COURSE DESCRIPTION CARD - SYLLABUS

Course name
English [S2IBio1>JA]

Course

Field of study
Biomedical Engineering

Year/Semester
2/3

Area of study (specialization)
Medical and Rehabilitation Devices

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
30

Projects/seminars
0

Number of credit points

2,00

Coordinators

mgr Karolina Całka
karolina.calka@put.poznan.pl

Lecturers

Prerequisites

Student should already have acquired language competence compatible with level B2 (CEFR). Student should also have the ability to use vocabulary and grammatical structures required on the first-cycle studies. Additionally, the student should be able to work individually and in a group and use various sources of information and reference works.

Course objective

Advancing students' language competence towards B2+ level or higher (CEFR). Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. Improving the ability to understand field specific texts and to function effectively on an international market and in daily basis situations.

Course-related learning outcomes

Knowledge
1. Definition and the scope of research of telemedicine;
2. Human tissue (types, definitions);
3. Lasers in medicine;

4. Biomimicry;
5. Bioethical issues;
6. Gene editing;
7. Writing a paraphraze;
8. Writing a summary.

Skills
As a result of the course, the student is able to:
1. Give a presentation/speech on field specific and popular science topic (in English), and discuss general and field specific issues using an appropriate linguistic and grammatical repertoire;
2. Understands and analyzes world literature of selected field of study;
3. The student is able to effectively use the academic language using the appropriate vocabulary and grammatical structures;
3. Formulate a short text in English using paraphrazing and summary techniques.

Social competences
As a result of classes, the student is able to communicate effectively in English in a professional environment and in typical everyday situations, and has the ability to speak in public. The student is able to recognize and use/understand cultural differences in behavior as well as in business and private conversation in English and in a different cultural environment. The student is able to distinguish between the general language and the academic language and therefore can also write a short text using academic language on general and popular science topics.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Group - ESP/presentationa:
The knowledge acquired during classes is verified by two pre-announced tests per course and one writing (summary). Each test consists of questions (mutliple choice and open questions) with different points. Passing threshold is 60%. Additionally, students prepare speeches on a selected field ralated topic and receive points for class activity.
Group - conversations:
The knowledge acquired during classes is verified by pre-announced graded speeches/presentations. Students prepare speeches on a selected field of related topics. Adittionally they receive points for class activity.

Programme content

A variety of topics in the field of biomedical engineering are discussed during the English classes including telemedicine, bionics, biomimetics and elements of bioethics with the use of AI. The purpose of the course is to familiarise students with technical subjects and the vocabulary related to it as well as some elements of B2+ grammar

Course topics

1. Definition and the scope of research of telemedicine;
2. Artificial tissue
3. Lasers in medicine
4. Biomimicry
5. Bioethical issues and gene editing
6. Ethical use of Artificial Intelligence.

Teaching methods

Vocabulary exercises, multimedia presentations, audiovisual materials, discussion of issues with examples on the blackboard, solving lexical and grammar exercises, integration and language games, discussion panels, pair/team work, individual student work (reading comprehension, listening comprehension).

Bibliography

Online materials
http://study.com
www.wikipedia.org
www.ted.com
www.youtube.com
http://spectrum.ieee.org/
www.howstuffworks.com
Eric H. Glendinning, Norman Glendinning "Oxford English for Electrical and Mechanical Engineering" (EME)

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00