

## CURRICULUM

The Integrated academic studies in Dental Medicine leading to the degree Doctor of Dental Medicine (DMD) last 6 years and include 12 semesters - 5.805 classes of active training (that is done in the form of lectures - 2.160 classes, practical training - 2.820 classes, 600 classes of clinical practice, 105 classes of scientific work (active teaching), and 75 other classes for final diploma thesis preparation.

The total student workload throughout the Integrated Academic Studies in Dental Medicine (active training, continuous training programs, exams and colloquia preparation, and final written exam preparation) equals 360 ECTS credit points.

The implementation of the ECTS credit system has been done in a non-modular fashion (the number of credits can be changed, but the total number of credits in one academic year must be 60). The number of credits per course is determined in regard to the established goals a student has to fulfil in order to achieve them as well as the study outcome. Activities relevant for achieving the goals and study outcomes are defined for each course, as well as the time needed, so that the total student workload corresponds with the number of credit points defined for the course. Students get ECTS credits after passing final exams.

The aim of this study program is to allow the 1st year students to acquire the basic knowledge in basic biomedical and preclinical sciences (Biophysics, Medical Chemistry, Biology and Human Genetics, Medical Biochemistry and Anatomy), general comprehensive courses (Medical Statistics and Informatics, Ethics in Dental Medicine and English language I) and get to know the principles of approaching the patient (First Aid). Apart from comprehensive general courses (Communication skills and English language II), 2nd year students study basic medical sciences (Dental Anatomy, Physiology, Histology and Embryology, and Microbiology, parasitology and immunology), as well as skills necessary for mastering curricula of clinical dental courses (Operative Dentistry – Preclinical, Cariology, Gnathology and Dental Materials). The curriculum of the 3rd year students includes courses in basic medical and dental sciences (General and Oral Pathology, Patophysiology, Pharmacology, Dental prosthetic – Preclinical), and clinical medical and dental sciences (General Radiology, Operative Dentistry - Clinic I, Propedeutics to Paedodontics, Dental Radiology and Dental Anaesthesiology). During the 4th and 5th years of studies, students gain knowledge and skills in general medical clinical sciences (Internal medicine, Surgery, Paediatrics, Dermatovenereology, Anaesthesia and Perioperative Medicine, Infectious Diseases, Neurology, Psychiatry and Psychological Medicine), and knowledge and skills in dental clinical disciplines (Clinical Prosthetics 1, Operative Dentistry - Clinic II, Paediatric Dentistry I, Oral Surgery with Implantology 1, Periodontology I, Endodontics I, Oral Medicine, Clinical Prosthetics II, Endodontics 2, Oral Surgery with Implantology 2, Paediatric Dentistry 2, Periodontology 2 and Orthodontics). During 6th year of studies, apart from the clinical medical disciplines (Maxillofacial Surgery, Ophthalmology, Public Health, Basics of Physical Medicine, Otorhinolaryngology, and Forensic Medicine) and Management in Dental Medicine, students gain skills in all clinical fields of dental medicine (Clinical Practice).

Elective courses provide the students an opportunity to confirm their liabilities towards some fields of medicine and dental medicine.

The teaching process for each particular course is conducted during one or maximum two semesters in accordance with the curriculum.

The most important teaching methods include: interactive communication, teaching in small groups, demonstrations and individual laboratory, preclinical and clinical practice skills lectures and practical classes illustrated by slides and video clips,.

All forms of active teaching are based on interactive teaching characterized by discussions on the topic, explanation of personal attitudes supported by theoretical or experience-based arguments, defining dilemmas regarding the topic and their solutions. It enables students to master the program content, and particular emphasis is laid on individual standpoint of the students in adopting relevant scientific and professional doctrines.

Work in small groups, being an important method of current teaching process, means attendance of 80 students per lecture, 15 and 7 students at preclinical and clinical practical classes, respectively. Students' activities during laboratory, preclinical or clinical practical classes are performed individually by the student or through teachers' demonstration.

Each clinical skill requires a defined level of student competence: the student has only theoretical knowledge about the skill; the student watches the procedure, but does not perform it on his own; the student individually performs the procedure, but not as a routine; the student routinely performs the procedure.

A student has to master the knowledge and clinical skills to the planned level of competence during the learning process, which is a prerequisite for working as a dentist independently and take responsibility. The teacher records the student's mastered clinical skills by signing in an evidence booklet (Guide for Students) that each student shall submit when taking the final examination for clinical courses.

#### 1<sup>ST</sup> YEAR

Course		Hours/week				
		Winter semester		Summer semester		
No.	Title	Theory	Practices	Theory	Practices	Theory
1	Biophysics	2	1			30
2	Medical Chemistry	3	2			45

3	Biology with Human Genetics	3	2			45
4	Ethics in Dental Medicine	2				30
5	First Aid		2			
6	Anatomy	3	3	3	3	90
7	English Language 1	2		2		60
8	Medical Statistics and Informatics			2	2	30
9	Medical Biochemistry			3	3	45
10	Elective 1			2	1	30
	Medical Sociology					
	Health Psychology					
11	Elective 2			1	2	15
	Oral Hygiene					
	Introduction to Dental Medicine					
	Introduction to Scientific Research Work					
Total		Active teaching				420
		Professional practice				
		Teaching hours at 1. study year				

## 2<sup>ND</sup> YEAR

Course	Hours/week

		Winter semester		Summer semester		
No.	Title	Theory	Practices	Theory	Practices	Theory
12	Histology and Embriology	4	3			60
13	Physiology	2	2	2	2	60
14	English Language 2	2		2		60
15	Operative Dentistry - Preclinical	1	3	1	3	30
16	Cariology	1				15
17	Dental Anatomy	1	2			15
18	Communication Skills	2	1			30
19	Microbiology with Parasitology and Immunology	4	2			60
20	Elective 3			2	1	30
	History of Medicine and Dental Medicine					
	Clinically Oriented embriology					
	General and Special Medical Cytology					
21	Elective 4			1	2	15
	Prevention and Infection Control in Dental Medicine					

	Prophylaxis of Oral Diseases					
22	Gnathology			2	3	30
23	Dental Materials			2	1	30
Total		Active teaching				435
		Professional practice				
		Teaching hours at 2. study year				

### 3<sup>RD</sup> YEAR

Course		Hours/week				
		Winter semester		Summer semester		
No.	Title	Theory	Practices	Theory	Practices	Theory
24	General and Oral Pathology	4	2			60
25	General Radiology	2	1			30
26	Patophysiology	4	2			60
27	Dental Prosthetic – Preclinical	2	3	2	3	60
28	Operative Dentistry - Clinic I	1	3	1	6	30
29	Pharmacology	2	2	3	2	75
30	Propedeutics to Paedodontics	1	1			15
31	Elective 5	1	2			15
	Dental Protection in the Community					
	Microscopic Laboratory Techniques in Medicine					

32	Elective 6	2	1			30
	Computer Use in Dental Medicine					
	Rational Phytotherapy					
33	Dental Radiology			1	1	15
34	Dental Anaesthesiology			2	1	30
Total		Active teaching				420
		Professional practice				
		Teaching hours at 3. study year				

#### 4<sup>TH</sup> YEAR

Course		Hours/week				
		Winter semester		Summer semester		
No.	Title	Theory	Practices	Theory	Practices	Theory
35	Internal Medicine	2	3			30
36	Surgery	2	1	1	2	45
37	Paediatrics	1	1			15
38	Dermatovenerology	2	1			30
39	Infectious Diseases	1	2			15
40	Clinical Prosthetics 1	1	6	1	6	30
41	Operative Dentistry - Clinic 2		3			
42	Elective 7	2	1			30
	Dental Care of Elderly Patients					

	Dental Traumatology					
	Pharmacotherapy of Infections in Dentistry					
43	Elective 8	1	2			15
	Bloodborne Diseases and Professional Prophylaxis					
	Experimental Animals and Experimental Design in Medical Research					
44	Paediatric Dentistry 1	1	2	1	3	30
45	Oral Surgery with Implantology 1	2	3	1	4	45
46	Anaesthesia with Perioperative Medicine			1	1	15
47	Periodontology 1			1	2	15
48	Endodontics 1			1	3	15
Total		Active teaching				330
		Professional practice				
		Teaching hours at 4. study year				

## 5<sup>TH</sup> YEAR

Course		Hours/week				
		Winter semester		Summer semester		
No.	Title	Theory	Practices	Theory	Practices	Theory
49	Neurology	1	1			15
50	Psychiatry and Psychological Medicine	1	1			15

51	Elective 9	1	2			15
	Aesthetics in Dental Medicine					
	Clinical Genetics in Dental Medicine					
	Nanostructured Biomaterials in Dentistry					
	Patients at Risk in Dentistry					
	Professionally Orientated Education of Health Workers in Pharmaceutical Industry					
52	Elective 10	2	1			30
	Special Care Dentistry					
	Interprofessional Education					
	Ethics in Paediatrics					
	Health of School-Age Children and Adolescents					
	Rational Drugs Use in Pregnancy and Lactation					
	Gynecology with Obstetrics					
53	Oral Medicine	2	2	1	3	45
54	Clinical Prosthetics 2	2	5		4	30
55	Endodontics 2	1	6		6	15



56	Oral Surgery with Implantology 2			1	2	15
57	Paediatric Dentistry 2	1	2	1	3	30
58	Periodontology 2	1	3	1	3	30
59	Orthodontics	2	4	2	4	60
Total		Active teaching				300
		Professional practice				
		Teaching hours at 5. study year				

## 6<sup>TH</sup> YEAR

Course		Hours/week				
		Winter semester		Summer semester		
No.	Title	Theory	Practices	Theory	Practices	Theory
60	Management in Dental Medicine	2	1			30
61	Maxillofacial Surgery	2	2	2	2	60
62	Public Health	3	1			45
63	Basics of Physical Medicine	1	1			15
64	Ophthalmology	1	1			15
65	Clinical Practice					
66	Elective 11	1	2			15
	Basics of Periodontal Surgery					
	Health Promotion					
	Healthcare Management					
	Professionalism in Healthcare					
67	Elective 12	2	1			30

	Salivary Theranostics					
	Orofacial Pain					
68	Otorhinolaryngology			2	2	30
69	Forensic Medicine			1	1	15
70	Graduation Paper					
Total		Active teaching				255
		Professional practice				
		Teaching hours at 6. study year				

Course	Hours/week	Hours/year		ECTS						
Winter semester		Summer semester								
No.	Title	Theory	Practices	Theory	Practices	Theory	Practices	Total.		
Other										
1	Biophysics		2	1		30	15	45	0	5
2	Medical Chemistry			3	2		45	30	75	0
6										
3	Biology with Human Genetics			3	2			45	30	75
0	6									
4	Ethics in Dental Medicine			2				30		30
0	2									
5	First Aid			2			30	30	0	3
6	Anatomy		3	3	3	90	90	180	0	17
7	English Language 1			2	2		60		60	0
4										
8	Medical Statistics and Informatics						2	2	30	30
60	0	4								
9	Medical Biochemistry				3	3	45	45	90	0
7										
10	Elective 1			2	1	30	15	45	0	3
	Medical Sociology								0	

Health Psychology							0	
11	Elective 2	1	2	15	30	45	0	3
Oral Hygiene						0		
Introduction to Dental Medicine								0
Introduction to Scientific Research Work								
0								
Total								
Active teaching	420	315	735		60			
Professional practice		0						
Teaching hours at 1. study year	735							