



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar

Course

Field of study

Biomedical engineering

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

15

Number of credit points

8

Lecturers

Responsible for the course/lecturer:

prof. Ewa STACHOWSKA

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Faculty of Mechanical Engineering

ul. Piotrowo 3, 60-965 Poznań

dr hab. inż. Jacek Buśkiewicz

email: jacek.buskiewicz@put.poznan.pl

tel. 61 665 26 19



Instytut Mechaniki Stosowanej

Responsible for the course/lecturer:

Wydział Inżynierii Mechanicznej

ul. Jana Pawła II 24, 60-965 Poznań

Prerequisites

Basic knowledge of engineering studies in the field of biomedical engineering first degree.

Course objective

Introduction to the principles of writing scientific papers and preparing for the implementation of their own master's thesis.

Exercise in presenting fragments of the results of own work. Preparation for the defense of the thesis and for the final examination.

Course-related learning outcomes

Knowledge

1. Expanded knowledge of biomedical engineering based on various sources of scientific information.
2. The student knows the basic tools for conducting scientific research in the field of biomedical engineering.

Skills

The student is able to select and properly use literature sources in order to solve tasks being the subject of the diploma thesis.

He can prepare a scientific study in Polish, presenting the results of his own scientific research in the field of biomedical engineering.

Can prepare and present in Polish a concise oral presentation on specific issues in the field of biomedical engineering.

Can choose the right research tools.

He can plan and carry out experiments and analyse them also with the use of statistical methods. He can use computer modeling and simulation skills in biomedical engineering.

Social competences

He is able to expand knowledge through independent research of the scientific literature, as well as exchange of acquired knowledge in research groups.

Can think and act creatively.

Can set priorities for the implementation of a task set by himself or others.

Is aware of the importance of non-technical aspects of engineering activities.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:



Completion of the course with a numerical grade on the basis of papers on the progress of students' own research and the indicated topics in the field of biomedical engineering.

Programme content

Teaching methods

Programme content

Discussion of the methodology of scientific work.

Discussion of issues related to scientific publications.

Overview of guidelines for the implementation of the master's thesis.

Provisions regarding the diploma dissertation and examination in the study regulations.

Copyright to the thesis.

Specifying the title of the thesis, formulating research assumptions and working hypotheses or a research problem.

Reporting on issues in the field of biomedical engineering.

Teaching methods

Multimedia presentation.

Bibliography

Basic

Majchrzak J., Mendel T., *Metodyka pisania prac magisterskich i dyplomowych*. Wyd. Akademii Ekonomicznej, Poznań, 1995.

Sydor M., *Wskazówki dla piszących prace dyplomowe*, Wydawnictwo Uniwersytetu Przyrodniczego W Poznaniu, 2014

Additional

Żółtowski B., Jedliński R., Jazon A., *Metodyka w okruchach. Seminarium dyplomowe. Metodyka pisania pracy dyplomowej*. Bydgoszcz, 1994.

Żółtowski B., *Seminarium dyplomowe - zasady pisania prac dyplomowych*, ATR, Bydgoszcz 1997.

M. Sobczyk, *Statystyka*, Warszawa PWN 2015.

Additional



Breakdown of average student's workload

	Hours	ECTS
Total workload	200	8,0
Classes requiring direct contact with the teacher	15	1,0
Student's own work (literature studies, preparation for tutorials, preparation presentation) ¹	185	7,0

1 delete or add other activities as appropriate