

ACADEMIC STANDARD FOR THE DISCIPLINE DENTAL CLINICAL ALLERGOLOGY

1. Dental clinical allergology

The discipline proposes the possibility of acquiring knowledge of etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prophylaxis of allergic reactions especially to dental materials. The students acquire skills in skin allergy tests.

The theory of odontogenic focal infection is discussed. The students acquire skills in odontogenic focal infection diagnostic tests.

At the end of the course the students are capable of applying knowledge through planning a dental treatment according to patient history of allergy or focal infection-related chronic diseases..

2. Learning contents

Discipline	Exam	Academic hours			Academic hours in years and semesters				
		semester	total	lectures	practicals	IV year			
						VII		VIII	
						L	P		
Dental clinical allergology	VII	30	15	15	1	1			

Lecture course

№	TOPIC	Hours
1.	Allergens, allergic reactions, allergic diseases.	2h.
2.	Allergic reactions to dental materials. Diagnostic allergens. Diagnostic methods in allergy.	2h.
3.	Allergic diseases. Drug allergy and drug intolerance. Syndrome of Stevens-Johnson syndrome and Lyell syndrome. Allergic reactions to local anesthetics. Anaphylactic shock.	2h.
4.	Allergic diseases. Allergic Asthma. Allergic rhinitis. Contact dermatitis. Atopic dermatitis. Urticaria. Food allergy and food intolerance.	2h.
5.	Occupational allergy among dental staff. Natural rubber latex allergy.	2h.
6.	Treatment and prevention of allergic diseases.	1h.
7.	Focal infection theory. Odontogenic focal infection. Iatrogenic factors.	2h.
8.	Reactivity of the organism to the odontogenic focal infection. Treatment and prevention of dental focal infection diseases.	2h.

Practical course

№	TOPIC	Hours
1.	Theory – Dental allergology specialized office. Structure and organization. . Practice – Emergency kit.	2h.
2.	Theory – Allergic reactions to dental materials. Practice – Patch test	2h.
3.	Theory – Anaphylactic shock – clinical manifestations. Anaphylaxis algorithm. Practice – Scratch and prick tests to local anesthetics.	2h.
4.	Theory – Occupational allergy among dental staff. Natural rubber latex allergy.. Practice – Prick test to natural latex rubber protein.	2h.
5.	Theory – Dentist`s approach to the patient with allergic diseases and reactions. Practice – Pre-medication protocols for dental allergic patients.	2h.
6.	Theory –Focal infection theory in dentistry.Focal infection history taking in dentistry. Practice – Gehlen and Standel`s electro-skin-test method. Local thermometry.	2h.
7.	Theory – Focal infection theory in dentistry. Diagnostic of dental focal infection. Practice – Registration of corrosion potentials of dental alloys.	2h.
8.	Colloquium	1h .

3. Prerequisites

After completing the training, students must have the following knowledge and skills:

- to know the basic pathophysiologic mechanisms of allergic reactions
- to be familiar with the allergens from clinical and preclinical dental environment, as well the cross-reactivity between allergens and all possible sources of these allergens out of the dental environment
- to diagnose, treat and prevent allergic reactions to haptens from dental environment]
- to be familiar and to a apply modern methods for focal infection diagnostics.

4. Academic resources

The department have the necessary number of teachers according to the accepted norms for the teaching workload of the teachers from MU - FDM – Plovdiv – 1 habilitaated lecture and 1 assistant. The teachers have excellent theoretical and practical training and specialty in the field of Dental Clinical Allergology.

5. Material resources

For the training, there is 1 clinical room, provided with:

- dental unit – 1
- Dentotest – 2
- Thermovision camera
- Computer configuration
- Multimedia equipment
- Standardized allergens

6. Lecturer training

The lecture course is presented using multimedia.

7. Practical exercises

Exercises of Dental Clinical Allergology are hosted in the clinical room in groups of 4-8 dental students. A test of the topic is submitted to each student to check student's preparation and knowledge on the specific topic. The assistant discusses the gaps in the theoretical part of the test. Under the guidance and the control of the assistant, students conduct an allergic and focal diagnostics of patients referred to the Allergy office. Clinical cases are discussed and different clinical tasks are addressed.

By way of exception, instead of a test, student may be required as a self-study assignment to prepare a referral and to present it.

8. Seminar exercises

Students are given the topics of the seminar in advance. Each student is asked a theoretical question to which he answers in writing, then a clinical case is discussed.

9. Information resources. Main literature

The lecturer has the obligation to have lectures and exercises developed in the discipline, providing the same in an electronic version. The lecture and the practical courses are worked out in an electronic version.

Sources of self-preparation

1. Stoeva I, Nikiolov G. Textbook of Dental Clinical Allergology.
2. Stoeva I. Practical guide of Dental Clinical Allergology.
3. A colour atlas of oro-facial diseases. L. W. Kay, R. Haskell . - London : Wolfe, 1971 . - 286 p.
Color atlas of oral pathology. Goro Ishikawa, Charles Waldron . - St. Louis : IshiyakuEuroAmerica, 1987 . - 193

10. Controls

At each practical exercise, a continuous control of the knowledge is carried out by conducting a multiple choice test on the subject of the current lecture and exercise. After the test, the assistant must provide information and explanations to aid the further preparation of the students. The results of this control are a component in the current assessment for the semester.

Students are required to perform and interpret the results of specific allergy and focal diagnostic tests. The results of the practical work are part of the semester certification.

11. Individual work and commitment of the student

The individual work is led by an assistant who guides the student both in literary sources and in the methods of their learning.

12. Collaboration between students and the teaching staff

The cooperation is expressed in:

- Commitment of the assistant to the student and his / her pre-training, current learning difficulties and opportunities for an individual learning program for better achievements.
- Providing reception counseling hours
- Involving students in teams for scientific tasks, research, trials, projects, etc.

13. Exams

The current assessment for the curriculum of the specialty is given for:

- The activity and results of the student in the clinical classes during the semester
- Colloquium written work
- Work of the student with the lecturer in scientific researches and projects.

14. Standards for assessment:

- **Excellent (6)** - Good knowledge of the material, profound assimilation of base and additional knowledge and skills, meaningful and correct understanding of matter. Adequacy in solving clinical tasks, taking argued decisions, drawing conclusions. Accuracy of the exhibition and rich medical vocabulary.
- **Very good (5)** - Very well assimilated base and additional knowledge, meaningful and correct understanding of matter. Practical skills in solving clinical cases and tasks. Difficulties in making well-grounded own decisions.
- **Good (4)** - Good knowledge of the material, base and additional knowledge. Lack of profound knowledge and interpretation of the studied material and in the argumentation of own decisions.
- **Medium (3)** - Basic knowledge of the studied material. Basic knowledge of solving simple clinical tasks. Poor medical vocabulary.
- **Poor (2)** - Does not fulfill any of the requirements above.

At the beginning of the semester the students are informed for the evaluation standards, the procedures for conducting the current control and the opportunities for obtaining feedback on their progress during the semester.

15. Formation of the final mark

The final assessment is multi-component and includes :

- Current control
- Multiple choice test
- Written final exam
- Oral final exam

For each component involved in the final evaluation, a significance factor of 0 to 1 is defined:

- Current control - $k_1 = 0.20$
- Multiple choice test - $k_2 = 0.30$
- Final written exam - $k_3 = 0.25$
- Final oral exam - $k_4 = 0.25$,

the total sum of the coefficients must always be 1. The final mark is the sum of the six-point scores of the different components multiplied by the relevant coefficients of significance as follows:

$$Q_{\text{final mark}} = k_1 \times Q_{\text{current control}} + k_2 \times Q_{\text{multiple choice tests}} + k_3 \times Q_{\text{final written exam}} + k_4 \times Q_{\text{final oral exam}}$$

If one of the components of the final mark is Poor (2), then the final score is poor (2).

The examination materials are kept in the department office. Students are provided with the opportunity to be acquainted with them and with the motives for

assessment according to the order and procedure announced in paragraph 13 of the current standard. The period during which the students have access to the examination materials and results is no longer than 5 working days after the exam date.

At the beginning of the semester students are provided access to the characteristic of the discipline in this form.

This requirement is set in accordance with the Law on University education Art. 56, paragraph 1, "Teachers are required to prepare and publicize description of the lecture course conducted by them, including the titles and the sequence of the topics of the curriculum, the recommended literature, the way of forming the marks and the form of examining the knowledge and skills" .

Composed by.....

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Approved by.....

The Head Department

Assoc. Prof. Dr. Iliana Stoeva, MD, PhD, DSc

The academic standard for the discipline has been approved by the Decision of the Board of the DEPARTMENT No 3 from 06.04.2023.