the eye.	W02	1
E2	The student understands and is able to solve problems related to image formation, both qualitative and quantitative, as well as with the optics of human vision and optical correction.	W02 W05	1 1
E3	Students can expand their knowledge of visual optics and find detailed information using professional literature.	U07 U08 W03 W05	1 1 1 1
E4	Student understands the need for an ethical attitude and respect toward another human being - the patient.	K04	1

9. Methods of conducting classes		
Code	Category	Name (description)
a01	Lecture methods / expository methods	Formal lecture/ course-related lecture

		<i>a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided</i>
c06	Demonstration methods	Demonstration-imitation <i>a presentation of a model way of performing specific activities accompanied by a commentary; it aims at triggering imitation activities in an individual or in a group of participants observing the activities of the person teaching the course until the right habit is formed through regular exercise; the demonstration-imitation method is combined with a physical practice of activities/behaviours</i>

10. Forms of teaching					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
FZ1	lecture	15	course work	E1, E2, E3, E4	a01, c06

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a02	Preparation for classes	Literature reading / analysis of source materials <i>reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class</i>	Yes
b01	Consulting the curriculum and the organization of classes	Getting acquainted with the syllabus content <i>reading through the syllabus and getting acquainted with its content</i>	No
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion <i>a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory phase/element of the verification of the learning outcomes assigned to the course</i>	No

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.