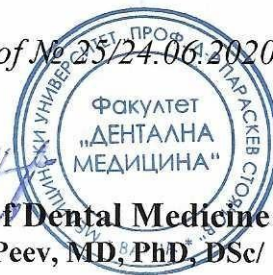




**MEDICAL UNIVERSITY**  
**“PROF. DR. PARASKEV STOYANOV” - VARNA**  
**FACULTY OF DENTAL MEDICINE**

*Approved with a Protocol of № 25/24.06.2020*

**Approved:**  
**DEAN of Faculty of Dental Medicine:**  
*/ Prof. Stefan Peev, MD, PhD, DSc/*



**EDUCATIONAL PROGRAMME**  
**OF**  
**“DENTAL ALLERGOLOGY”**

**Specialty “DENTAL MEDICINE”**

**Educational-qualification degree “MASTER”**

**Professional qualification “PHYSICIAN IN DENTAL MEDICINE”**

	Semester	Horarium weekly	Total horarium
Lectures	VIII	1	15
Exercises	VIII	1	15
Total		2	30
Monitoring and evaluation forms	Current control		Exam – VIII semester
Credits ( ECTS )			2
Extracurricular employment			30

Lecturer: Assoc. Prof. Dr. Miglena Balcheva-Eneva, DMD, PhD

Varna, 2020

## **ANNOTATION:**

The “Dental allergology“ course gives an opportunity to acquire practical and theoretical knowledge and competency on special dental allergology and complex focal diagnostics.

Tasks of the syllabus are mastering of the methods of complex focal and allergological diagnostics for the assessment of general and local reactivity of the organism; allergological status; differential and final diagnosis of the manifestations of chronic and allergic diseases in the oral cavity and oral mucosa, as well as the impact of dental and periodontal diseases on other organs and systems; acquiring knowledge and clinical experience in the sphere of dental medicine.

Preliminary requirements: In order to start the training in Dental Allergology students should have basic knowledge of: Biology, Physics, Chemistry, Anatomy and Histology, Cytology, Biophysics, Pathophysiology, Medical Ethics, General Medicine, Social Medicine, Dental Materials Science, Microbiology, Pharmacology, General pathology, Propaedeutics of Internal Medicine, Imaging diagnostics, General surgery, Occupational Diseases, Emergency Medicine, etc.

### **Training, control and evaluation forms**

Training of students is theoretical and practical, and follows the contemporary methods of teaching and evaluation of achievements.

Evaluation is complex and includes routine assessment of student's activity during practical classes and practical examination, and estimation of theoretical knowledge through tests, oral examination and final exam.

Assessment aspects – complex:

- Clinical and paraclinical diagnostics.
- Clinical cases analysis.
- Test results.
- Exam results.

## Evaluation criteria:

Evaluation – complex:

- Assessment of student's activity during practical classes.
- Colloquium.
- Final exam results.

Assessment aspects: The assessment is based on collected points (up to 102 points), as the weight of each component is determined by an appropriate coefficient. The formula is  $S = A*3 + B*3 + C*4 + D*7$ , such as:

- Clinical and paraclinical diagnostics, and clinical cases analysis – A
- Test results – B
- Final exam results – written topic – C
- Final exam results – oral topic – D

At the end of the course, students must have the following knowledge, skills and competencies:

- **Knowledge** about various allergic diseases, including their maxillo-facial manifestations and impact on dental work, about occupational allergic hazards and the relation between oral and general diseases.
- **Skills** to apply the methods of complex focal and allergological diagnostics for assessing local and general reactivity of the body, interpret the obtained results, master the differential diagnostic process and make correct diagnosis.
- **Competencies** for establishing focal and allergological status, prevention of allergic diseases induced by the use of dental drugs and materials, both in patients and in themselves as an occupational risk, consulting patients with relevant specialists, monitoring the treatment plan and evaluating the results at regular follow-ups.

## PLAN OF TOPICS OF LECTURES AND PRACTICAL CLASSES

### Lectures VIII semester

№	Topic	Hours
1.	Allergens, allergic reactions and allergic diseases Atopy.	2
2.	Allergic diseases with maxillofacial manifestations and dentist's approach. Manifestations of immune diseases in maxillofacial area.	2
3.	Drug intolerance and its oral manifestations. Specific oral allergic diseases.	2
4.	Dental materials, causing allergic reactions, diseases and anaphylaxis. Local anesthetics – options in patients with allergic and systemic diseases. Latex allergy in dental practice.	2
5.	Occupational sensitization in dentistry.	2
6.	Treatment of allergic diseases.	2
7.	Chronic focal infection – definition, terms and historical review. General and local reactivity tests.	2
8	Prevention and treatment of disturbance fields.	1
	<b>Total</b>	<b>15</b>

### Practical classes VIII semester

№	Topic	Hours
1.	<b>Theoretical part</b> – Diagnostic methods in allergology. Principles and practice. <b>Practice</b> – Scratch- and prick-tests.	2
2.	<b>Theoretical part</b> – Factors that hamper skin and mucosal testing and affect its results. Complications. Contraindications for allergy testing.	2

	<b>Practice</b> – Patch test.	
3.	<b>Theoretical part</b> – Paraclinical tests in oral allergic and focal diagnostics. <b>Practice</b> – Electro-skin test of Gehlen. <b>Test 1</b>	2
4.	<b>Theoretical part</b> – Burning mouth syndrome. <b>Practice</b> – Local thermometric test.	2
5.	<b>Theoretical part</b> – Drugs used in oral allergology. <b>Practice</b> – Pathogalvanism test.	2
6.	<b>Theoretical part</b> – Premedication protocols in oral allergology. <b>Practice</b> – Thermography. <b>Test 2</b>	2
7.	<b>Theoretical part</b> – Emergency locker drugs. <b>Practical exam</b>	3
	<b>Total</b>	<b>15</b>

## **SYLLABUS:**

### **General part (written examination):**

1. Conditions to which patients must respond for conducting complex oral diagnostics.
2. Allergy diagnostics – allergic history and physical examination.
3. Diagnostic procedures in allergology – patch test.
4. Diagnostic procedures in allergology – skin prick test and intradermal test.
5. Diagnostic procedures in allergology – specific tests, elimination, exposition and provocation tests; indirect tests.
6. Factors that hamper skin and mucosal testing and affect its results.
7. Indications and counter-indications for allergy testing. Complications after skin and mucosal testing.
8. Orofacial manifestations of drug intolerance.
9. Drug induced variations in salivary secretion. Drugs.
10. Drug induced lesions in the oral cavity. Drugs.
11. Drug induced changes on lips and oral mucosa. Drugs.
12. Drug induced oral pigmentations. Drugs.
13. Drugs in oral allergology. Antihistamines.
14. Drugs in oral allergology. Corticosteroids.
15. Drugs in oral allergology. Leukotriene antagonists. Mast cell stabilizers. Decongestants.
16. Premedication before local anesthesia. Protocols.

### **Specific part (oral examination):**

1. Allergy. Immunologic mechanisms of allergic reactions.
2. Classification of allergens. Diagnostic allergen extracts.

3. Allergic reactions and diseases – etiology, classification, management.
4. Bronchial asthma. Dentist's approach.
5. Allergic rhinitis and rhinosinusitis. Dentist's approach.
6. Atopic dermatitis. Dentist's approach.
7. Acute and chronic urticaria. Quincke's edema.
8. Insect allergy. Dentist's approach.
9. Food allergy with oral manifestations.
10. Immune diseases with maxillofacial manifestations.
11. Specific oral allergic diseases.
12. Dental materials with allergic potential – metals, acrylates, root canal filling materials. Short characteristics.
13. Allergy to dental materials – clinical features. 178-80
14. Latex in dentistry. Dentist's approach in cases of latex allergy.
15. Occupational allergies in dental staff.
16. Local anesthetics – allergenicity and allergic reactions. Dentist's approach.
17. Allergic reactions during local anesthesia. Anaphylactic shock. Management.
18. Immunotherapy.
19. Burning mouth syndrome.
20. Disturbance fields and chronic focal infection. Focal problem in oral medicine.
21. Local reactivity tests, applied in maxillofacial area.
22. Thermovisional diagnostics.
23. Prevention and treatment of maxillo-facial disturbance fields. Treatment plan.
24. Maxillo-facial disturbance fields – reasons for the treatment failure.



## REFERENCES:

1. Adkinson NF, Bochner BS, Busse WW, Holgate ST, Lemanske RF, Simons FER. Middleton's allergy: principles and practice. Mosby, 7th ed., 2008
2. Balcheva M. Burning mouth syndrome: possible dental hypersensitivity problem. Oral Diseases. 2016 Sep;22(Suppl.2):21
3. Balcheva M, Abadzhiev M. A case of Alopecia areata, associated with a focus of dental origin. J of IMAB. 2009; 15(2): 73-74.
4. Balcheva M, Abadjiev M, Dencheva M, Iovchev D, Kisselova A. Osseous and dental problems in patients with renal failure. A case report. J of IMAB. 2010; 16(4): 43-44.
5. Balcheva M, Krasteva A, Kisselova A, Nikolov G. Oral allergy syndrome – determination of specific IgE. SSMD (Scripta Scientifica Medicinae Dentalis). 2015; 1(1): 27-30.
6. Balcheva-Eneva M, Krasteva A, Kisselova-Yaneva A et al. Oral allergy syndrome and dental allergology. J of IMAB. 2013, 19(4): 332-335.
7. Balcheva M, Panov V, Kisselova A. Are we allergic to our work. J of IMAB. 2010; 16(4): 45-46.
8. Cruse JM, Lewis RE. Atlas of immunology. 2<sup>nd</sup> ed. CRC Press LLC. 2004.
9. Kay AB, Bousquet J, Holt PG, Kaplan AP. Allergy and allergic diseases. Vol. 1: The scientific basis of allergy. Blackwell Publishing, 2nd ed., 2008
10. Petrunov B, Kisselova A, eds. 2014. Dental clinical allergology. Sofia: Zabu kvite.
11. Roitt IM, Delves PJ. Roitt's Essential immunology. 10<sup>th</sup> ed. Blackwell Science. 2001.



**Department's council protocol № 67/ 18.06.2020**

**Faculty's council protocol № 25/ 24.06.2020**

**PREPARED:.....**

**/Assoc. Prof. Dr. Miglena Balcheva-Eneva, DMD, PhD /**

**HEAD OF DEPARTMENT:.....**

**/Prof. Dr. Vladimir Panov, DMD, PhD, DSc /**