A COURSE SYLLABUS – DOCTORAL SCHOOL

REGARDING THE QUALIFICATION CYCLE FROM 2025/2026 TO 2028/2029

GENERAL INFORMATION ABOUT COURSE	
Course title	**COMMERCIALIZATION OF SCIENTIFIC RESEARCH**
Name of the unit running the course	Doctoral School at University of Rzeszów
Type of course *(obligatory, optional)*	***obligatory***
Year and semester of studies	1st year/ 2nd semester
Discipline	general discipline
Language of Course	Polish
Name of Course coordinator	mgr Bartosz Jadam
Name of Course lecturer	mgr Bartosz Jadam
Prerequisites	None

BRIEF DESCRIPTION OF COURSE
(100-200 words)

The course will present concepts and definitions of research commercialization and possible forms of commercialization. The course will discuss the concept and types of innovation, the levels of technological readiness of enterprises, the principles of creating spin-off and spin-out companies, and will present forms and methods of obtaining financing for commercialization. Part of the class will be practical. The purpose of the course is to learn about the possibility of commercialization of conducted scientific research and development work.

COURSE LEARNING OUTCOMES AND METHODS OF EVALUATING LEARNING OUTCOMES

Learning outcome	The description of the learning outcome defined for the course	Relation to the degree programme outcomes (symbol)	Learning Format (Lectures, classes,...)	Method of assessment of learning outcomes (e.g. test, oral exam, written exam, project,...)
Knowledge (no.)	knows and understands, has knowledge			
P8S_WK3	The doctoral student knows the principles of knowledge transfer to the economic and social spheres and the principles of commercialization of the results of scientific activity.	**P8S_WK**	Conversation	project, discussion
Skills (no.)	can			
P8S_UW4	Transfer the results of scientific activity to the economic and social spheres.	**P8S_UW**	Conversation	project, discussion
Social competence (no.)	is ready to			
P8S_KO1	Use their knowledge and creativity for the benefit of the public interest.	**P8S_KO**	Conversation	project, discussion
P8S_KO2	Use their knowledge and creativity into activities related to related to improving its	**P8S_KO**	Conversation	project, discussion

	entrepreneurship and initiating activities to disseminate it.			
P8S_KO3	Thinking and acting in an entrepreneurial way by undertaking wide-ranging interdisciplinary cooperation.	**P8S_KO**	Conversation	project, discussion
P8S_KK3	Solve cognitive and practical problems using the knowledge at hand of the studied discipline and related disciplines.	**P8S_KK**	Conversation	project, discussion

LEARNING FORMAT – NUMBER OF HOURS

Semester (no.)	Lectures	Seminars	Lab classes	Internships	others	ECTS
II	**-**	**-**	**-**	**-**	**6**	**1**

METHODS OF INSTRUCTION

- CONVERSATION IN TRADITIONAL FORM;
- CONVERSATION WITH MULTIMEDIA PRESENTATION;
- PROJECT;
- DISCUSSION .

COURSE CONTENT

1. Commercialization and technology transfer - definitions, subject matter.
2. The concept of technology transfer and its legal forms.
3. Intellectual property rights as an object of commercialization (characteristics).
4. Inventions and know-how as a result of research and development work with the greatest market potential and commercialization.
5. Forms of technology transfer.
6. Barriers to technology transfer (legal, organizational).

COURSE ASSESSMENT CRITERIA

Credit for the course is based on the project prepared by the doctoral student and activity in class.
The prerequisite for passing the conversion course is to score at least 51%.
The final grade for the course is determined according to the scale:
less than 50% points. - no credit,
[51 - 60%] pts. - sufficient,
[61 - 70%] pts. - plus sufficient,
[71 - 80%] pts. - good,
[81 - 90%] pts. - plus good,
[91 - 100%] pts. - very good.
Activity in class can raise the grade by half a grade

TOTAL PhD STUDENT WORKLOAD REQUIRED TO ACHIEVE THE INTENDED LEARNING OUTCOMES – NUMBER OF HOURS AND ECTS CREDITS

Activity	Number of hours
Scheduled course contact hours	**6**
Other contact hours involving the teacher (consultation hours, examinations)	**1**
Non-contact hours – student`s own work (preparation for classes or examinations, project, etc.)	**20**

Total number of hours	**27**
Total number of ECTS credits	**1**

INSTRUCTIONAL MATERIALS	
Compulsory literature:	Wawrzynowicz, J. (2022). Vademecum transferu technologii. Poznań: Wydawnictwo Uniwersytetu Przyrodniczego w Poznaniu. Dostępny pod adresem: https://wydawnictwo.up.poznan.pl/products/vademecum-transferu-technologii
Complementary literature:	Barszcz M. (2016) Komercjalizacja B+R dla praktyków 2016. Warszawa: Wydawca Narodowe Centrum Badań i Rozwoju

*(1 ECTS CREDIT CORRESPONDS TO 25 - 30 HOURS OF THE TOTAL WORKLOAD OF A DOCTORAL STUDENT, NEEDED TO ACHIEVE THE ESTABLISHED EFFECTS).

.....
Date and signature of the Course lecturer

.....
Approved by the Head of the Department or an authorised person