COURSE DESCRIPTION CARD - SYLLABUS

Course name
Dental prosthetics

Course

Field of study
Biomedical engineering
Area of study (specialization)
Engineering of implants and prosthodontics
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
15
Laboratory classes
15
Other (e.g. online)
0
Tutorials
0
Projects/seminars
0

Number of credit points

2

Lecturers

Responsible for the course/lecturer:
dr n med. Justyna Otulakowska-Skrzyńska

email: justynao@ump.edu.pl

Department of Integrated Dentistry
Poznan University of Medical Sciences

Responsible for the course/lecturer:
x

Prerequisites

1. Basic knowledge from biology, chemistry, biomaterials. Chemical and physical structure and properties of biomedical materials, including dental materials dedicated for prosthodontics.

2. The ability to think logically, to obtain information from the library and the Internet.

3. Understanding the need for education and gaining interdisciplinary knowledge.

Course objective

Learning the basics of knowledge about artificial materials replacing the structures and tissues of the oral cavity and craniofacial tissues, being familiar with the conditions of supporting the functions of the masticatory organ in the period of human biological development (childhood) and rehabilitation (ageing period of life) conditioned by the loss of bone basis of the oral cavity and teeth during elderly in the field of dental prosthetics.

Course-related learning outcomes

Knowledge

Getting to know the basics of knowledge in the field of dental prosthetics, introductory acquaintance with the conditions of supporting the oral mouth and rehabilitation of the masticatory organ during the child development and an adult period of life.

Skills

1. Student is able to design and select dental prosthetic materials for the production of prosthetic restorations in the field of the oral cavity and the facial skeleton supporting the rehabilitation of the masticatory organ.

2. Student should describe the technical aspects of oral/dental substitutes

3. Student is able to assess the medical conditions in the field of biomedical engineering.

4. Student is able to integrate the obtained information, interpret and draw conclusions..

Social competences

1. Student is aware of the importance and understanding of non-technical aspects of engineering.

2. Student is able to set priorities for the implementation of a specific project.

3. Student is able to interact in a group, taking on different roles.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Forming rating:

a) for the lectures:

- Based on answers to questions concerning the material discussed in previous lectures

b) for the laboratories:

- On the basis of an assessment of the current progress of tasks,

Summary rating:

Lecture

Credit based on a test consisting of 50 general questions (pass in the case of a correct answer to at least 60% at the end of the semester (grades: <60% 3-ndst, >60% 3-sufficient, 75% 3.5-fairly good, 80% 4-good, 85% 4 , 5-over good, 90% 5-very good)

Laboratory

Evaluation of the report and oral response from each laboratory exercise as indicated by the laboratory instructor. Getting a pass on the basis of a positive assessment of the answer and report. Assessment of the test solution based on problem questions according to the adopted scale of min. 60% (grades: <60% 3-ndst, >60% 3-sufficient, 75% 3.5-fairly good, 80% 4-good, 85% 4 , 5-over good, 90% 5-very good).

Programme content

Lectures.

I. Introducing lecture. The aim of prosthetic treatment in oral cavity, advantages and dysadvantages of prosthetic traeatment. Classification of dental prosthesis, planning of prosthetic treatment

II. Prosthetic treatment of young adult patients and middle-age patients. Tooth restoration after endo treatment. Fixed partial dentures: post and cores and crowns

III. Prosthetic treatment of partially edentulous patients. Bridges and partial dentures.

IV. Prosthetic treatment of edentulous patients. Complete dentures. Prosthetic treatment of elderly patients

V Pediatric dentistry and prosthetic treatment.

Labolatory Exercises.

I. Dental prosthetic on clinical cases. Advantages and dysadvantages of prosthetic traeatment, side effects. Demonstration of different types of denture phantoms. General principials of planning prosthetic treatment.

II. Prosthetic treatment of young adult patients and middle-age patients. Tooth restoration of teeth after endo treatment. Fixed partial dentures: post and cores and crowns. Clinical case presentation, discussion

III. Prosthetic treatment of partially edentulous patients. Bridges and partial dentures . Case presentation, disscusion.

IV. Prosthetic treatment of edentulous patients. Complete dentures, treatment of elderly patients. Case presentation, discussion, prognosis for treatment

V. Prosthetic treatment of children. Case presentation, discussion, prognosis .

Teaching methods

1. Lecture: multimedia presentation based on principles, standards and material-clinical relationships in dental prosthetics.

2. Laboratory exercises: demonstrative discussion of clinical cases of patients, solving clinical problems, discussion about planning prosthetic treatment, prognosis for the patient. Discussio in viva and team work.

Bibliography

Basic

E. Spiechowicz, Protetyka Stomatologiczna - podręcznik dla studentów stomatologii, Wydawnictwo Lekarskie PZWL, wyd. VI

Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,2
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	20	0,8

[1] delete or add other activities as appropriate