

**Subject card**

<b>Subject name and code</b>	Thermodynamics , PG_00204522						
<b>Field of study</b>	Nuclear safety and radiological protection						
<b>Date of commencement of studies</b>	October 2026	<b>Academic year of realisation of subject</b>				2027/2028	
<b>Education level</b>	Bachelor's studies	<b>Subject group</b>				Obligatory subject group in the field of study Subject group related to scientific research in the field of study	
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>				at the university	
<b>Year of study</b>	2	<b>Language of instruction</b>				Polish	
<b>Semester of study</b>	3	<b>ECTS credits</b>				4.0	
<b>Learning profile</b>	academic	<b>Assessment form</b>				exam	
<b>Conducting unit</b>	Faculty of Mathematics, Physics and Informatics -> Rector						
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		prof. dr hab. Stanisław Pogorzelski				
	<b>Teachers</b>						
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	30.0	30.0	0.0	0.0	0.0	60
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	<b>Number of study hours</b>	60	0.0	40.0	100		
<b>Subject objectives</b>	not applicable						
<b>Learning outcomes</b>	<b>Course outcome</b>	<b>Subject outcome</b>			<b>Method of verification</b>		
	[BJORL3_U01] Can formulate the laws of physics and chemistry using mathematical formalism.	not applicable			[SU1] oral statement/conversation/discussion [SU3] text preparation/written work [SU4] test/exam - oral or written		
	[BJORL3_W02] Understands the role of physical and chemical experimentation, mathematical theoretical models approximating reality, and computer simulations in scientific research methodology; is aware of technological, apparatus, and methodological limitations in scientific research.	not applicable			[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion [SW3] text preparation/written work		
	[BJORL3_W01] Has a detailed knowledge of the basic concepts and principles of nuclear physics and chemistry, understands their historical development and their importance not only for nuclear safety and radiation protection, but also for understanding the modern world.	not applicable			[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion [SW3] text preparation/written work		
<b>Subject contents</b>	not applicable						
<b>Prerequisites and co-requisites</b>	not applicable						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	not applicable	0.0%	5.0%
	not applicable	51.0%	60.0%
	not applicable	51.0%	35.0%
Recommended reading	Basic literature	not applicable	
	Supplementary literature	not applicable	
	eResources addresses		
Example issues/ example questions/ tasks being completed	not applicable		
Work placement	Not applicable		

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