

## POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

DEVELOPMENT PROSPECTS AND NEW SCIENTIFIC TRENDS 5 [S5SD1>PRNTN5]

Course

Proposed by Discipline Year/Semester

– 3/5

Level of study Course offered in

Doctoral School English

Form of study Requirements

full-time elective

Number of hours

Lecture Laboratory classes Other

0 0

Tutorials Projects/seminars

0 0

Number of credit points

1.00

Coordinators Lecturers

prof. dr hab. Alina Dudkowiak alina.dudkowiak@put.poznan.pl

## **Prerequisites**

Knowledge: basic knowledge and understanding of existing trends in respective field of science and directions of their potential development. Skills: communication skills, competence in critical analysis, ability to contribute to scientific discourse. Social competences: critical evaluation of PhD student's contribution to scientific development, in particular within own discipline.

# Course objective

Comprehensive analysis of new and existing trends in science, especially within disciplines in which education at the Doctoral School is provided as well as scientific activity combining different disciplines.

## Course-related learning outcomes

#### Knowledge

A PhD student who graduated from doctoral school knows and understands:

- 1. global achievements, covering theoretical foundations as well as general and selected specific issues that are relevant to scientific disciplines studied at the doctoral school, to the extent that enables revision of existing paradigms, [P8S WG/SzD W01]
- 2. key developmental trends of science disciplines in which education takes place at the doctoral school. [P8S\_WG/SzD\_W02]

#### Skills

A PhD student who graduated from doctoral school can:

- 1. critically analyze and asses scientific research results, work of experts and other creative activities together with their contribution into knowledge development, [P8S\_UW/SzD\_U02]
- 2. take part in scientific discourse, [P8S\_UK/SzD\_U07]
- 3. independently plan and act for their self-development as well as inspire and organize development of others. [P8S\_UU/SzD\_U10]

#### Social competences

A PhD student who graduated from the doctoral school is ready to:

- 1. acknowledge the importance of knowledge in solving cognitive and practical problems, [P8S\_KK/SzD\_K03]
- 2. fulfilling the social obligations of researchers and creators. [P8S KO/SzD K04]

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The verification of learning outcomes is carried out during doctoral students' participation in classes that expand their knowledge of global achievements and the main development trends relevant to the scientific disciplines in which education is provided at the Doctoral School.

## Assessment criteria:

- PhD students' ability to perform critical analysis and evaluation of results of scientific research, as well as to individual research planning related to acquired knowledge,
- PhD students' ability to utilize the acquired knowledge in problem-solving and to accept their responsibilities towards society,
- Phd student's communication skills.

The subject ends with a pass without a grade. The basis for passing the course is positive results of ongoing verification of the degree to which learning outcomes have been achieved.

## Programme content

Identifying prospects for development in science, in particular in PhD students' own disciplines, with emphasis on making use of interdisciplinary research in order to tackle contemporary world challenges.

## Course topics

As proposed by person delivering the lectures/workshops/training or any other related activities.

#### **Teaching methods**

Lectures / workshops / training or other activities supported by multimedia presentations.

## **Bibliography**

Basic

Scientific publications, books, training materials.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	4	0,00
Doctoral student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	21	1,00