POZNAN UNIVERSITY OF TECHNOLOGY

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Diploma Seminar [S1Bioinf1>SEM]

Course

Field of study
Bioinformatics

Year/Semester
4/7

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture	Laboratory classes	Other
0	0	0

Tutorials	Projects/seminars	
15	0	

Number of credit points
1,00

Coordinators	Lecturers
prof. dr hab. inż. Piotr Formanowicz piotr.formanowicz@put.poznan.pl	

Prerequisites

The student starting this course should have basic knowledge of the problems and methods of bioinformatics as well as biological problems whose effective solving requires an application of bioinformatics methods. He/she should have skills on solving biological problems using such methods. Moreover, the student should present such attitudes as: honesty, responsibility, perseverance, cognitive curiosity, creativity, personal culture, respect for other people.

Course objective

The aim of the course is to provide students with basic knowledge on the preparation of an engineering thesis.

Course-related learning outcomes

Knowledge:
1. The student knows and understands the development trends of bioinformatics.
2. The student knows and understands the social, economic and legal conditions of his activity, including issues related to the protection of intellectual and industrial property.

Skills:
1. The student is able to obtain information from literature, databases and other properly selected sources, also in English.
2. The student is able to integrate and interpret the obtained information, as well as draw conclusions and formulate and justify his/her opinions.
3. The student is able to use the language adequate to the undertaken scientific discussions in communication with various communities.
4. The student is able to prepare a well-documented study in Polish and in English and an oral presentation on bioinformatics.

Social competences:
1. The student is ready to learn throughout the whole life and improve his/her competences.
2. The student is ready to cooperate and work in a group, assuming various roles in it.
3. The student is ready to set priorities for the realization of a task defined by him/her or others.
4. The student is ready to identify and resolve ethical dilemmas related to practicing his/her profession.
5. The student is ready to fulfill the social role of a university graduate.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
Students" activity during classes and the effects of the implementation of tasks related to preparation of an engineering thesis are evaluated.

Programme content

The course concerns issues related to the preparation of an engineering thesis.

Course topics

The issues presented and discussed during the course include:
1.Principles of editing an engineering thesis.
2. The content of the engineering thesis.
3. Ways of solving bioinformatics problems and presenting the obtained results.
4. Preparation of a multimedia presentation containing information about the topic and assumptions of the engineering thesis, applied solutions and obtained results.

Teaching methods

Seminar: multimedia presentation, discussion with students.

Bibliography

Basic
It depends on the topic of the engineering thesis.
Additional
It depends on the topic of the engineering thesis.

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,50