

**DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND  
TECHNOLOGY**

**SUPERVISOR DECLARING/CONDUCTING COURSE: Dr. hab. inż. Leszek Bryja**  
**DEPARTMENT: Department of Experimental Physics**  
**SCIENTIFIC DISCIPLINE: Physical Sciences**

**COURSE CARD**

**Course name in Polish: Seminarium Sprawozdawcze NF**

**Course name in English: Annual Report Seminar**

**Course language: English**

**University-wide general course type\*:**

**The course is intended for all PhD students: YES**

**SEMINAR**

**LANGUAGE English**

**Subject code: NFQ100280S**

\* delete as applicable

	Lecture	Foreign language course	Seminar	Mixed forms
Number of hours of organized classes in university (ZZU)			15	
Grading			Oral presentation	Exam, inspection, evaluation classes

**PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES**

1. Basic knowledge in quantum mechanics, solid state physics and optics
2. Linear algebra and mathematic analysis skills
3. Competences in self work

**COURSE OBJECTIVES**

C1 Acquisition of advanced knowledge on current trends in condensed matter and optics

C2 Acquisition of skills of presenting scientific seminar in English

C3 Acquisition of skills of scientific discussion in English

**PROGRAM CONTENTS**

<b>Seminar</b>		Number of hours
S1	Introduction to seminar subject. Discussion of seminar presentation and evaluation.	1
S2-S15	PhD students seminar presentations. Discussion.	14
Total hours		15

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<b>TEACHING TOOLS USED</b>
N1 Audio-visual seminar N2. Self-work. Examination N3. Consultation

<b>ACHIEVED SUBJECT LEARNING OUTCOMES</b>		
Type of learning outcome	Code of learning outcome	Assessment of learning outcome
Universal		student competently quotes other authors in articles published and prepared for publication in peer-reviewed scientific journals, peer-reviewed materials from international scientific conferences, and in book editions preceding the preparation of a doctoral dissertation

<b>PRIMARY AND SECONDARY LITERATURE</b>
<b><u>PRIMARY LITERATURE:</u></b> Articles in scientific journals related to student scientific discipline Physical Review Letters, Nature, Science etc.
<b><u>SECONDARY LITERATURE:</u></b> Advanced textbooks related to student scientific discipline
<b>SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)</b>
<b>Dr hab. inż. Leszek Bryja, profesor uczelni, Leszek.Bryja@pwr.edu.pl</b>