University of Gdańsk

Subject card

Subject name and code	Diploma Seminar 2, PG_00205745						
Field of study	Medical Physics						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
Education level	Master's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		4.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Anna Synak				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	45.0	45
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	45		0.0		55.0	100
Subject objectives	The aim of Diploma Seminar II is to support students in developing and presenting the results of their own research related to the masters thesis and to prepare them for the public defense. The seminar includes presentations of the theoretical background of the selected topic, the presentation of obtained results, their analysis and interpretation, as well as comparison with literature data. The classes enhance students ability to prepare and deliver oral presentations and to participate in scientific discussions, while fostering the skill of presenting their knowledge clearly and concisely. An important component of the seminar is also improving the understanding of the legal aspects of using the intellectual work of others. In addition, students become familiar with methods of popularizing knowledge in medical physics, which helps them develop the ability to communicate scientific achievements in a broader social context.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[FIZMEDMU2_U05] Can present research results (experimental, theoretical, numerical, medical) in writing, orally, in a multimedia presentation or poster, using specialist terminology.	The student is able to present research results – experimental, theoretical, numerical, or medical – accurately and precisely, using a variety of formats. They can prepare: an oral presentation, a multimedia talk, or a scientific poster, adapting the form and language to the type of audience and the context. The student applies appropriate specialist terminology, ensures logical structure and clarity in presenting data, and is able to justify their conclusions with reference to scientific literature and conducted analyses.	[SU2] presentation/project/paper/ report
	[FIZMEDMU2_U09] Can use English in accordance with the requirements specified for level B2+ of the Common European Framework of Reference for Languages, to a degree that allows for independent completion of education and communication with a diverse audience, using specialist terminology.	The student is able to use English at the B2+ level of the Common European Framework of Reference for Languages. They can work with professional literature in English and prepare as well as deliver short presentations using specialist terminology. The student is capable of communicating in English with both experts and non-specialists, which enables independent advancement of knowledge and participation in international scientific discussions.	[SU1] oral statement/conversation/ discussion
	[FIZMEDMU2_U06] Can effectively communicate on specialised topics in the field of physics and medical physics with diverse audiences (specialists and non-specialists), skillfully justifying his/her position.	The student is able to communicate effectively on specialist topics in physics and medical physics. When presenting their own reports and research results, they can adapt their communication to diverse audiences – both specialists and non-specialists – while maintaining clarity and transparency of expression. The student is able to justify their position appropriately, drawing on professional literature, research data, and logical reasoning. In scientific discussions, they can skillfully engage in dialogue, defend their theses, and formulate statements using accurate specialist terminology.	[SU1] oral statement/conversation/ discussion
	[FIZMEDMU2_U10] He can lead a debate.	The student acquires the ability to conduct scientific debate. They can present their arguments clearly and systematically, respond to the views of other participants, and defend their position based on knowledge and research results. They are able to take part in academic discussion – respecting different opinions, posing problem-oriented questions, and seeking solutions. The student is capable of using communication skills, thinking critically, and presenting complex issues in a concise and structured manner.	[SU1] oral statement/conversation/ discussion

Course outcome	Subject outcome	Method of verification
[FIZMEDMU2_U08] Can determine directions for further improvement of knowledge and skills (including self-education) within the scope of the chosen specialisation and beyond, and guide others in this area, e.g. through popularisation.	The student is able to consciously define directions for further development of their knowledge and skills, covering both their chosen specialization and the broader field of natural and medical sciences. They can plan activities aimed at enhancing qualifications, including self-directed learning, and select sources and methods of education appropriate to professional and academic needs. They are capable of assessing their own progress and identifying areas requiring improvement. The student is also able to support the development of others by indicating possible learning pathways and by popularizing knowledge in a way that is tailored to both specialist and non-specialist audiences.	[SU2] presentation/project/paper/ report
[FIZMEDMU2_K05] He is ready to fulfil social obligations, inspire and organise activities for the benefit of the social environment, initiate actions for the public interest and take responsibility for carrying out tasks for society.	The student develops social awareness and is prepared to take on commitments for the benefit of the community. They understand the significance and importance of the medical physicist’s profession within the healthcare system and its place in activities that serve patients and society. By preparing and presenting research results, the student learns to regard their work as an expression of responsibility toward others – both the academic community and society at large, which benefits from the achievements of medical physics. They are also able to inspire and engage others in educational and public health activities, as well as co-organize scientific and outreach initiatives, recognizing their value for the public interest.	[SK2] presentation/project/paper/ report
[FIZMEDMU2_K03] He is ready to take a scientific approach to the issues being solved, using scientific literature, as well as expert opinions, in case of difficulties in solving the problem on his own.	The student develops a scientific approach to solving research problems. They use scientific literature in both Polish and English to formulate research questions, interpret results, and substantiate their position. They also learn to integrate knowledge from different areas of physics and medical sciences in order to comprehensively analyze issues related to the thesis. The student understands that, when difficulties arise, seeking expert opinions is both necessary and valuable, as it constitutes an element of reliable academic work and responsible preparation for the medical physicist’s profession. They further develop a critical approach to sources, the ability to select relevant information, and to integrate it into a coherent whole.	[SK1] oral statement/conversation/ discussion

<table>
<tr><td>Subject contents</td><td>Presentations of the theoretical background related to the masters thesis topic.

Analysis and interpretation of students own research results with reference to literature data

Preparing and delivering oral presentations, participating in scientific discussions, and defending ones position.

Developing skills in creating multimedia presentations.

Revisiting the legal aspects of using the intellectual work of others.

Short presentations on selected areas of medical physics, combined with questions and discussion, enhancing the ability to integrate knowledge and preparing students for the final examination.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>participation in discussions, activity</td><td>51.0%</td><td>20.0%</td></tr>
<tr><td>presentation</td><td>51.0%</td><td>80.0%</td></tr>
</table>
</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>Podawana przez prowadzących podczas przydziału tematów oraz dobierana samodzielnie przez studenta podczas przygotowywania referatów</td></tr>
<tr><td>Supplementary literature</td><td>not applicable</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table>
</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>not applicable</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.