# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course	name	
English	course [S1IFar1>JA1]	

Lecturers
ects/seminars
oratory classes Other (e.g. online) 0
Requirements elective
Course offered in english
Profile of study general academic
Year/Semester 1/1

#### **Prerequisites**

The already acquired language competence compatible with level B1 (CEFR).

### **Course objective**

Advancing students" language competence towards at least level B2 (CEFR). Improving students" communication skills in academic and professional contexts. Developing students" ability to use academic and field specific vocabulary.

### Course-related learning outcomes

#### Knowledge:

upon completion of the course, the student ought to know selected academic vocabulary related to the following issues:

1. different branches of science and fundamental concepts related to scientific research, with emphasis on the development of pharmaceutics , medicine and bioengineering. (k\_w1; k\_w14)

2.laboratory equipment and laboratory safety procedures. (k\_w27)

3. atomic structure and the periodic table (atoms and molecules, states of the matter, chemical elements, compounds and mixtures, physical and chemical properties of substances etc.). (k\_w4)

4. basic concepts related to mathematics and physics.(k\_w2 k\_w3)

Skills:

as a result of the course, the student is able to:

1. understand, analyse and interpret the contents of relevant academic texts. (k\_u1)

2. effectively use the terminology related to the states of the matter, atoms and molecules, chemical elements, compounds and mixtures, physical and chemical properties of substances. (k\_u3) 3. express basic mathematical operations and formulas and interpret data presented on graphs and

3. express basic mathematical operations and formulas and interpret data presented on graphs and diagrams.

4. prepare and give a talk on a field specific or popular science topic. (k\_u6)

Social competences:

upon the completion of the course, the student:

1. appreciates the value of independent learning and is able to learn english on their own as well as in cooperation with others. ( $k_k 1 k_k 2$ 

2. understands the need to respect opposing points of view as well as the importance of complying with social norms of behaviour and safety regulations in a working environment. (k\_k4)

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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Students" progress is evaluated based upon midterm test, oral presentation and active class participation. The total score for the test is 35 points, another 10 points can be scored for the oral presentation and up to 5 points for the active class participation. The test includes multiple-choice, matching, gap-filling, translation, transformation and reading comprehension items. The oral presentation is graded based on the content, organisation, range of topic-specific vocabulary, fluency, pronunciation and the ability to search the information and select sources as well as the quality of the visual materials provided. The ways of checking students" competence mentioned above can be adjusted to both traditional and online learning. The remote learning scenario involves an interactive test instead of a traditional one and oral presentations can be organized during a videoconference on MS Teams. During the classes, students have an opportunity to get activity points for doing optional home assignments and for their active participation in class discussions or activities. Students are required to score at least 30 points throughout the semester.

## Programme content

- 1. Pharmaceutical engineering within the context of different branches of science.
- 2. Working in a lab (lab equipment and its use, lab safety, measurement units).
- 3. The structure of an atom.
- 4. The periodic table of elements.
- 5. Physical and chemical properties of substances.
- 6. Basic concepts related to mathematics.
- 7. Interpreting data and trends presented in tables, graphs and diagrams.
- 8. Basic concepts related to physics.
- 9. Giving effective presentations.

### **Teaching methods**

The course methodology revolves around student-centred learning and the emphasis on both academic and field-specific vocabulary acquisition and everyday communication. Whenever possible, cooperative learning and group activities and discussions are encouraged. Both productive and receptive skills are developed. Students work based on materials provided by the teacher. There is much use of visual aids and online resources.

## Bibliography

Basic

1. Lipińska, A., Wiśniewska-Leśków, S., Szczepankiewicz, Z. English for Medical Sciences , MEDPHARM, 2013.

2. Evans, V., Dooley, J., Norton, E. Science , Express Publishing, 2012.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	60	3,00
Classes requiring direct contact with the teacher	30	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,50