



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Scientific and Technical Writing [S2Bioinf1>STW]

Course

Field of study
Bioinformatics

Year/Semester
1/2

Area of study (specialization)
–

Profile of study
general academic

Level of study
second-cycle

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other (e.g. online)
0

Tutorials
30

Projects/seminars
0

Number of credit points

2,00

Coordinators

mgr Nuala Mederski
nuala.mederski@put.poznan.pl

Lecturers

mgr Nuala Mederski
nuala.mederski@put.poznan.pl

Prerequisites

Students should have language skills at B2 level in accordance with the requirements set out by the Common European Framework of Reference for Languages. They should also have skills that are necessary to present specialized aspects concerning computing in English. Course objectives: 1. Provide students with knowledge regarding academic written language. 2. Develop students' skills in effective academic and ESP language usage within the scope of the four language skills, emphasizing writing and speaking. 3. Develop students' skills in adapting primary sources for scientific papers. 4. Develop students' abilities in critical thinking and the evaluation of their own and others' scientific work. 5. Develop students' teamwork skills.

Course objective

1. Provide students with knowledge regarding academic written language. 2. Develop students' skills in effective academic and ESP language usage within the scope of the four language skills, emphasizing writing and speaking. 3. Develop students' skills in adapting primary sources for scientific papers. 4. Develop students' abilities in critical thinking and the evaluation of their own and others' scientific work. 5. Develop students' teamwork skills.

Course-related learning outcomes

Knowledge:

1. The student knows field specific vocabulary related to academic language and is able to differentiate between formal and informal language, as well as between objectivity and subjectivity
2. The student knows and understands the rules of creating longer written texts
3. The student knows the structure of the documents and knows the scope of their application

Skills:

1. The student is able to acquire, combine, interpret and evaluate information from literature, databases and other information sources in English, and is able to use them in text writing
2. The student is able to formulate technical texts in English
3. The student is able to assess the expectations and abilities of the reader and is able to select appropriate material based on those
4. The student is able to follow the guidelines of international publishing houses
5. The student is able to present, in English, the selected achievements from the field of bioinformatics, based on selected technical texts

Social competences:

1. The student understands the need for presenting information in an ethical, concise, coherent, comprehensive manner that takes into account the abilities and needs of the reader
2. The student understands the benefits and the necessity of team work
3. The student is able to give and receive constructive criticism, and incorporate feedback in their work

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The learning outcomes presented above are verified using the following:

Formative assessment: based on continuous progress assessment;

Summative assessment: continuous assessment during every class (written utterances), marking during every class, including teamwork, discussing extended aspects of a problem, and defending one's own work.

Programme content

The curriculum comprises the following topics:

Aims of scientific and technical writing.

Main features of scientific articles.

Elements of a formal definition.

Elements and types of paragraphs (process, comparison/contrast).

Forms of scientific expression.

Project presentation.

Organization and writing process.

Differences between summaries and including relevant information in a logical order.

Summary and abstract.

Quoting.

Editing and proofreading scientific papers.

The most common writing mistakes.

The curriculum contains the following grammar and vocabulary areas:

Formal and informal language.

Articles.

Cohesion and coherence.

Logical linking in sentences.

Tenses.

Text cohesion from the form, logical, and lexicographic viewpoints. Argumentation and expressing an opinion.

Coordinating and subordinating conjunctions.

Nominalisation.

Teaching methods

Discussion with examples.

Critical analysis of real-world materials.

Cooperative argumentative dialogue between individuals (the Maieutic Socratic Method).

Brainstorming.

Practical exercises.

Bibliography

Basic

1. Cargill, M. & O' Connor, P. (2nd ed.). 2013. Writing Scientific Research Articles. Strategy and Steps. Wiley - Blackwell.

2. Bailey, S. 2011. Academic Writing: A handbook for international students. Routledge.

3. Finkelstein, L., Jr. 2000. Pocket Book of Technical Writing for Engineers and Scientists. McGraw-Hill.

Additional

1. Glasman-Deal, H. 2010. Science Research Writing for Non-Native Speakers of English. Imperial College Press.

2. Aliotta, M. 2018. Mastering Academic Writing. CRC Press.

3. Wallwork, A. 2011. English for Writing Research Papers. Springer.

4. Wallwork, A. 2013. English for Academic Research: Writing Exercises. Springer.

5. Hewings, M. 2012. Cambridge Academic English, Upper Intermediate. Cambridge University Press.

6. McCarthy, M. & O'Dell, F. 2016. Academic Vocabulary in Use (2nd ed.). Cambridge University Press.

7. Morley, J., Doyle, P. & Pople, I. 2021. University Writing Course. Express Publishing.

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