

**SARAJEVO UNIVERSITY**

**FACULTY OF DENTAL MEDICINE WITH CLINICS**



**CURRICULUM  
DENTAL HYGIENE PROFESSIONAL PROGRAM**



**Sarajevo, 2020**

Code: SFDH011	Course: <b>BASES OF DENTAL PRACTICE</b>		
Level: <b>Basic professional studies</b>	Year: <b>I</b>	Semester: <b>I</b>	ECTS credits: <b>5</b>
Status: <b>Obligatory</b>			Total hours: <b>120 (30L+45E+45S)</b>
Responsible teacher:	Head of Department		
Conditions for attending to lectures are in relation with the rules for the first level of studying in the high educational system in University of Sarajevo			
1. <b>Objectives of the course</b>	Introducing the student to the specificities of practice in dental offices		
2. <b>Puopse of the course</b>	Provide the student with informative knowledge about: <ul style="list-style-type: none"><li>- Technical conditions of work in dental office</li><li>- Disciplines and methods of work in dental practice</li><li>- Professional relationships between dental team members</li><li>- Professional relationship of dental team members towards patient and escort</li><li>- Riscs and how to protect from professional and infectious diseases</li></ul>		
3. <b>Learning outcomes</b>	Upon completion of the course the students is capable to: <ul style="list-style-type: none"><li>- Describe and apply the principles of work in the dental office</li><li>- Adopt a basic knowledge of the principles of work in specialist dental offices</li></ul>		
4. <b>Learning methods</b>	<ul style="list-style-type: none"><li>- interactive lectures</li><li>- practical exercises</li><li>- seminar</li></ul>		
5. <b>Knowledge assesment methods</b>	Final exam is in the form of test, containing 20 questions. Student's pre-exam requirements are awarded with a maximum of 50 points in the final grade structure, as follows: <ul style="list-style-type: none"><li>- attendance and activities at lectures, 15 points to the maximum</li><li>- practical exercises, 15 points to the maximum</li><li>- seminar work, 20 points to the maximum</li><li>- test, 50 points to the maximum</li></ul> Upon completion of the semester, the student can win a maximum of 100 points. The total number of points scored is translated into the final score:		

	10 (A) outstanding, without fail or with minor errors 95-100 9 (B) above the average, with occasional errors 94-85 8 (C) average, with noticeable errors 75-84 7 (D) generally good, but with significant deficiencies 74-65 6 (E) meets the minimum criteria 55-64 5 (F, FX) does not meet the minimum criteria <55 5 (FX) does not meet the minimum criteria <50
<b>6. Literature:</b> <b>Obligatory:</b> <ol style="list-style-type: none"> <li>1. Topić B, Tahmišćija H. Stomatološka propedeutika, Synopsis d.o.o., Stomatološki fakultet Univerziteta u Sarajevu, 2002.</li> </ol> <b>Additional:</b> 1. Vodanović M et al. Osnove stomatologije, Naklada Slap, 2015. – elected chapters 2. Pezelj-Ribarić S et al. Stomatološka propedeutika i dijagnostika. Medicinski fakultet Sveučilišta u Rijeci, 2009. – elected chapters	

### COURSE IMPLEMENTATION PLAN:

Week	Teaching methods	Number of hours
Week 1.	<b>Lecture:</b> Ergonomic principles of dental office; Anatomical and physiological aspects of the proper working position of the therapist, patient and nurse	2
	<b>Practical exercise:</b> Introduction to specificities of work in dental office	3
	<b>Seminar:*</b>	3
Week 2.	<b>Lecture:</b> Design of dentist's working place, waiting room and laboratory; Design of dental equipment and instruments - the impact of design on neuromuscular load; Four-hands work in dentistry.	2
	<b>Practical exercise:</b> Introduction to dental workplace, equipment and instruments.	3
	<b>Seminar:*</b>	3
Week 3.	<b>Lecture:</b> First contact with patient; Admission and preparation of patients for dental treatment; Psychological preparation of patient for dental treatment.	2
	<b>Practical exercise:</b> Individual work with patients, application of prophylactic measures in dental office. <b>Seminar:*</b>	3

		3
Week 4.	<b>Lecture:</b> Examination methods of dental patient – diagnostic procedure; Elements of diagnostic procedure; Anamnesis/history – anamnesis of difficulties, dental, medical, family history, social anamnesis/history <b>Practical exercise:</b> Admission of patient – taking history/anamnesis <b>Seminar:*</b>	2 3 3
Week 5.	<b>Lecture:</b> Clinical examination of patient in dentistry – extraoral and intraoral examination. Inspection of hard dental tissues and oral mucosa, status dictation and coordination between doctor and nurse. <b>Practical exercise:</b> Admission of patient – clinical examination and status dictation <b>Seminar:*</b>	2 3 3
Week 6.	<b>Lecture:</b> Dental diagnostic tests – oral tests, test (indices) of oral health, oral-laboratory and laboratory tests; Storage of materials and medicaments in dental office – the importance of respecting durability. <b>Practical exercise:</b> Acquaintance with the specificities of work at Clinic for dental pathology and endodontics <b>Seminar:*</b>	2 3 3
Week 7.	<b>Lecture:</b> Individual health education work ; Education of patients and prophylaxis; Extraoral and intraoral photographing; Giving preoperative and postoperative advices. <b>Practical exercise:</b> Acquaintance with the specificities of work at Clinic for preventive dentistry and pedodontics. <b>Seminar:*</b>	2 3 3
Week 8.	<b>Lecture:</b> Categorisation of patients in dental practice – acute and chronical cases. International classification of diseases in dentistry. <b>Practical exercise:</b> Acquaintance with the specificities of work at Clinic for oral medicine and periodontology. <b>Seminar:*</b>	2 3 3
Week 9.	<b>Lecture:</b> Administration in dental office; Dental chart; Dental chart for different specialities. <b>Practical exercise:</b> Acquaintance with the specificities of work at Clinic for prosthetic dentistry.	2 3

	<b>Seminar:*</b>	3
Week 10.	<p><b>Lecture:</b> Counseling patients on current nutrition topics („organic“ diet, mega-vitamine therapy, vegetarian diet). Connection between diet and the need for dental treatment. Re-motivation of patients and additional advices for oral hygiene.</p> <p><b>Practical exercise:</b> Acquaintance with the specificities of work at Clinic for orthodontics.</p> <p><b>Seminar:*</b></p>	2 3 3
Week 11.	<p><b>Lecture:</b> Personal hygiene of members of dental team, hygiene of space, equipment and instruments; Desinfection and sterilisation in dentistry; Procedures of desinfection and sterilisation; Measurements for protection of patients and members of dental team.</p> <p><b>Practical exercise:</b> Acquaintance with the specificities of work at Clinic for oral surgery.</p> <p><b>Seminar:*</b></p>	2 3 3
Week 12.	<p><b>Lecture:</b> Profesional exposition of dental team members to contagious diseases. Profesional diseases in dentistry.</p> <p><b>Practical exercise:</b> Acquaintance with the specificities of work at dental implantology ambulance.</p> <p><b>Seminar:*</b></p>	2 3 3
Week 13.	<p><b>Lecture:</b> Stressful situations in dental profession (patients, the specifics of job, interpersonal relationships); Preventive and therapeutical measurements for prevention of professional diseases of dental team.</p> <p><b>Practical exercise:</b> Ambulatory field work (stationary institutions for patients with intellectual and physical disabilities).</p> <p><b>Seminar:*</b></p>	2 3 3
Week 14.	<p><b>Lecture:</b> Oral health in the context of general health.</p> <p><b>Practical exercise:</b> Ambulatory field work (hospitals, schools, kindergartens).</p> <p><b>Seminar:*</b></p>	2 3 3
Week 15.	<p><b>Lecture:</b> Dental practice computerization and modern equipment - multimedia</p> <p><b>Practical exercise:</b> Ambulatory field work (geriatric stationary institutions).</p>	2

	<b>Seminar:*</b>	3
		3
Week 16.	-	
Week 17.	Final exam	
Week 18.-20.	Exam- the second term	

\* Students will defend their seminar work during semester, in groups of five to ten students in terms agreed upon with responsible teachers and assistants.

Code: SFDH011	Course title: <b>DENTAL MATERIALS</b>		
Level: Basic Professional Program	Year: <b>I</b>	Semester: <b>I</b>	ECTS credits: <b>6</b>
Status: <b>Mandatory</b>			Total hours: <b>150</b> <b>(45L +45E +60Sp)</b>
Teacher in-charge of the program:	Head of Department		
Course admission requirements: As provided under the Rules of Academic Programs for the first cycle of study at higher education institutions of the Sarajevo University			
1. Objective of the Course	The objective of the course is to ensure that, once they complete the theoretical and practical classes, the students are able to apply various materials in their practice according to the usage characteristics and the ways in which they are to be prepared for the use.		
2. Purpose of the Course	The purpose of the course is to teach the students on basic mechanical, physical, chemical, and biological properties of dental materials, which is effectively a prerequisite for appropriate manipulation of materials in dental practice. The course includes a review of dental materials, their standardization, structure, and properties. During the course of the studies, the student will learn about types of dental materials used in different branches of dental medicine, as well as with their clinical application. The students also learn about characteristics and the ways in which different materials respond and the reasons why consistent compliance with the instructions for their use is essential.		

3. Learning Outcomes	<p>Upon completion of the Course, the students will be able to:</p> <ul style="list-style-type: none"> <li>– Identify different dental materials and explain their actual use.</li> <li>– Identify composition of materials and explain their physical and chemical properties.</li> <li>– Elaborate on the operational properties of dental materials (manipulation period, bonding time, mixing time).</li> </ul>
4. Learning Methods	<ul style="list-style-type: none"> <li>– Lectures</li> <li>– Practical classes</li> <li>– Seminars</li> </ul>

5. Knowledge evaluation methods	<p>Acquired knowledge and skills are tested continuously throughout the semester. The overall final grade is calculated on the basis of points and it includes (i) class attendance and activity at lectures, which accounts for maximum 15% of the final grade, (ii) attendance and activity at exercises, which accounts for maximum 35% of the final grade, and (iii) the final examination, which accounts for maximum 50% of the final grade. In order to qualify for the final examination, students are required to get minimum 28 points in the course of the practical classes/exercises.</p> <p>The final exam is taken in the form of a test, which is compiled separately for each examination term. It is divided into groups A and B (or if necessary, C, and D). The final examination will be scored only if student correctly answered at least 55% of the questions. All questions in the test do not have to be scored with the same number of points. The decision on how to score the test questions is made by the teacher in-charge of the Course before the test is taken.</p> <p>Accordingly, the rating scale is as follows:</p> <table><tr><th>Grade</th><th>Points</th><th>Grade description</th></tr><tr><td>10 (A)</td><td>95-100</td><td>Exceptional performance without or with minor errors</td></tr><tr><td>9 (B)</td><td>85-94</td><td>Above average performance with sporadic errors</td></tr><tr><td>8 (C)</td><td>75-84</td><td>Average performance with evident errors</td></tr><tr><td>7 (D)</td><td>65-74</td><td>Good performance in general, but with significant shortcomings</td></tr><tr><td>6 (E)</td><td>55-64</td><td>Meets the minimum criteria</td></tr><tr><td>5 (F)</td><td>&lt; 55</td><td>Fails of meet the minimum criteria</td></tr></table>	Grade	Points	Grade description	10 (A)	95-100	Exceptional performance without or with minor errors	9 (B)	85-94	Above average performance with sporadic errors	8 (C)	75-84	Average performance with evident errors	7 (D)	65-74	Good performance in general, but with significant shortcomings	6 (E)	55-64	Meets the minimum criteria	5 (F)	< 55	Fails of meet the minimum criteria
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5 (F)	< 55	Fails of meet the minimum criteria																				
6. Textbooks:																						
<b>Mandatory:</b> Stamenković D, Obradović – Đuričić K, Ivanović V, Vuličević Z, Marković D, Raić K, Pavlović G, Veličković S: Stomatološki materijali, knjiga 1, Stomatološki fakultet, Beograd, 2009.																						

## CURRICULUM

Week	Form of teaching and teaching materials	Hours
Week 1	<b>Lectures:</b> Dental Materials Standards (ADA, ISO, Good Clinical Practice Standard, Good Manufacturing Practice Standard). Biocompatibility of Dental Materials - Concept and Significance	3
	<b>Exercises:</b> Cements - use, method of preparation, manipulation time, binding time zinc phosphate, zinc oxide eugenol, polycarboxylate cements.	3

Week 2	<p><b>Lecture:</b> Physical properties of dental materials. Mechanical properties: density, strength, hardness, elasticity, plasticity, brittleness, toughness. Viscosity of the material - viscoelasticity, elasticity, pseudoplasticity, manipulation time, curing time.</p> <p><b>Exercises:</b> Cements – usage, method of preparation, manipulation time, bonding time - ionomer, resin-modified ionomer, composite cements</p>	<p>3</p> <p>3</p>
Week 3	<p><b>Lecture:</b> Bonding reactions of dental materials - neutralization, chelation, polymerization</p> <p><b>Exercises:</b> Dental impressions materials - general characteristics, usage, method of preparation, bonding time, manipulation time, disinfection of zinc oxide-eugenol paste, thermoplastic cements</p>	<p>3</p> <p>3</p>
Week 4	<p><b>Lecture:</b> Corrosion of dental materials - electrochemical corrosion processes, galvanic corrosion, discoloration and passivation of metals</p> <p><b>Exercises:</b> Dental impressions materials - general characteristics, usage, method of preparation, bonding time, manipulation time, disinfection of irreversible hydrocolloids, elastomers</p>	<p>3</p> <p>3</p>
Week 5	<p><b>Lecture:</b> Lecture: Dental cements - properties and classification. Preparation method, manipulation time, bonding time of zinc phosphate, zinc oxide eugenol, polycarboxylate, glass-ionomer, resin-modified voice-ionomer, composite cements.</p> <p><b>Exercises:</b> Cements for temporary cementing of prosthetics - general characteristics, usage, method of preparation</p>	<p>3</p> <p>3</p>
Week 6	<p><b>Lecture:</b> Dental impressions materials – nonelastic impression materials - zinc-oxide eugenol paste, thermoplastic cements - composition, general characteristics, division, method of preparation, binding time, manipulation time, disinfection.</p> <p><b>Exercises:</b> Materials used for temporary crowns and dental bridges - general characteristics, usage, method of preparation</p>	<p>3</p> <p>3</p>
Week 7	<p><b>Lecture:</b> Dental impressions materials – elastic impression materials: irreversible hydrocolloids, elastomers - composition, general characteristics, division, method of preparation, binding time, manipulation time, disinfection</p> <p><b>Exercises:</b> Denture repair materials. Materials for temporary and permanent denture lining.</p>	<p>3</p> <p>3</p>
Week 8	<p><b>Lecture:</b> Materials for temporary crowns and dental bridges - composition of general characteristics, materials for temporary crowns and dental bridges bonding.</p> <p><b>Exercises:</b> Plaster – usage, method of preparation</p>	<p>3</p> <p>3</p>
Week 9	<p><b>Lecture:</b> Polymers in dental medicine - Denture repair materials (cold polymerizing acrylates). Materials for temporary and permanent denture lining.</p> <p><b>Exercises:</b> Bite registration waxes, adhesive waxes - purpose, method of usage</p>	<p>3</p> <p>3</p>
Week 10	<p><b>Lecture:</b> Dental plaster - composition, bonding, strength, mixing. Dental waxes - composition, bite registration waxes, adhesive waxes</p> <p><b>Exercises:</b> Dental unit instruments, grinding instruments - method of use, maintenance, sterilization</p>	<p>3</p> <p>3</p>

Week 11	<b>Lecture:</b> Dental equipment and instruments. Dental unit instruments, grinding instruments	3
	<b>Exercises:</b> Temporary cavity closure materials - purpose, general characteristics, method of application. Amalgams	3
Week 12	<b>Lecture:</b> Restorative materials. Materials for temporary cavity closure (zinc oxide sulphate cement, gutta-percha), varnishes, liners, Ca-hydroxide based substances - purpose, general characteristics, method of application. Amalgam - structure, physical characteristics, mixing techniques.	3
	<b>Exercises:</b> Composite materials and dentin-biding substances - general characteristics, method of application	3
Week 13	<b>Lecture:</b> Composite materials and dentin-biding substances	3
	<b>Exercises:</b> Composite polymerization lamps - purpose, use	3
Week 14	<b>Lecture:</b> Composite materials manipulation protocol. Composite polymerization lamps	3
	<b>Exercises:</b> Endodontics Materials - purpose, general characteristics, method of application	3
Week 15	<b>Lecture:</b> Endodontics Materials. Fissure sealing materials, teeth whitening materials.	3
	<b>Exercises:</b> Teeth whitening materials - general characteristics, method of application	3
Week 17	Final examination. Examination taken by students who failed to pass the mid-semester examinations	
Weeks 18-20	Make up examination	

**NB:** In this Course students are required to take the professional practice at the dental offices dedicated for students' clinical practical classes, the work of doctors of dental medicine undergoing residency programs (specialization), and the dental services provided by resident doctors of dental medicine. Students are required to follow the work of doctors of dental medicine and students involved in clinical practice classes and to prepare the materials required for their work. Under this professional practice and with the supervision of the teacher in-charge of the Course and their mentor, students will be required to individually perform activities on the basis of the knowledge and skills they acquired through the active learning process. The total number of professional practice hours is 60.

Code: <b>SFSDH013</b>	Course Title: <b>HEAD ANATOMY WITH DENTAL MORPHOLOGY</b>		
Level: <b>Basic vocational studies</b>	Year:1	Semester I	ECTS credits: 6
Status: <b>Required</b>			Total hours: 150 (45 L+ 45 E+ 30 S)
Head teacher: Head of Department			
Attendance requirements: Attendance requirements are governed by the Study Rules for the first cycle of study at the University of Sarajevo			
<b>1. Objectives of the course</b>	Mastering basic knowledge in anatomy of the head and morphology of permanent and deciduous teeth.		
<b>2. Purpose of the course</b>	The course studies anatomy of the head with particular emphasis on the anatomy of the jaws, temporomandibular joint, and oral cavity. Within the course, the anatomic and morphological characteristics of permanent and deciduous teeth and the arrangement of dental arches are studied. In addition, the subject of study is the applied morphology, ie. linking tooth shape with the functions of the stomatognathic system.		
<b>3. Learning outcomes</b>	Upon completion of class, the student must: Have basic knowledge of head anatomy. Master the nomenclature and terminology used in anatomy and dental morphology Know and distinguish each of the individual teeth of the milky and permanent dentition of man Be able to seamlessly monitor future clinical subjects		
<b>4.Learning methods</b>	- interactive lectures - practical exercises, small group work, - seminar work with discussion		
<b>5. Knowledge assessment methods</b>	The first partial exam (general anatomy material included) The second partial exam (included dental morphology material).  If the student did not pass one of the partial exams, he / she will take the same exam during the final exam. The final exam consists of a practical part and a test that make up 50% of the total grade. The practical part of the exam is eliminatory. Passed test will be considered to be the test that has at least 55% correct answers. Regular attendance and class attendance make up 20% of the total grade. Regular attendance and exercise activities make up 20% of the total grade. Seminar work makes up 10% of the total grade. Upon completion of the semester, a student may earn a maximum of 100 credits. According to the above, the rating scale is as follows: <55 points - Score 5 55-64 points - grade 6 65-74 points - mark 7 75-84 points - grade 8 85-94 points - grade 9 95-100 points - grade 10		

**6. Literature:**

1. Vukovic A. et al. Fundamentals of dental morphology and dental anthropology, School of Dental Medicine, University of Sarajevo, Sarajevo, 2013.
2. Slavoljub V. Jovanovic, Nadezda A. Jelicic. Human anatomy - head and neck. Belgrade: Contemporary Administration, 2000.
3. Kapur E, Kulenović A. Clinical anatomy of cranial nerves, DES, Sarajevo, 2012.
4. Berkowitz BKB, Holland GR, Moxham BJ. Oral Anatomy, Histology and Embriology. Mosby, St. Louis, 2002.

**COURSE IMPLEMENTATION PLAN:**

Week	Form of teaching and teaching materials	Number of hours
Week 1	Lecture: Introduction to Anatomy. An Introduction to Head Anatomy. Historical development. Division of anatomy. Anatomical position and orientation planes. Anatomical terminology. Division of systematic anatomy. Skull as a whole, division and structure, bones of neurocranium and viscerocranium (review).	3
	Exercises: Skull as a whole, bone morphological characteristics of neuro and viscerocranium bones	3
	Seminar: Functional and clinical anatomy of the skull	2
Week 2	Lecture: Anatomical characteristics of lower and upper jaw and temporomandibular joint. Joint bodies, connections and functional anatomy.	3
	Exercises: Mandible and maxilla, art. temporomandibularis.	3
	Seminar: An overview of the movable and immobile joints of the bones of the head	2
Week 3	Lecture: Facial muscles, masticatory muscles, arteries and veins of the head.	3
	Exercises: Examination of head muscles from the anatomical and functional aspect. Carotid artery system. Lateral and terminal branches of the external carotid artery. Internal jugular vein and its tributaries.	3
	Seminar: Muscles and blood vessels of the head from the aspect of clinical anatomy	2

Week 4	<p>Lecture: Oral cavity, overview of oral structures.</p> <p>Vascularization and lymphatic drainage. Dental system innervation.</p> <p>Exercises: Lips, cheeks, tongue, hard and soft palate, pharynx, large and small salivary glands (morphology, vascularization, innervation and lymphatic drainage).</p> <p>Seminar: Functional anatomy of V, VII, IX, X and XII cranial nerve</p>	<p>3</p> <p>3</p> <p>2</p>
Week 5	<p>Lecture: Nomenclature in dental morphology, Dental division by position and shape. Orientational planes and tooth marking systems</p> <p>Exercises: Dental System, Teeth Groups, Dental Nomenclature, Palmer-zsigmondy, FDI and American system of Tooth Marking</p> <p>Seminars: *</p>	<p>3</p> <p>3</p> <p>2</p>
Week 6	<p>Lecture: Periods of deciduous, mixed and permanent dentition. Anatomical parts of the tooth, signs of the tooth, anatomical and clinical crown</p> <p>Exercises: Analysis of milky, mixed and permanent dentition, topographic-anatomical signs of teeth: Exercises on model and natural teeth</p> <p>Seminars: *</p>	<p>3</p> <p>3</p> <p>2</p>
Week 7	<p>Lecture: Organum dentale, basic notes on the histological structure of dental tissues.</p> <p>Exercises: Observation of microscopic preparations of dental tissues and identification of the most important structural properties of individual tooth tissues.</p> <p>Seminars: *</p>	<p>3</p> <p>3</p> <p>2</p>
Week 8	<p>Lecture: The incisors</p> <p>Exercises: Analysis of morphological characteristics of incisors on models and natural teeth</p> <p>Seminars: *</p>	<p>3</p> <p>3</p> <p>2</p>
Week 9	<p>Lecture: Canines</p> <p>Exercises: Analysis of canine morphological characteristics on models and natural teeth</p> <p>Seminars: *</p>	<p>3</p> <p>3</p> <p>2</p>

Week 10	Lecture: Premolars Exercises: Analysis of morphological characteristics of premolars on models and natural teeth Seminars: *	3 3 2
Week 11	Lecture: The molars Exercises: Analysis of morphological characteristics of molars on models and natural teeth Seminars: *	3 3 2
Week 12	Lecture: Specific features of deciduous dentition and anatomicmorphological characteristics of the deciduous teeth Exercises: Analysis of the model of deciduous dentition and analysis of the morphological characteristics of deciduous teeth on natural teeth Seminars: *	3 3 2
Week 13	Lecture: Tooth relations in dental arch and interrelationships of upper and lower dental arch Exercises: Analysis of tooth interactions on models Seminars: *	3 3 2
Week 14	Lecture: Tooth anomalies, etiology and classification Exercises: Observation and analysis of dental anomalies. Seminars: *	3 3 2
Week 15	Lecture: Importance of dental morphology in the study of clinical dental disciplines. Exercises: Dentistry observation and analysis on plaster models Seminars: *	3 3 2
Week 17	Final exam	
Week 17	Corrective Exam Time	

**Seminars: \*** Throughout the topics of the seminar papers, the entire theoretical content of the course is covered

Code: SFDHO14	Course title: <b>ORAL PHYSIOLOGY AND BIOCHEMISTRY</b>		
Level: basic vocational studies	Year:I	Semester: I	Total ECTS points: 4
Status: obligatory			Total hours: 90 (30P+30V+30S)
Course leader:	Head of Department		
Prerequisites for course attendance are regulated by the Rules of Studies in establishments of higher education at Sarajevo University			
1.Aims of the course	The aim of the course is to get students through theoretical and practical teaching knowledge of the physiological and biochemical aspects of the human body, especially in the composition of oral tissues, and physiological processes.		
2. Learning outcomes	After attending lectures and passing the exam students are able to : <ul style="list-style-type: none"><li>- understands the physiological mechanisms of human body functioning at different levels (from molecular, cellular, tissue to level organs and organ systems) and their integration into a single, functional entity - organism.</li><li>- knows the biochemical characteristics of dental tissues.</li><li>- understands the processes of mastication and ingestion under physiological conditions.</li><li>- knows the biochemical composition of saliva, and understands the processes the formation of saliva, its function and the disorder of its secretion.</li><li>- understands bone mineralization processes under physiological conditions.</li><li>- understands the process of dental biofilm formation.</li><li>- understands the main characteristics of the digestive, cardiovascular, of the respiratory , nervous and muscular systems under physiological conditions.</li></ul>		
3. Learning methods	Teaching is performed through:  Lectures: 30 hours  Practical exercises: 15 hours  Professional Practice: Independent work of a student outside the intended class of classes for hands-on teaching.		

4. Evaluation methods	<p>Acquired knowledge and skills are tested continually during the course.</p> <p>Knowledge and skills assessment methods are written: - type test multiple choice (MCQ test). Students are required to regularly attend all forms of teaching and be sure to access all tests during the semester.</p> <p><b>CONTINUOUS KNOWLEDGE TESTING</b></p> <p><b>Practical Exercises:</b></p> <p>During the practical exercises, the examination is performed through 3 colloquium. The acquired knowledge and skills from practical exercises are evaluated. Student can to score a maximum of 30 points, of which each colloquium carries a maximum 10 points.</p> <p>The minimum score as a condition of passage is 5.5 points at each colloquium. To pass the practical part of the exam the student must have a minimum of 16.5 points.</p> <p><b>Theoretical teaching</b></p> <p>The theoretical instruction is tested in writing by MCQ (70 in total MCQ questions, each with 1 point). The student can win maximum of 70 points. To pass the theoretical part of the exam the student must score a minimum of 39 points from the test.</p> <p>At the final exam the student takes the material that he did not pass during the class.</p> <p>The score is formed by summing all points scored for each form tests of knowledge.</p>
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In accordance with the above, the grade scale is as follows:

Grade	ECTS points	Grade description
10 (A)	95 - 100	excellent without errors or with minor errors
9 (B)	85 – 94	above average, with a few errors
8 (C)	75 – 84	average, with noticeable errors
7 (D)	65 – 74	generally good, but with significant flaws
6 (E)	55 – 64	satisfies the minimal criteria
5 (F)	< 55	does not satisfy the minimal criteria

#### 6. Literature:

Required literature :

1. Guyton A.C., Hall J.E.: Medicinska fiziologija, Medicinska naklada Zagreb 2012
2. Nakaš-Ićindić E. i saradnici: “Laboratorijski vodič za vježbe iz fiziologije čovjeka” Medicinski fakultet, Sarajevo, 2006.
3. Tatjana Todorović: Oralna biohemija, Čigoja, Beograd, 2006.
4. Nastavni tekstovi za praktične vježbe

Week	Course load	Number of hours
1.	<p>Lecture:</p> <p>Divisions and characteristics of body fluids. Homeostatic mechanisms and water turnover. Basics of physiological structures and functions of irritable tissues. Types of muscle and their physiological characteristics.</p> <p>Exercises:</p> <p>Cell membrane (ESP CD presentation). The influence of osmotic pressure on cell volume change (Osmotic resistance of erythrocytes). Hemolysis of erythrocytes.</p>	<p>2</p> <p>2</p>
2.	<p>Lecture:</p> <p>Basic Mechanisms of Muscular Contraction. Muscle receptors. Sensory receptors. Receptor potential. Somatosensory cortex. Motor cortex.</p> <p>Exercises:</p> <p>Impulse transfer from nerve to muscle. Muscular contraction (CD simulation by A.D.A.M.).</p>	<p>2</p> <p>2</p>
3.	<p>Lecture:</p> <p>Pain physiology (oral cavity receptors - pressure, pain, fever; sensitive transmission through dental tissues; pain caused by dental factors, vascular pain, muscular pain, salivary glands and pain, theories of pain).</p> <p>Exercises:</p> <p>Chewing Muscle Contraction Strength Control (motor unit and summed muscle contraction - CD simulation of A.D.A.M.)</p>	<p>2</p> <p>2</p>

4.	<p>Lecture:</p> <p>Vegetative nervous system. Sympathicus and parasympathicus and receptors. Chewing physiology, masticatory muscles, chewing reflex; the act of swallowing. The role of the oral cavity in the process of digestion, defense, breathing, speech.</p>	2
	<p>Exercises:</p> <p>Human reflexes test. Sensation testing taste.</p>	2
5.	<p>Lecture:</p> <p>Basic principles of motility and secretion in the digestive tract. The formation of saliva, the role of saliva in maintaining homeostatic mechanisms in the oral cavity and control of saliva secretion. A taste sensation.</p>	2
	<p>Exercises:</p> <p>Estimated flow unstimulated and stimulated saliva.</p>	2
6.	<p>Lecture:</p> <p>Blood plasma and blood elements, haemostasis and coagulation. Physiological bases of immune system.</p>	2
	<p>Exercises:</p> <p>Colloquium 1. Bleeding time and coagulation time.</p>	2
7.	<p>Lecture:</p> <p>Cardiovascular physiology, regulation cardiac function, bioelectric activity of the heart, ECG, cardiac cycle, heart tones.</p>	2
	<p>Exercises:</p> <p>Red blood cell count and differential blood count.</p>	2

8.	<p>Lecture:</p> <p>Blood pressure and its regulation, pulse.</p> <p>Exercises:</p> <p>Heart rates, ECG registration and analysis.</p>	<p>2</p> <p>2</p>
9.	<p>Lecture:</p> <p>Respiratory physiology, respiratory roads, mechanism of respiration - basic concepts in gas exchange., sneeze and cough reflex.</p> <p>Exercises:</p> <p>Measurement of blood pressure and pulse.</p>	<p>2</p> <p>2</p>
10.	<p>Lecture:</p> <p>Functional organization of the endocrine system, hormones, control and regulation of secretion.</p> <p>Parathyroid gland..</p> <p>Calcium and phosphate metabolism, hormonal regulation.</p> <p>Biochemical composition of saliva; saliva as a biological sample.</p> <p>Exercises:</p> <p>Colloquium 2. Mechanism of breathing and spirometry.</p>	<p>2</p> <p>2</p>
11.	<p>Lecture:</p> <p>Saliva ingredients;</p> <p>Metabolism and the role of fluoride in oral health.</p> <p>Exercises:</p> <p>Preparation of solutions of different concentrations.</p>	<p>2</p> <p>2</p>
12.	<p>Lecture:</p> <p>Organic biomolecules and their characteristics, role in saliva composition;</p> <p>Proteins (structural proteins and enzymes) and their biochemical significance in the oral environment.</p>	<p>2</p>

	Exercises: Determination of solution pH.	2
13.	Lecture: Dental biochemistry: enamel, dentin, cement, pulp.  Exercises: Determination of total salivary proteins.	2  2
14.	Lecture:  Dental plaque (biofilm) and its formation; metabolic activity of biofilm bacteria; Dental pellicle - formation, characteristics, composition and roles.  Exercises:  Determination of glucose concentration in saliva-colorimetric.	2  2
15.	Colloquium 3.	2

Study program: <b>Oral hygiene</b>			
Code:	Course: <b>ORAL HYGIENE WITH PROPHYLAXIS</b>		
Level: <b>undergraduate</b>	Year of the study:	Semester:	ECTS :
Status: compulsory			Total hours <b>90 (45P/45V)</b> * Professional practice: <b>90</b>
Professor in charge:	Head of Department		
Entry requirements:			
In accordance with the study rules for the first cycle studies at higher education institutions of the University of Sarajevo			
1. Objectives of the course:	The aim of the course is to provide students with the ability to perform independent clinical work in order to achieve optimal oral hygiene in pediatric and adult patients.		

2. Purpose of the course	<p>The purpose of the course is to train the student to be able to evaluate and register the level of oral hygiene of the patient through clinical work, to motivate patients to perform oral hygiene; remove all soft and mineralized deposits from the tooth using adequate professional methods, and educate patients on available and appropriate techniques and means necessary to prevent and halt the progression of oral diseases.</p>
3. Learning outcomes	<p>After completing the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• define, motivate and educate the patient on the importance of performing oral hygiene in maintaining oral health</li> <li>• complete the dental anamnesis questionnaire</li> <li>• detect soft and hard supragingival dental deposits</li> <li>• Mechanically remove soft deposits</li> <li>• Remove supragingival hard dental deposits with hand instruments and mechanical scaling equipment</li> <li>• educate and recommend patients to use different dental cleaning techniques with basic and auxiliary products.</li> </ul>
4. Teaching methods/ attendance	<p>The course is taught in the form of:</p> <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Practical clinical classes - group clinical exercises according to the standards</li> <li>• Professional practice: independent work of the student outside the mandatory number of hours for practical clinical classes.</li> </ul>
5. Assessment methods	<p>The final grade will be formed on the following elements:</p> <ul style="list-style-type: none"> <li>• Compulsory attendance and activity at the classes account for 45% of the grade (a student will be considered to have met this criterion if he / she has justifiably dropped out of a maximum of 20% of class).</li> <li>• The final exam is in the form of a test and accounts for 55% of the grade.</li> </ul> <p>Rating Scale: A (10) = 95- 100%  B (9) = 85-94%  C (8) = 75-84%  D (7) = 65-74%  E (6) = 55-64%  F (5) = below 55%</p>
6. Literature:	<ol style="list-style-type: none"> <li>1. Wilkins EM. Clinical practice of the dental hygienist. 12th Ed. Wolters Kluwer, 2017.</li> <li>2. Darby ML, Walsh MM. Dental Hygiene: Theory and Practice. 3rd Ed. Saunders, 2010.</li> </ol>

	<ol style="list-style-type: none"> <li>3. Harris NO, Garcia-Godoy F. Primary Preventive Dentistry. 5th Ed. Prentice Hall, 1999.</li> <li>4. Fejerskov O, Nyvad B, Kidd E. Dental Caries: The Disease and its Clinical Management. 3rd Ed. Wiley-Blackwell, 2015.</li> <li>5. Jurić H i sur. Dječja dentalna medicina. Naklada Slap, Jastrebarsko, 2015</li> <li>6. Kobašlija S, Huseinbegović A, Selimović Dragaš M, Berhamović E. Karijes zuba – primarna prevencija i kontrola. Stomatološki fakultet Sarajevo, 2010.</li> </ol>
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Week	Theory topics and clinical work	Hours
Week 1.	<p>LECTURES</p> <p>Introduction to Oral Hygiene with Prophylaxis</p> <p>EXERCISES</p> <p>Medical and dental history; clinical examination (workplace, dental record, medical and dental history, vital signs)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 2.	<p>LECTURES</p> <p>Importance of oral hygiene in maintaining oral health - basic requirements for oral hygiene maintenance</p> <p>EXERCISES</p> <p>Completing dental record (oral health assessment, caries indices, dental anomalies)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 3.	<p>LECTURES</p> <p>Oral biofilm and other dental soft deposits</p> <p>EXERCISES</p> <p>Detection and removal of dental plaque and of other soft deposits</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 4.	<p>LECTURES</p> <p>Methods for detection and removal of soft deposits</p> <p>EXERCISES</p>	<p>3</p>

	<p>Use of basic oral hygiene products (toothbrushes - type, characteristics; special toothbrushes, interdental floss, interdental stimuli, toothbrushes, polishing tapes, water jet irrigator)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>6</p>
Week 5.	<p>LECTURES</p> <p>Hard dental deposits</p> <p>EXERCISES</p> <p>Use of oral hygiene auxiliary products (toothpaste, specialty types of toothpaste, mouthwash)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 6.	<p>LECTURES</p> <p>Supragingival calculus removal methods (hand instruments)</p> <p>EXERCISES</p> <p>Tooth brushing techniques (indications for different techniques, practical application)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 7.	<p>LECTURES</p> <p>Supragingival calculus removal methods (ultrasound, profi-jet)</p> <p>EXERCISES</p> <p>Teeth brushing training methodology (analytical and synthetic method, training stages)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 8.	<p>LECTURES</p> <p>Oral hygiene diagnostics and indices</p> <p>EXERCISES</p> <p>Patient motivation and remotivation for maintaining oral hygiene - an individual approach</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>

Week 9.	<p>LECTURES</p> <p>Basic oral hygiene products</p> <p>EXERCISES</p> <p>Hand instruments for calculus removal.</p> <p>Detection and removal of soft and hard dental deposits</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 10.	<p>LECTURES</p> <p>Oral hygiene auxiliary products</p> <p>EXERCISES</p> <p>Ultrasound instruments and technique for the removal of hard supragingival dental deposits. Combined removal technique with ultrasonic and hand instruments.</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 11.	<p>Tooth brushing techniques</p> <p>EXERCISES</p> <p>Filling in/recording patient dental record (Plaque index, Gigival index).</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 12.	<p>LECTURES</p> <p>Chemical agents for oral disease prophylaxis</p> <p>EXERCISES</p> <p>Filling in/recording patient dental record (debris index, calculus index, oral hygiene index)</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 13.	<p>LECTURES</p> <p>Motivation and remotivation of patients for effective oral hygiene maintenance, recalls</p> <p>EXERCISES</p> <p>tooth root desensitizers</p>	<p>3</p> <p>3</p>

	*PROFESSIONAL PRACTICE	6
Week 14.	<p>LECTURES</p> <p>Introducing proper oral hygiene maintenance techniques to patients with prosthetics, orthodontic appliances, dental implants and dental implant suprastructures</p> <p>EXERCISES</p> <p>Dental check-up. Assessment of oral hygiene and gingival health using indices. Remotivation of the patient and advising on the choice of oral hygiene products and techniques.</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>
Week 15.	<p>LECTURES</p> <p>Oral hygiene of hospitalized and patients with medical risk</p> <p>EXERCISES</p> <p>Dental check-up. Assessment of oral hygiene and gingival health using indices. Remotivation of the patient and advising on the choice of oral hygiene products and techniques.</p> <p>*PROFESSIONAL PRACTICE</p>	<p>3</p> <p>3</p> <p>6</p>

\*PROFESSIONAL PRACTICE: During the professional practice hours, the student fills in patient dental record (history), detects soft and hard supragingival dental deposits, performs mechanical oral hygiene procedures, removes supragingival hard dental deposits with hand instruments and ultrasound, educates patients for the application of different dental cleaning techniques and products.

Code: SFDHO22	Title of the course: <b>Oral health care and teamwork</b>		
Level: <b>Basic vocational studies</b>	Year: <b>I</b>	Semester: <b>II</b>	ECTS: <b>5</b>
Status: <b>Mandatory</b>			Course load: <b>105 15 + 45 + 45</b>
Course head:	Head of Department		
Requirements for the course: Define by the Law			
1. Aims of the course	Through theoretical and practical instruction, graduate oral hygienists will get an adequate knowledge in the field of oral health care, necessary for an efficient work in the patient care.  By applying scientific knowledge, graduate oral hygienists develop the skills of communication, teamwork, solving organizational problems, the use of information technology, research methodology while nurturing a spirit of humanity, commitment and ethics.		
2. Learning Objectives	The study of theoretical and practical principles of dental health care.  Education on teamwork principles and factors that affect team effectiveness.  Practical application of acquired knowledge and skills in the field of dental health care.		
3. Learning outcomes	After completing the course, students will be able to:  - Works according to the principles of dental care;  -Implements the process of dental health care and to keep medical records;  - Plans, organizes and implements diagnostic procedures;  -To collaborate with the dental healthcare team, at various levels of health care, and provide complete patient health care.  - Continue further continuous learning, related professions, and dental health care research.		
4. Teaching and learning process	Lectures, colloquiums, clinical practice and problem based learning (PBL)		
5. Assessment methodology	Students knowledge is assessed continuously throughout the course and at the end of course there is the final exam.		

	<p>Students are required to take all forms of assessment during the semester, during each form of assessment the student receives a certain number of points.</p> <p>Final exam - after passing all the colloquiums</p> <p>The final exam consists of a written essay and a practical exam with the patient.</p> <p>The final score will be formed on the basis of the following elements:</p> <p>Mandatory presence and activity in class makes up 30% of the grade (define by law)</p> <p>Colloquiums is scored as 20%.</p> <p>The final exam is written (4 questions based essay) and 50% of the total grade.</p> <p>Student can get a maximum of 100 points (100%)</p> <p>Scale grade:</p> <p>A(10)= 95-100%</p> <p>B(9)= 85-94%</p> <p>C(8)=75-84%</p> <p>D(7)=65-74%</p> <p>E(6)=55-64%</p> <p>F(5)= below 55%</p>
<p>Literatura: Seleced parts from the journals</p> <p>Lecture notes</p>	

### TEACHING PLAN:

Week	Content of the course	
Week 1.	<b>Lecture: Introduction, general principles of health and care</b>	1
	<b>Exercises: Practical work</b>	3
Week 2.	<b>Lecture: Levels of dental health care</b>	1
	<b>Exercises: Practical work</b>	3
Week 3.	<b>Lecture: Health care theories and definitions</b>	1
	<b>Exercises: Practical work</b>	3
Week 4.	<b>Lecture: Patient health care</b>	1
	<b>Exercises: Practical work</b>	3
Week 5.	<b>Lecture: Principles of health care planning and implementation</b>	1
	<b>Exercises: Practical work</b>	3
Week Week 6.	<b>Lecture: Types and methods of health care in dentistry</b>	1
	<b>Exercises: Practical work</b>	3
Week 7.	<b>Lecture: Oral Hygienist education – functions and competencies</b>	1
	<b>Exercises: Practical work</b>	3
Week 8.	<b>Lecture: Dental health team - activities of health care organization</b>	1
	<b>Exercises: Practical work COLLOQUIUM I</b>	3
Week 9.	<b>Lecture: Principles and techniques for the formation and successful functioning of dental teams</b>	1
	<b>Exercises: Practical work</b>	3
Week 10.	<b>Lecture: : Making and implementing decisions, resolving problems and conflicts within the team</b>	1

	<b>Exercises: Practical work</b>	3
Week 11.	<b>Lecture: Team work communication</b> <b>Exercises: Practical work</b>	1 3
Week 12.	<b>Lecture: Problems and barriers in teamwork</b> <b>Exercises: Practical work</b>	1 3
Week 13.	<b>Lecture: Team work motivation</b> <b>Exercises: Practical work</b>	1 3
Week 14.	<b>Lecture: The need to evaluate the effectiveness of the dental team</b> <b>Exercises: Practical work</b>	1 3
Week 15.	<b>Lecture: : The need for change and reconstruction teams</b> <b>Exercises: Practical work</b>	1 3

**Professional practice (45 hours) will be organized through interactive communication, case simulations, discussion and problem-based learning.**

Code:	Subject: <b>PUBLIC ORAL HEALTH</b>		
Level: <b>undergraduate</b>	Year: <b>I</b>	Semester:	ECTS credits:
Status: <b>compulsory</b>			Working hours total: <b>30+30</b>
<b>Responsible teacher:</b> Head of Department			
<b>Prerequisites:</b> Regulated by the principles for the studying vocational studies at the Faculty of Dentistry, University of Sarajevo.			
1. Course objectives:	To acquire basic knowledge about the goals and importance of public oral health.  The knowledge and understanding principles of dental public health; planning and evaluation of programs of oral health in population and measures for improving oral health.  To gain knowledge and to understand the principles of organization, functioning, and financing of the health system and health care.		
2. The aim of the course:	The purpose of the course is to enable a student to participate in a unique dental healthcare process with an aspect of preventive action to improve the oral health of the population.		
3. Learning outcomes	<b>Upon completion of this course, students will be able to:</b>  a) Identify various components and risks that could affect the oral health on a local and national level. b) Know and understand the strategies for the planning of preventive programs for oral health protection and to assess the advantages and disadvantages of different programs. c) Be familiar with the organization of dental health-care and health teams involved in the development of oral health care strategies. d) Plan and implement preventive measures for all ages and to be familiar with the implementation of preventive measures for persons with special needs and systemic illnesses. e) Know the concepts of financing and health insurance in Bosnia and Herzegovina f) Know the legislation, normative and standards in the process of organization of dental care.		
4. Teaching methods	The course is performed in the form of:  • Lectures ex cathedra for all students • Practice exercises- groups according to standard • Interactive learning for all students (during the lectures and practice exercises) • Preparing and presentation of term papers		

5. Assessment methods	<p><b>Grades are assigned based on the following criteria (see below):</b></p> <p>Mandatory attendance on lectures and practice exercise-30 points (a student will be considered to have met this criterion if he / she was reasonably absent at maximum of 20% of lectures).</p> <p>Written and successfully presented term paper -20 points.</p> <p>The Final examination comprised of multiple choice and short answer questions -50. points.</p> <p>A test is considered to be passed successfully if it has at least 55% of correctly answered questions.</p> <p>A prerequisite for the final exam is a successful presentation of term paper.</p> <p><b>Summary: 100</b> points is possible as a total for all course components</p> <p><b>The grading scale for this course consists of the standard scale below:</b></p> <p>A (10) = 95- 100 points</p> <p>B (9) = 85- 94 points</p> <p>C (8) = 75- 84 points</p> <p>D (7) = 65- 74 points</p> <p>E (6) = 55-64 points</p> <p>F below 55 points, minimum requirements have not been achieved.</p>
<p><b>6. Literature:</b></p> <p>1.Pine C., Harris R.: „COMMUNITY ORAL HEALTH“, Quintessence Publishing, UK Catalogue, 2007</p> <p>2. Murray J.J.: „PREVENTION OF ORAL DISEASES“, 4th Edition, Oxford University Press, Oxford, 2003.</p>	

## WEEKLY TEACHING PLAN

Week	Lectures	Working hours
Week 1.	Introduction to public oral health (history, development, relevance)	1
Week 2.	Introduction to epidemiology, epidemiology of infectious and non-communicable diseases.	1
Week 3.	Epidemiology of oral diseases, epidemiological studies of oral diseases.	1
Week 4.	The International Classification of Diseases, Injuries, and Causes of Death, application to dentistry and stomatology. Evidence in dentistry.	1
Week 5.	Strategies for the improvement of oral health, the levels of prevention and the differences between the three levels of disease prevention.	1
Week 6.	<i>Planning and monitoring of oral health care.</i>	1
Week 7.	Quality control , Quality Assurance and Quality Improvement in dentistry .	1
Week 8.	The principles of evidence-based dentistry.	1
Week 9.	Nutrition. Systemic and local effect of nutrition on tooth formation process, caries development, and periodontal disease. Cariogenic potential of foods and the methods for assessing the cariogenic potential of foods. Caries protective food. Dietary recommendations for the protection of oral health.	1
Week 10.	Social determinants of illness and inequalities in health. Oral health as a global burden. Preventive measures for public health.	1
Week 11.	Health habits, attitudes and behavior and their influence to oral and general health.	1
Week 12.	History of health education. Methods and model of health education. Oral health promotion. A motivation for preservation of oral health.	1
Week 13.	<i>Concept of oral health, disease and quality of life.</i>	1
Week 14	Laws and regulations in dental health care.	1
Week 15.	Institutions, health services, professional associations and their role in public oral health.	1
<b>END OF COURSE</b>		

<b>Week 17-18.</b>	The Final examination
<b>Week 19-20.</b>	The Final remedial examination

### WEEKLY PRACTICES PLAN

<b>Week</b>	<b>Lectures/Practices</b>	<b>Working hours</b>	<b>Professional practice</b>
1.	Course description, an introduction to the syllabus and the methodology of conducting classes and exams. Themes for the term paper.	2	6
2.	Assessment of general health of the population	2	6
3.	Epidemiological methods for assessing the oral health of the population.	2	6
4.	The International Classification of Diseases, Injuries, and Causes of Death, application to dentistry and stomatology. Evidence in dentistry.	2	6
5.	Oral health Indices	2	6
6.	Different data sources as a base for general health assessment.	2	6
7.	Questionnaire as an instrument for scientific research. Types of an questionnaires and a poll.	2	6
8.	Design of questionnaires and demonstration of their application.	2	6
9.	Dental office, Patient-centered dental care as a model for better quality of dental care. Patient rights and responsibilities and patient safety under dental care. Analysis of regulations related to dental health care.	2	6
10.	Principles of a correct nutrition of the population.	2	6
11.	Dietary assessment methods: dietary records (Food diary).	2	6
12.	Preparation and presentation of oral health educational material for different age groups.	2	6
13.	Preparation of promotive material for the protection and improvement of oral health for different age groups.	2	6
14.	Design of educational and community-based programs and strategies for the protection of oral health of different age groups.	2	6

15.	Problem based learning (PBL), preparation of individual preventive measures for the specific patient (patients of different age groups, elderly patients, medically compromised patients and patients with special needs).	2.	6
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Code: SFDH024	<b>ETHICS AND DEONTOLOGY IN DENTAL MEDICINE</b>		
Level: <b>Basic professional studies</b>	Year: <b>I</b>	Semestar: <b>II</b>	ECTS credits: <b>4</b>
Status: <b>Obligatory</b>			Total hours: <b>90 (30L+30E+30S)</b>
<b>Responsible teacher:</b>	Head of Department		
Conditions for attending to lectures are in relation with the rules for the first level of studying in the high educational system in University of Sarajevo			
<b>1. Objectives of the course</b>	Objective of the course is to familiarize students with ethical and professional obligations of healthcare professionals, patient's rights, types of responsibilities of healthcare professionals.		
<b>2. Purpose of the course</b>	Purpose of the course is to accept basic criteria of medical ethics and legal responsibilities of healthcare professionals.		
<b>3. Learning outcomes</b>	Upon completion of the course, student should: <ul style="list-style-type: none"><li>- know the most important determinants of the healthcare professional - patient relationship</li><li>- know which laws and regulations regulate dental practice</li><li>- recognize the elements of disciplinary and criminal responsibility of healthcare professionals</li></ul>		
<b>4. Learning methods</b>	<ul style="list-style-type: none"><li>- Interactive lectures</li><li>- Practical excercises – work in small gropus, simulations of practical cases, finding medical law sources</li><li>- Seminar</li></ul>		
<b>5. Knowledge assessment methods</b>	Final exam is in the form of test, containing 20 questions. Student's pre-exam requirements are awarded with a maximum of 50 points in the final grade structure, as follows: <ul style="list-style-type: none"><li>- attendance and activities at lectures, 20 points to the maximum</li><li>- practical exercises, 20 points to the maximum</li><li>- seminar work, 10 points to the maximum</li><li>- test, 50 points to the maximum</li></ul> Upon completion of the semester, the student can win a maximum of 100 points. The total number of points scored is translated into the final score:  10 (A) outstanding, without fail or with minor errors 95-100  9 (B) above the average, with occasional errors 94-85  8 (C) average, with noticeable errors 75-84  7 (D) generally good, but with significant deficiencies 74-65  6 (E) meets the minimum criteria 55-64		

	5 (F, FX) does not meet the minimum criteria <55 5 (FX) does not meet the minimum criteria <50
6. References:  <b>Obligatory:</b> Lectures- notes-Hands-out ;  Williams JR. Dental Ethics Manual. France: FDI World Dental Federation, 2007.  Key Texts and/or other learning materials  Selected chapters from journals and proceedings.	

### COURSE IMPLEMENTATION PLAN:

Week	Teaching methods	Number of hours
1.	<b>Lecture:</b> The idea and significance of dental ethics; Relationship between ethics, bioethics, medical law and deontology.	2
	<b>Practical exercise:</b>	2
	<b>Seminar: *</b>	2
2.	<b>Lecture:</b> Professional and ethical duties of health professionals, relationship towards patient, towards other healthcare professionals, and ethical duties towards community.	2
	<b>Practical exercise:</b>	2
	<b>Seminar: *</b>	2
3.	<b>Lecture:</b> Basic and derived principles of medical ethics; principle of autonomy, harmlessness, charity, and justice.	2
	<b>Practical exercise:</b>	2
	<b>Seminar: *</b>	2
4.	<b>Lecture:</b> Basic rights, duties and responsibilities of the patient: the right to information, the right to consent / refuse treatment, the right of access to documentation, the right to choose a doctor, the right to protection of medical data	2
	<b>Practical exercise:</b>	2
	<b>Seminar: *</b>	2
5.	<b>Lecture:</b> Legal, ethical and clinical aspects of informed consent in dental practice.	2
	<b>Practical exercise:</b> <b>Seminar: *</b>	2

		2
6.	<b>Lecture:</b> Complications and errors in dental practice. Iatrogenia, malpractice, medical error <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
7.	<b>Lecture:</b> Ethical dilemmas in dental practice. <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
8.	<b>Lecture:</b> Types and importance of dental documentation <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
9.	<b>Lecture:</b> Laws and regulations regulating dental practice <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
10.	<b>Lecture:</b> Types of responsibilities of healthcare professionals: disciplinary, civil, and criminal. Avoiding of professional mistakes. <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
11.	<b>Lecture:</b> Big bioethical issues of modern medicine <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
12.	<b>Lecture:</b> Ethical and legal aspects of medical research <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
13.	<b>Lecture:</b> Principles of protection against patient complaints. <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2
14.	<b>Lecture:</b> The role and importance of dental documentation in forensic expertise. <b>Practical exercise:</b> <b>Seminar:</b> *	2  2 2

15.	<b>Predavanje:</b> Interactive repetitorium	2
	<b>Practical exercise:</b>	2
	<b>Seminar: *</b>	2
16.		
17.	Final exam	
18. – 20.	Exam- the second term	

**Seminars:\*** Throughout the topics of the seminar papers, the entire theoretical content of the course is covered

Code: SFDHI15	Name of the subject: <b>CELL BIOLOGY AND ORAL HISTOLOGY</b>		
Level: basic vocational studies	Year: <b>I</b>	Semester: <b>II</b>	ECTS credits: <b>3</b>
Status: <b>elective</b>			<b>Total hours: 75 (30+30+15)</b>
Faculty advisor:	Head of Department		
Requirements for taking the course: Requirements are compliant with the Rule book on studying at the first cycle of studies at the higher education institutions of the University in Sarajevo			
1. Course objectives	<ul style="list-style-type: none"><li>- Familiarising the student with the structure and function of the human cell, tissue and organs.</li></ul>		
2. Purpose of the course	The purpose of the course is creating possibilities for the student, based on their acquired knowledge, to easily attend future clinical courses, where they will learn about pathological changes in oral tissue and dental organ.		
3. Learning outcomes	After completing the course, the student will be qualified to: <ul style="list-style-type: none"><li>- Apply the technique of microscoping with the aim of identification of human cell, tissue and organ structure</li><li>- Understand basic principles of histogenesis and organogenesis</li><li>- Explain the function of hereditary basis in biochemical and morphological cell features</li></ul>		
4. Teaching methods	Interactive lectures Practical exercises (practical work in smaller groups, accompanies the topic covered in lectures content-wise)P, professional practice		
5. Methods of learning assessment	<p>The exam consists of practical and theoretical part.</p> <p>In the practical part, the student is assigned to diagnose the tissue on a histological preparation, and then to diagnose the anomaly on an extracted natural tooth with developmental anomaly. If the student passes the practical part of the exam, they are eligible to take the theoretical part. Practical part of the exam is eliminatory.</p> <p>Theoretical part of the exam is taken in writing, in the form of a test that consists of 10 questions. A passed exam is every test that contains at least 55% of correct answers. Final exam makes up 50% of the total grade.</p> <p>Regular lecture attendance makes up 25% of the total grade.</p> <p>Regular practice attendance makes up 25% of the total grade.</p> <p>After completing the semester, a student can receive a maximum of 100 points. According to the above mentioned, the grading scale is as follows:</p> <p>&gt;55 points – grade 5</p>		

	55-64 points – grade 6 65-74 points – grade 7 75-84 points – grade 8 85-94 points – grade 9 95-100 points – grade 10
6. Literature: Obligatory: 1. Avery JK, Chiego DJ. Basics of oral histology and embryology – clinical approach. Datastatus, Belgrade, 2011. – Selected chapters 2. Vesna Lačković, Ivan R. Nikolić, Vera Todorović "Basic and oral histology and embriology" Data Status Beograd - Selected chapters  Supplementary: 1. Berkowitz BKB, Holland GR, Moxham BJ. Oral Anatomy, Histology and Embriology. Mosby, St. Louis, 2002.	

### DETAILED PLAN OF THE SYLLABUS

Week	Form of teaching and curriculum	Number of hours
Week 1	<b>Lecture:</b> Basics of preparing histological preparation and microscoping	2
	<b>Practice:</b> Familiarizing with the histological laboratory	2
Week 2	<b>Lecture:</b> Basic cell properties. Plasmalemma	2
	<b>Practice:</b> Preparing and microscoping of routine histological preparation	2
Week 3	<b>Lecture:</b> Cellular organelles: types of structure and functions	2
	<b>Practice:</b> Cellular organelles in electronic microscope	2
Week 4	<b>Lecture:</b> Cell life cycle	2
	<b>Practice:</b> round cell (SM) pyramidal cell (SM)	2
Week 5	<b>Lecture:</b> Basic features of embryonic development	2
	<b>Practice:</b> Embryonic and fetal period of development	2
Week 6	<b>Lecture:</b> Tissue classification. Epithelial tissue.	2
	<b>Practice:</b> Covering and glandular epithelia	2
Week 7	<b>Lecture:</b> Connective tissue	2
	<b>Practice:</b> Selected histological preparations of connective tissue	2
Week 8	<b>Lecture:</b> Muscle and nerve tissue.	2
	<b>Practice:</b> Selected histological preparations of muscle and nerve tissue	2
Week 9	<b>Lecture:</b> Histological features of the oral cavity: lips, cheeks, palate	2
	<b>Practice:</b> Analysis of histological preparations of the lip, cheek and palate	2
Week 1	<b>Lecture:</b> Histological features of the oral cavity: tongue, salivary glands, tonsils	2

	<b>Practice:</b> Analysis of histological preparations of the tongue, salivary glands and tonsils	2
Week 11	<b>Lecture:</b> Organum dentale; Tissues of the dental organ – ectodontium; Histophysiological features of tooth enamel; Submicroscopic enamel structure – enamel prisms, structural lines in the enamel; The enamel-dentine junction; Fluorine and enamel – remineralisation <b>Practice:</b> Observation and analysis of selected histological enamel preparations	2
Week 12	<b>Lecture:</b> Endodontium – Histophysiological features of dentine – physical and chemical dentine properties; Submicroscopic dentine structure – dentinal tubule and its contents; Dentine classification according to structure and time of creation; Histophysiological features of dental pulp; Relations and connections of the pulp and other tissues; Biology of dental pulp (age-related and regressive changes) <b>Practice:</b> Observation and analysis of selected histological preparations of the dentine and pulp	2
Week 13	<b>Lecture:</b> Periodontium – Histophysiological features of mature periodontium – periodontal tissues; Cement – structure, physical and chemical properties; Fibres and cells of the periodontal ligament; Physiology of periodontal ligament; Histophysiology of the alveolar bone; Histophysiology of the gingiva <b>Practice:</b> Observation and analysis of selected histological preparations of cement, gingiva, periodontium and alveolar bone	2
Week 14	<b>Lecture:</b> Development of the dental organ; Physiological and morphological stages of development of the dental organ; Billets of a dental germ; Development of the root of a tooth <b>Practice:</b> Observation and analysis of histological preparations of developmental stages of organum dentale	2
Week 15	<b>Lecture:</b> Irregularities of tooth development, etiology, pathogenesis. Developmental tooth anomalies and their connection with the changes in physiological processes of tooth development. <b>Practice:</b> Observation and analysis of dental anomalies in natural teeth	2
Week 17	Final exam	
Week 19-20	Remedial final exam	

Code SFDHI25	Name of the course subject: <b>ENGLISH LANGUAGE</b>		
Level: basic vocational studies	Year: <b>I</b>	Semester: <b>II</b>	ECTS credits: <b>3</b>
Status: <b>elective</b>			Total hours: <b>75</b> <b>(30L + 45P)</b>
Faculty advisor:	Head of Department		
Requirements for taking the course: Requirements for taking the course are regulated by the Rule book on studying at the I cycle of studies at the University of Sarajevo			
1. Course objectives	Understanding specialized texts from the domain of dentistry. Preparation of students for individual presentations as well as individual activities of writing summaries and academic articles.		
2. Purpose of the course	Determining basic vocabulary, determining and revising grammar structures, adopting pronunciation of English words that originate directly from Latin or Greek language, determining the meaning of suffixes and prefixes, discussion on vocational topics, practicing writing summaries and biographies. Functional: developing the ability of inferring and critical thinking, developing the ability of individual expression as well as the ability to apply acquired knowledge. Educational: achieving communication and interaction, achieving motivation to speak in English language.		
3. Learning outcomes	After completing the course and passing the exam students comprehends basic English expressions related to oral hygiene, teeth morphology, preventive dentistry, dental team and clinical work. They are also qualified to be able to: <ul style="list-style-type: none"><li>• participate in spoken communication with fellow students, dentists, lecturers;</li><li>• attend classes in English language and actively take part in them;</li><li>• read scientific literature with understanding;</li><li>• participate in formal and informal written communication, and compose summaries and reports.</li></ul>		
4. Teaching methods	<ul style="list-style-type: none"><li>• lectures,</li><li>• language practice,</li><li>• auditory methods,</li><li>• translating original texts from dentistry,</li><li>• abstracts from journals of papers from conferences and conventions.</li></ul>		
5. Methods of learning assessment	The exam consists of final test which makes up 50% of the final grade. In order to have a passing grade a student should have 60% correct answers. Regular class attendance and activity during lessons makes up 50% of the grade. Final grade is formed in the following way: <55 points – grade 5 55-64 points – grade 6 65-74 points – grade 7 75-84 points – grade 8 85-94 points – grade 9 95-100 points – grade 10		

6. Literature:	<p>Obligatory: Lidija Štefić, English in Dentistry, Faculty of Dentistry at the University in Zagreb</p> <p>Supplementary: Maher, C.J. (1995) International Medical Communication in English, Edinburgh University Press, Edinburgh</p> <p>Tanay, V. (2003) Croatian-English dictionary of medical terminology and English-Croatian dictionary of medical terminology with pronunciation, Medicinska naklada, Zagreb</p> <p>Ilić, D. English-Serbian dictionary of dentistry, Faculty of Dentistry Belgrade, 2007.</p>
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#### DETAILED PLAN OF THE SYLLABUS

Week	Form of teaching and curriculum	Number of hours
Week 1	<b>Lecture:</b> Introducing the students with the curriculum and work methods. Familiarizing with the students' level of English language.	2
	<b>Practice:</b> Visiting the dentist. Routine check-up	3
Week 2	<b>Lecture:</b> The Digestive System, The Mouth, Lips and Cheeks	2
	<b>Practice:</b> Routine Filling, The dentist's explanation of the procedure	3
Week 3	<b>Lecture:</b> Gums and Teeth, The Pharynx, Salivary Glands	2
	<b>Practice:</b> Exercises, answer the questions, fill in the correct term, give the antonym of each term, select one correct answer for each of the following multiple choice questions, translate into English	3
Week 4	<b>Lecture:</b> The Teeth, Tooth Morphology	2
	<b>Practice:</b> Words to remember	3
Week 5	<b>Lecture:</b> The Morphology of Permanent Teeth – The Incisors The Canines, The Premolars, The Molars	2
	<b>Practice:</b> Exercises, Fill in the correct term, give the antonyms of the following words, provide plural forms for the following nouns (Latin origin nouns), provide the adjective form for the following nouns, put the following sentences into the Passive form	3
Week 6	<b>Lecture:</b> Dental Caries, Theories of Caries, Mutans Streptococci and Caries	2
	<b>Practice:</b> Answer the following questions, use the correct verb form in the following sentences, make sentences using the following phrases	3
Week 7	<b>Lecture:</b> Lactobacilli and Caries, Physical and Microscopic Features of Incipient Caries	2
	<b>Practice:</b> Give the antonyms of the following words, provide the noun for the following adjectives, provide the plural form of the following nouns	3
Week 8	<b>Lecture:</b> Prevention of Caries, Water Fluoridation	2
	<b>Practice:</b> Write a summary: Dental Caries	3

Week 9	<b>Lecture:</b> Benefits of Water Fluoridation, Prevention of Root Caries <b>Practice:</b> Answer the following questions, At the dentist – Bridge Work	2 3
Week 10	<b>Lecture:</b> Problems of Pain in Dentistry <b>Practice:</b> Bleeding Gums, the doctor's explanation, discussion	2 3
Week 11	<b>Lecture:</b> The Subjective Symptoms (Given by Patients) <b>Practice:</b> Orthodontics; Explain to a child what orthodontic treatment is	2 3
Week 12	<b>Lecture:</b> Periondontology, The Role of Dental Plaque in the Etiology and Progress of Inflammatory Periodontal Disease <b>Practice:</b> New Dentures, Angular Cheilitis, Complete the following table, Fill in the gaps, Finish the sentences	2 3
Week 13	<b>Lecture:</b> The Periodotium, The Gingival Sulcus <b>Practice:</b> Most Commonly Seen Diseases	2 3
Week 14	<b>Lecture:</b> The Developing Gingival Lesion <b>Practice:</b> Discussion, at the dentist	2 3
Week 15	<b>Lecture:</b> Periodontal Microflora, Host Defences, Primary Preventive, Dentistry Implications <b>Practice:</b> Revision, Preparation for the final exam	2 3
Week 17	Final exam	
Week 18-20	Remedial final exam	

Code: SFDHI26	Name of subject: <b>PHOTOGRAPHY IN DENTAL MEDICINE</b>		
Study programme: <b>basic vocational studies</b>	Year: <b>I</b>	Semester: <b>II</b>	ECTS credits: <b>3</b>
Status: <b>optional</b>			No. Of hours: 75
Course leader:	Head of Department		
Prerequisites for course attendance are regulated by the Rules of Studies in establishments of higher education at Sarajevo University			
1.Objectives of the course:	Educate the student to master basic principles and techniques taking, processing, analyzing and storing photographs.		
2.Purpose of the course:	The purpose of the course is to familiarize the student with the basic principles making extraoral and intraoral photographs as well as modes processing and improving the quality of the recorded material. The purpose is also to point out the importance of photography that she has in dentistry documentation and education.		
3.Learning outcomes:	At the end of the class the student should:  • Master the basic principles and techniques of recording  intraoral and extraoral sets of photographs  • Master the basics of computer photo processing and  archiving of recorded material		
4.Learning methods:	- lectures  - practical exercises,  - professional practice		
5.Evaluation methods:	The final exam consists of a test that makes up 50% of the total grade. A passed test will be considered the one that has the least test 55% correct answers. Regular attendance and attendance at lectures account for 25%  total marks. Regular attendance and exercise activities make up 25% of the total grade. At the end of the semester, a student can earn a maximum of 100 points.  Rating scale evaluation:  10 (A) 95-100 Excellent without errors or with minor errors		

	<p>9 (B) 85-94 Above the average, with a few errors</p> <p>8 (C) 75-84 Average with noticeable errors</p> <p>7 (D) 65-74 Generally good, but with significant flaws</p> <p>6 (E) 55-64 Satisfies the minimal criteria</p> <p>5 (F) &lt;55 Does not satisfy minimal criteria</p>
6.Literature:	<p>1. Stefanović N, Glišić B. Fotografija u stomatologiji. Dostupno na <a href="http://www.stomf.bg.ac.rs/upload/documents/students/KOMP_glisic_201516.pdf">http://www.stomf.bg.ac.rs/upload/documents/students/KOMP_glisic_201516.pdf</a></p> <p>2. Bengel W. Mastering Digital Dental Photography. 1. izd. Quintessence Publishing (IL);</p>

### SUBJECT IMPLEMENTATION PLAN:

Week	Course load	Number of hours
1.	<b>Lecture:</b> Introductory notes on the subject, Photography as a medium	2
	<b>Exercises:</b> Introductory with basic photography equipment	2
2.	<b>Lecture:</b> The purposes of dental photography in modern dentistry	2
	<b>Exercises:</b> Choosing a camera, lens and flash for dental use photo	2
3.	<b>Lecture:</b> Basic principles of photography	2
	<b>Exercises:</b> Basics of operating with camera	2
4.	<b>Lecture:</b> The benefits of digital photography; Recording techniques with digital camera;	2
	<b>Exercises:</b> The importance of standardizing clinical photographs	2
5.	<b>Lecture:</b> Accessories for Dental Photography: retractors, mirrors, and contrasters	2
	<b>Exercises:</b> Getting to know and putting into practice accessories for photography.	2

6.	<b>Lecture:</b> Anthropometric points on the face; facial photogrammetry <b>Exercises:</b> Positioning the patient when taking extraoral photographs	2 2
7.	<b>Lecture:</b> Types of Extraoral Photos <b>Exercises:</b> Taking an face, profile and semi-profile photos	2 2
8.	<b>Lecture:</b> A standard set of intraoral photographs <b>Exercises:</b> Frontal occlusion, lateral incisal step, left and right lateral imaging, occlusal imaging of the upper and lower jaws	2 2
9.	<b>Lecture:</b> Photographing studio models and small objects <b>Exercises:</b> Photographing reflective areas and objects with low light contrast	2 2
10.	<b>Lecture:</b> Photo of a smile; Photographing of skin and mucous membranes <b>Exercises:</b> Analysis and processing of captured photographs	2 2
11.	<b>Lecture:</b> Intraoral Camera, <b>Exercises:</b> Dental examination with an intraoral camera	2 2
12.	<b>Lecture:</b> Digital photo editing programs <b>Exercises:</b> Digital photography processing	2 2
13.	<b>Lecture:</b> Photographing and scanning radiographs <b>Exercises:</b> Archiving of recorded material	2 2
14.	<b>Lecture:</b> Specificities and importance of photography in cosmetic dentistry <b>Exercises:</b> Send digital photos electronically	2 2
15.	<b>Lecture:</b> The importance of photography in dental forensics <b>Exercises:</b> Digital photography processing and preparation of the presentation	2 2
17.	<b>Final exam</b>	

Independent professional practice is foreseen of 15 hours.

Code: SFDHO25	Name of the course subject: <b>Individual professional practice I</b>		
Level: <b>Basic vocational studies DH</b>	Year: <b>I</b>	Semester: <b>II</b>	ECTS credits: <b>10</b>
Status: <b>compulsory</b>			Total hours: <b>200</b>
Faculty advisor:	Head of Department		
Requirements for taking the course: Regulated by the Rule book on studying at the I cycle of studies at the University of Sarajevo			
1. Course objectives	Practical work and application of skills acquired during theoretical and practical lessons, seminars and half-term exams that the students attended during the previous year of study.		
2. Purpose of the course	Qualifying students with basic knowledge and skills from the area of dental practice and dental materials, oral health, oral hygiene and ethics.		
3. Learning outcomes	After completed individual professional practice students will, with additional application of acquired knowledge and skills, be qualified to: <ul style="list-style-type: none"><li>- define the significance of oral hygiene in maintaining oral health,</li><li>- educate a patient on the significance of oral hygiene from the standpoint of oral diseases prevention and maintaining good oral health,</li><li>- recommend various techniques and substances for cleaning teeth to their patients,</li><li>- apply different methods for identification and removal of soft and hard dental plaque,</li><li>- organise patient care in primary protection,</li><li>- cooperate within dental team,</li><li>- define public health risk factors for general and oral health,</li><li>- implement public health measures of prevention of oral diseases, non-infectious and infectious diseases,</li><li>- apply, working within a team, programmes of health education with the aim of prevention of oral diseases.</li></ul>		
4. Teaching methods	During professional practice the student will: <ul style="list-style-type: none"><li>- fill out dental chart and take medical history</li><li>- identify soft and hard supragingival dental plaque</li><li>- mechanically remove soft plaque</li><li>- remove hard supragingival dental plaque using manual and mechanical instruments</li><li>- demonstrate to patients various techniques of brushing teeth using basic and additional substances</li><li>- organise health care in primary prevention of oral diseases</li><li>- implement measures of primordial and primary prevention in the office of dental practice</li><li>- evaluate oral health of groups of patients</li></ul>		

	<ul style="list-style-type: none"> <li>- create and applies questionnaires for the assessment of the condition of patients' oral health</li> <li>- participate in creating a proposal of health education programmes of oral health protection for various groups of population</li> <li>- give advice on proper nutrition, especially from the standpoint of oral health.</li> </ul>
5. Methods of learning assessment	<p>Summer professional practice takes place at the Clinics of the Faculty of Dentistry according to the programme and with the control of faculty advisor, mentor, co-mentor or expert from practice in charge (report on completed professional practice is filled out by the mentor, co-mentor or expert from practice, and the number of ECTS credits in the index is filled out by the faculty advisor). Teacher, in charge of professional practice, creates the plan of students' summer professional practice and checks the register of regular attendance and students' activity, and the student keeps a journal of professional practice where they note the activities they performed. After completed professional practice student does not receive a grade, but is obligated to complete it in order to attain a stipulated number of ECTS credits.</p>

## SECOND YEAR

Code:	Course title: <b>Preventive dentistry</b>		
Study level: basic – professional, undergraduate	Year:	Semester:	ECTS score:
Status: Compulsory			Total hours: <b>60+60 +90</b>
Professor in charge	Head of Department		
Entry requirements: Regulated by the rules of the University in Sarajevo. Exams from previous years passed.			
1. Course objectives	To realize and understand oral health promotion, etiology, pathogenesis and prevention of oral diseases, and the role of dental hygienist in patient care for protection and promotion of oral health in individuals and in community.		
2. Course purpose	<p>To capacitate students to realize, understand and use methods for diagnosis and exclusion of risks for oral diseases appearance, and to overwhelm the tests for risk assessment.</p> <p>To capacitate students to give the patients proper advices about nutrition, oral hygiene maintenance, and prevention of dental traumas, oral lesions and temporomandibular joint diseases.</p> <p>To capacitate students for autonomous implementation of preventive measures: professional removal of dental plaque and calculus, application of highly concentrated fluorides, fissure sealing, making of mouthguards, and to be capable of using interceptive orthodontic measures.</p> <p>To capacitate students for recognizing of normal growth and development, from the conception until the end of adolescence, and to be capable to perceive the deviations in this complex process as well as to find out the causes of these deflections.</p> <p>To capacitate students for performing of clinical treatments in order to solve above mentioned conditions, with the application of modern dental materials and treatment techniques.</p>		

3. Course outcomes	After lectures and practicals students will be capable to autonomously plan and conduct preventive measures for patients of all ages, and to be introduced in implementation of preventive measures in medically compromised and disabled patients.
4. Learning methods	<p>The course content will be presented in form of:</p> <ul style="list-style-type: none"> <li>• - ex cathedra lectures for all students;</li> <li>• - practical classes - clinical exercises for students within groups, according to standards;</li> <li>• - consultations;</li> <li>• - individual work of students;</li> <li>• - seminars (problem based learning) in a form of interactive studying. .</li> <li>• individual professional student training- individual student work at Clinic out of group classes.</li> </ul> <p>Students can have consultations in the department from Monday to Friday from 12:00-14:00</p>
5. 5. Conditions for taking the exam	<p>During the course period the presence of students to every form of learning method will be noted, which are compulsory. It is allowed to be absent from 10% of total number of classes of each of learning methods forms (separately one from another form) in order that the presence to the course could be verified by signature of the professor in charge at the end of each semester. If there are extraordinary justified reasons for absence, students are allowed to make up to 20% missed classes out of total number of classes, followed by written proof for these actions (shorter illness, student activities in scientific and other kind of projects, workshops, meetings, family reasons, for example).</p> <p>If the student absence from the total number of classes of this course is higher than it is allowed (separately for each of the learning forms), the course presence could not be verified by a signature from the professor in charge. These students have no right to take the final exam at the end of semester.</p>
6. Methods of student knowledge assessment	<p>Students are able to score maximally 100 points at the end of the semester, after evaluation of their achievements from all kind of learning forms during the course period.</p> <p>Final grade will be based on further elements:</p> <p>The course attendance is maximally 10 points.</p>

	<p>Seminar in written form with oral presentation is maximally 20 points.</p> <p>Clinical practicum for group exercises and individual training is maximally 20 points.</p> <p>Final exam that covers all course content is maximally 50 points.</p> <p>Final exam will be organized in the 17th-18th week in oral form. The exam re-take for students who do not satisfy at the first exam will be organized form the 19th to 20th week of the semester.</p> <p>After scoring all the activities during the IX and X semester, and after passing all exams, students could obtain one of the following grades:  A (10) = 95-100 points;  B (9) = 85-94 points;  C (8) = 75-84 points;  D (7) = 65-74 points;  E (6) = 55-64 points;  F, FX (5) = under 55 points, which means that the exam is not passed.</p>
<p>Required literature:</p> <ol style="list-style-type: none"> <li>1. Harris NO, Garcia-Godoy FG, Nathe CN. Primary Preventive Dentistry. Eighth edition. Pearson; 2013.</li> <li>2. Dean JA, Avery DR, McDonald RE. Dentistry for the Child and Adolescent. Ninth edition. St. Louis: Mosby; 2011.</li> <li>3. Koch G, Poulsen S. Pediatric Dentistry. A Clinical Approach. Second edition. Wiley-Blackwell; 2009.</li> </ol> <p>Recommended literature:</p> <ol style="list-style-type: none"> <li>4. Casamassimo PS, Fields HW, McTigue DJ, Nowak AJ. Pediatric Dentistry. Infancy through adolescence. Fifth edition. St. Louis: Elsevier; 2013.</li> <li>5. Cameron AC, Widmer RP. Handbook of Pediatric Dentistry. Fourth edition. St. Louis: Mosby; 2013.</li> </ol>	



	<p><b>Practicals:</b> Diagnostics of health of oral mucous membranes, periodontal tissues (appearance, color, shape, size, texture, periodontal indexes), teeth (dentition type, number, shape, size, arrangement, color, developmental disturbances, DMFT). Assessment of quantity and quality of secreted saliva, buffer capacity. Mutual clinical examinations between students.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2
		3
Week 3	<p><b>Lecture:</b> Biological mechanisms for the protection of the oral cavity.</p> <p><b>Practicals:</b> Diagnostics of health of oral mucous membranes, periodontal tissues (appearance, color, shape, size, texture, periodontal indexes) and teeth (dentition type, number, shape, size, arrangement, color, developmental disturbances, DMFT). Assessment of quantity and quality of secreted saliva, buffer capacity. Mutual clinical examinations between students.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2
		2
		3
Week 4	<p><b>Lecture:</b> Dental plaque and oral microbial flora.</p> <p><b>Practicals:</b> Methods of dental plaque detection and removal. Evaluation indices of oral hygiene status. Mutual clinical examinations between students and/or examinations of the patients.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2
		2
		3
Week 5	<p><b>Lecture:</b> Nutrition. Systemic and local effects. The cariogenic potential of food and its measurement. Carbohydrates. Artificial sweeteners. Caries protective action of food. Dietary recommendations.</p>	2

	<p><b>Practicals:</b> Nutrition diary, motivation for proper nutritive habits and correction of mistakes. Mutual clinical examinations between students. Food diary.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2
		3
Week 6	<p><b>Lecture:</b> Dental caries. Etiology and pathogenesis of dental caries. Macroscopic and microscopic characteristics of the early carious lesion (reversible stage). Dental erosions, etiology, prevention.</p> <p><b>Practicals:</b> Demonstration of a detailed examination of hard dental tissues status, clinical and radiological diagnostics of early carious lesions, as well as of dental erosions and abrasions. Demonstration of determination of microorganisms in saliva. Mutual clinical examinations between students and/or examinations of the patients. Food diary assessment.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2
		2
		3
Week 7	<p><b>Lecture:</b> Etiology, pathogenesis and diagnostics of periodontal diseases, methods for risk assessment for the onset of the periodontal diseases.</p> <p><b>Practicals:</b> Demonstration of gingival and periodontal indexes. Evaluation of gingival and periodontal status: Gingival Index (Loe and Silness, 1963), Simplified Gingival Index (Lindhe, 1983), Papilla Bleeding Index (Saxer and Muhleman, 1975), Community Periodontal Index of Treatment Needs (CPITN - WHO). Calculating of percentages of gingivitis existence per patient based on assessment by Simplified Gingival Index. Mutual clinical examinations between students.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2
		2

		3
Week 8	<p><b>Lecture:</b> Prevention of dental trauma.</p> <p><b>Practicals:</b> Analysis and comparison of condition and habits in patients obtained by taking history and clinical examination (oral hygiene status, DMFT, salivary characteristics and periodontal status). Mutual clinical examinations between students and/or examinations of the patients. Prevention of dental trauma education and counseling.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	<p>2</p> <p>2</p> <p>3</p>
Week 9	<p><b>Lecture:</b> Epidemiology of oral diseases, oral health indices for oral health monitoring.</p> <p><b>Practicals:</b> Clinical history and examination of patients, diagnostics of oral health status, risk assessment, patient individual preventive treatment planning.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	<p>2</p> <p>2</p> <p>3</p>
Week 10	<p><b>Lecture:</b> Oral hygiene - mechanical and chemical devices and agents for plaque control.</p> <p><b>Practicals:</b> Demonstration of the maintenance of proper oral hygiene using mechanical and chemical devices and agents. Teeth brushing techniques, proper use of dental floss and interdental brushes. Training and motivation of patients for proper continuous maintenance of oral hygiene. Implementation of mutual plaque removal techniques between students and/or in patients, and training for proper oral hygiene maintenance techniques.</p>	<p>2</p> <p>2</p>

	<p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	3
Week 11	<p><b>Lecture:</b> Fluorides in caries prevention. General characteristics. Mechanism of action. Endogenous and exogenous fluoridation methods. Toxicity of fluorides.</p> <p><b>Practicals:</b> Demonstration of local application of fluorides (solutions, gels, varnishes), prescription of fluorides. Clinical history and examination of patients, diagnostics of oral health status, removal of soft and hard dental deposits, instructions for oral hygiene maintenance, local fluoridation.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2  2    3
Week 12	<p><b>Lecture:</b> Fissure sealing as a prophylactic measure. Indications and contraindications. Techniques and materials.</p> <p><b>Practicals:</b> Demonstration of fissure sealing on a patient or model. Clinical history and examination of patients, diagnostics of oral health status, removal of soft and hard dental deposits, instructions for oral hygiene maintenance, local fluoridation, fissure sealing, treatment of early carious lesions.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2  2   3
Week 13	<p><b>Lecture:</b> Oral health education and counselling. Methods of individual and group counselling for optimal oral health.</p> <p><b>Practicals:</b> Preparation and practical performance of individual and group oral health education.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2   2

		3
Week 14	<p><b>Lecture:</b> Oral health in pregnancy. Preventive and prophylactic treatment in pregnancy. Oral health education and counselling in pregnancy.</p> <p><b>Practicals:</b> Individual and group oral health counselling.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2  2  3
Week 15	<p><b>Lecture:</b> Preventive measures for specific patient groups (people with mental and physical disabilities and disorders, medically compromised patients, pregnant women).</p> <p><b>Practicals:</b> Clinical history and examination of patients, diagnostics of oral health status, removal of soft and hard dental deposits, instructions for oral hygiene maintenance, local fluoridation, fissure sealing, treatment of early carious lesions.</p> <p><b>Individual professional student training:</b> Individual hands-on work at Clinic to reinforce practical skills in preventive dentistry.</p>	2  2  3
Week 17-18	Final exam	
Week 19-20	Final exam/retake	

Code: SFDHO32	Name of the course subject <b>INTERNAL MEDICINE</b>		
Level: Basic vocational studies	Year: <b>II</b>	Semester: <b>III</b>	ECTS credits: <b>7</b>
Status: <b>compulsory</b>			Total hours: <b>180</b> (45+45+90)
Faculty advisor:	Head of Department		
Requirements for taking the course: Compliant with the Rule book on studying at the first cycle of studies at the higher education institutions at the University in Sarajevo			
1. Course objectives	Familiarising with the basic knowledge in the domain of internal medicine		

2. Purpose of the course	<p>After successfully completing the course and passing the exam, the student will be able to:</p> <ul style="list-style-type: none"> <li>• understand the etiopathogenesis of internal organs diseases</li> <li>• recognize symptoms and clinical manifestations of these diseases</li> <li>• conduct a practical examination of a patient.</li> </ul>
3. Learning outcomes	<p>After completing the course, student is qualified to:</p> <ul style="list-style-type: none"> <li>• get medical history</li> <li>• examine a patient</li> <li>• know diagnostic procedures</li> <li>• know procedures of tending to patients in medical emergencies</li> </ul>
4. Teaching methods	<p>Interactive lectures Practical exercises (accompany theoretical part of the course) Seminar paper</p>
5. Methods of learning assessment	<p>After completing the course student takes the final exam, in the form of a test, which consists of 20 questions. The exam is considered passed if there are at least 55% correct answers. Regular lesson attendance makes up maximum 30% of the final grade, seminar papers make up maximum 20% of the grade, and final exam makes up maximum 50% of the grade. A student can score a maximum of 100 points. According to the above mentioned, grading scale is as follows:</p> <p>&lt;55 points – grade 5 55-64 points – grade 6 65-74 points – grade 7 75-84 points – grade 8 85-94 points – grade 9 95-100 points – grade 10</p>
6. Literature:	<p><b>Obligatory:</b></p> <ul style="list-style-type: none"> <li>• Lecture notes</li> <li>• Vrhovac B. et al., Internal medicine, third edition. Naklada Ljevak, Zagreb, 2003. (selected chapters)</li> </ul> <p><b>Supplementary:</b></p> <ul style="list-style-type: none"> <li>• Harrison's, Principles of Internal Disease, thirteenth edition. First Croatian edition, editors Ivančević Ž., Rumboldt Z., Bergovec M., Silobrčić V., Bruketa D., Naklada Placebo, Split, 1997. (selected chapters)</li> </ul>

## DETAILED PLAN OF THE SYLLABUS

Week	Form of teaching and curriculum	Number of hours
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Week 1	<b>Lecture:</b> Medical history (current disease, earlier diseases, personal medical history, family and social medical history); Basic methods of a physical exam of internal medicine patient; General status (status praesens); Head and neck examination <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 2	<b>Lecture:</b> Symptomatology and physical examination in heart diseases; Diagnostic methods in cardiology; Angina pectoris; Myocardial infarction <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 3	<b>Lecture:</b> Arterial hypertension; Cardiac insufficiency; Congenital and acquired heart diseases; Cardiopulmonary resuscitation <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 4	<b>Lecture:</b> Symptoms and signs of pulmonary disease; Diagnostic methods in pulmonology; Typical and atypical diseases of lower airways and pulmonary parenchyma with complications <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 5	<b>Lecture:</b> Pulmonary thromboembolism; Chronic obstructive lung disease; Bronchial asthma; Chronic respiratory insufficiency; Medical emergencies in pulmonology <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 6	<b>Lecture:</b> Symptoms and signs of digestive system disease; Diseases of the hepato-biliary system and the pancreas; Diseases of the oesophagus ; Ulcer diseases <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 7	<b>Lecture:</b> Bleeding in the gastrointestinal system; Intestinal diseases; Chronic hepatitis (etiology, clinical picture, diagnostics and treatment); Cirrhosis of the liver <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 8	<b>Lecture:</b> Diseases of the endocrine system; Diabetes mellitus (etiology, pathogenesis, clinical picture, diagnostics and therapy) – the significance in dental practice; Acute and chronic complications in diabetes mellitus <b>Practice:</b> <b>Seminars:</b> *	3  3 3
Week 9	<b>Lecture:</b> Other diseases of the endocrine system (diseases of the pituitary gland, diseases of the thyroid gland, parathyroid glands, diseases of the adrenal glands) – the significance in dental practice <b>Practice:</b> <b>Seminars:</b> *	3  3 3

Week 10	<b>Lecture:</b> Symptoms and signs of urinary tract disease; Physical examination and diagnostic methods in nephrology; Urinary infections; Pyelonephritis; Glomerulonephritis <b>Practice:</b> <b>Seminars:</b> *	3 3 3
Week 11	<b>Lecture:</b> Acute renal insufficiency; Chronic renal insufficiency; Dialysis; Kidney transplant <b>Practice:</b> <b>Seminars:</b> *	3 3 3
Week 12	<b>Lecture:</b> Clinical features of a hematological patient; Diagnostic methods in hematology; Coagulation disorders; Transfusion medicine <b>Practice:</b> <b>Seminars:*</b>	3 3 3
Week 13	<b>Lecture:</b> Bleeding and hemostasis; Epistaxis – causes, clinical picture and care <b>Practice:</b> <b>Seminars:</b> *	3 3 3
Week 14	<b>Lecture:</b> Methods of examination of peripheral blood vessels, atherosclerosis, diseases of peripheral blood circulation <b>Practice:</b> <b>Seminars:</b> *	3 3 3
Week 15	<b>Lecture:</b> Chronic inflammations of mucous membrane of the pharynx and its complications; Acute and chronic sinusitis and its complications <b>Practice:</b> <b>Seminars:</b> *	3 3 3
Week 17	Final exam	
Week 18-20	Remedial final exam	

\* During the semester, a continual assessment of knowledge and acquired skills is conducted in theoretical part and practical work. Three seminar papers are planned. Students will present those seminar papers during the semester, in groups and according to the schedule made with faculty advisor and assistants.

Code: SFDHO33	Name of the course subject: <b>MICROBIOLOGY WITH INFECTION CONTROL</b>		
Level: Basic vocational studies	Year: <b>II</b>	Semester: <b>III</b>	ECTS credits: <b>5</b>
Status: <b>compulsory</b>			Total hours: <b>90</b>
Faculty advisor:	Head of Department		
Requirements for taking the course: Regulated by the Rule book on studying at the first cycle of studies at higher education institutions at the University of Sarajevo			
1. Course objectives	Adopting the knowledge on the most significant pathogens, causes of infection in the oral and maxillofacial region, as well as the methods of their treatment and prevention.		
2. Purpose of the course	The purpose of the course is to provide the student with basic knowledge in the area of bacteriology, parasitology, mycology and virology, with special attention on specificities of infection control in dentistry.		
3. Learning outcomes	After completing the course, the student is qualified to: describe basic structure of bacteria, fungi, protozoa and viruses that are significant for dental practice; recognize basic features of infections in the oral and maxillofacial region, as well as the pathogens, causes of caries and infections in the periodontium.		
4. Teaching methods	<ul style="list-style-type: none"><li>- lectures: 54 hours</li><li>- seminar papers: 6 hours per group</li><li>- practice: 30 hours per group</li></ul>		

5. Methods of learning assessment	<p>Learning assessment will be conducted continuously during the semester. Elaboration (continual learning assessment) involves: knowledge and skills in practical exercises, knowledge and activity in interactive seminar classes, and partial exams. Seminar papers are defined by planned topics beforehand. Learning assessment during the semester will be graded according to the stipulated standards and it will make up 55% of the final grade.</p> <p><b>Practical exercises</b></p> <p>During the semester acquired skills will be evaluated by means of three mid-term exams. Maximum number of points per one mid-term exam is 5 (a total of 15). Minimum number of points in order to pass a mid-term exam is 3 (a total of 9). All passed mid-term exams are recognized. Failed mid-term exams are taken at the final exam.</p> <p><b>Seminar papers</b></p> <p>During the semester, a student will present one previously defined seminar paper, which is presented in the amphitheatre in front of the entire generation with the faculty advisor present. Minimum number of points in order to pass the seminar is 5,5. Maximum number of points is 10.</p> <p><b>First partial exam</b></p> <p>The exam is conducted in writing by means of tests. Maximum number of points that a student can acquire is 30. Minimum number of points in order to pass the term exam is 16,5. Partial exam consists of 50 questions worth 0,5 points each and 5 essays worth 1 point each (25+5=30).</p>
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The exam will be held in the ninth week.

**Second partial exam**

The exam is conducted in writing by means of tests. Maximum number of points that a student can acquire is 45. Minimum number of points in order to pass the exam is 24. Partial exam consists of 80 questions worth 0,5 points each and 5 essays worth 1 point each (40+5=45)

The exam will be held in the sixteenth week.

**Final exam**

Final exam is for students that have not passed the first and/or second partial exam, mid-term exam or seminar paper, and they only take the part that they did not pass.

Grading criteria	Maximum points	Minimum points (points for passing grade)
Knowledge and skills in practical exercises	15	9
Knowledge and activity during interactive (seminar) classes	10	5,5
Partial exam 1	30	16,5

	Partial exam 2	45	24
	Total:	100	55
	After passing all parts of the exam student is given a final grade as follows:		
	Grade	Number of points	Grade description
	5 (FX)	below 50	Does not fulfil minimum criteria and needs significantly more work
	5 (F)	50-54	Does not fulfil minimum criteria
	6 (E)	55-64	Fulfils minimum criteria
	7 (D)	65-74	Generally good
	8 (C)	75-84	Average
	9 (B)	85-94	Above average
	10 (A)	95-100	Exceptional results
Students that did not acquire enough passing points from the previous grading criteria (practice, seminar papers, partial exam, final exam) only take parts that they did not pass, in a repeated/makeup exam date			

#### LITERATURE:

##### **Obligatory:**

1. Specificities of infection control in dentistry. Arifhodžić F. et al. Šahinpašić TKD, Sarajevo, 2014.
2. Infections in the oral mucosa. Arifhodžić F., Hamzić S. University textbook, Faculty of Dentistry at the University in Sarajevo, Sarajevo, 2011.
3. Microbiology and immunology. Zvizdić Š., Hamzić S. Textbook with practicum for the students of the Faculty of Dentistry, Sarajevo, 2015.
4. Medical microbiology. Edina Bešlagić et al. Faculty of medicine Sarajevo, 2010.
5. Virology. Šukrija Zvizdić. Faculty of medicine Sarajevo, 2009.

### **DETAILED PLAN OF THE SYLLABUS**

Week	Form of teaching and curriculum	Number of hours
Week 1	<b>Lecture:</b> Introduction to microbiology. Bacterial cell structure, bacteria morphology. Classification, metabolism and bacteria reproduction. Pathogenicity and virulence, virulence factors in bacteria.	4
	<b>Practice:</b> General principles of work in microbiological laboratory. Microscope and ways of microscoping with light microscope.	2

Week 2	<b>Lecture:</b> Application of physical agents – sterilisation (dry, humid heat) in dental practice; Sterilisation control.	4
	<b>Practice:</b> Native and coloured preparation (simple colouring).	2
Week 3	<b>Lecture:</b> Properties, division and application of chemical agents in dental practice (disinfectants and antiseptics).	4
	<b>Practice:</b> Complex colouring.	2
Week 4	<b>Lecture:</b> Infection and infectious disease. Infectious diseases most relevant for dental practice. Measures of protection from infection and code of conduct in case of injury.	4
	<b>Practice:</b> Sterilisation and application of chemical agents in dental practice.	2
Week 5	<b>Lecture:</b> Staphylococcus, Streptococcus.	2
	<b>Seminar:</b> Normal microflora	2
	<b>Practice:</b> Taking and sending materials for microbiological examination; culture media.	2
Week 6	<b>Lecture:</b> Neisseriae (N.meningitidis, N.gonorrhoeae), Corynebacterium diphtheriae; Bacillus anthracis, Clostridium tetani, Clostridium botulinum, Clostridium perfringens).	4
	<b>Practice:</b> Methods of bacteria identification; Antibigram.	2
Week 7	<b>Lecture:</b> Enterobacteriaceae; Pseudomonas aeruginosa.	4
	<b>Practice:</b> Methods of identification of members from the Enterobacteriaceae family.	2
Week 8	<b>Lecture:</b> Mycobacterium (M. tuberculosis), Treponema pallidum.	4
	<b>Practice:</b> Methods of identification of members from the genus and Treponema pallidum species.	2
Week 9	<b>Lecture:</b> General features of viruses; Herpesviridae (HSV1, HSV2, VZV, CMV, EBV).	4
	<b>Practice:</b> Laboratory methods of virus identification.	2
Week 10	<b>Lecture:</b> Hepatotropic viruses (HAV, HBV, HCV, HDV, HEV, HGV); Human immunodeficiency virus (HIV).	2
	<b>Seminar:</b> Oncogenic viruses.	2
	<b>Practice:</b> Serological diagnostics.	2
Week 11	<b>Lecture:</b> Influenza virus; Morbili virus; Mumps virus; Papovaviridae (papilloma viruses); Picornaviridae (poliomyelitis virus, coxsackie virus); Rabies virus.	4
	<b>Practice:</b> Basic principles of viral diseases diagnostics.	2
Week 12	<b>Lecture:</b> Fungi and protozoa relevant for dental practice.	4
	<b>Practice:</b> Basics of identification of fungi and protozoa relevant for dental practice.	2
Week 13	<b>Lecture:</b> Oral microflora (general features); Members of normal oral microflora (oral streptococci, Villonela genus, Lactobacillus, Actinomyces, Porphyromonas, Prevotella, Wolinella, Fusobacterium, oral spirochetes, filamentous bacteria).	4
	<b>Practice:</b> Biotype of the oral cavity; Species and genera members of the oral microflora.	2

Week 14	<b>Lecture:</b> Specificities of defence in the oral cavity; Saliva and mucous membrane of the oral cavity; Dental plaque. <b>Practice:</b> Dental plaque; Caries (methods of measuring the level of colonisation of cariogenic bacteria species in the oral cavity).	4 2
Week 15	<b>Lecture:</b> Specificities of infection control in dentistry. <b>Seminar:</b> Etiopathogenesis of caries. <b>Practice:</b> Diseases of the periodontium (gingivitis and periodontopathy).	2 2 2
Week 17	Partial / Final exam	
Week 18-20	Repeated / Remedial final exam	
Note	Consultation time for students is every day from 12 to 14 at the Department	

CODE: SFDH034	<b>COURSE TITLE: STOMATOLOGICAL FARMACOLOGY AND PAIN MANAGEMENT</b>	
LEVEL: Basic vocational studies - Dental hygiene	YEAR: II SEMESTER: III	ECTS POINTS: 4
STATUS: OBLIGATORY	TOTAL HOURS: 90 (45L+15E+15VP)	
LECTURER IN CHARGE: Head of Department		
<b>REQUIREMENTS FOR ATTENDING THE COURSE:</b> Regulated by the Study rules for the I cycle studies at University of Sarajevo		
1. Aims and objectives of the course	To provide standard level of knowledge about medications that are used in pharmacotherapy of oral diseases, application of dental anesthetics and pharmacotherapy of urgent conditions.	
2. Purpose of the course	To educate students about medications that are used in pharmacotherapy of oral diseases and mechanisms of their action.	
3. Learning outcomes	Upon finalization of the course student will be able to: <ul style="list-style-type: none"><li>- Describe mechanisms of action and effect of medications used in dentistry</li><li>- Calculate therapeutic concentrations of medications used locally that are often used in dental office because of their short effect</li><li>- Sum up advantages, limitations and recommendations of different means of pain control that are suitable of planned therapeutic procedures</li><li>- Estimate which patient require caution and urgent pharmacotherapy</li></ul>	
4. Learning methods	<ul style="list-style-type: none"><li>- Interactive lectures</li><li>- Practical exercises</li><li>- Seminar paper and continued assessment</li></ul>	
5. Assessment methods	Obligatory presence and active involvement of the student in lectures accounts for 20% of the final grade. Obligatory presence and active involvement of the student in exercises accounts for 20% of the final grade. Seminar paper accounts for 10% of the grade. Upon completion of semester student can acquire maximum of 100 points. <b>GRADING SCHEMA:</b> <55 – grade 5 55-64 – grade 6 65-74 – grade 7 75-84 – grade 8 85-94 – grade 9	

	95-100 – grade 10
6. Literature	Mandatory: Bazična farmakologija u stomatologiji/Milorad R. Terzić, Dragica M. D. Stojić. Zrenjanin: IP Beograd, 2010. selected chapters Stomatološka anesteziologija (Brković, Dražić, Milosavljević, Todorović), Beograd. 2012. selected chapters

### SYLLABUS

NO	CONTENT	HOURS
Week 1	Lecture: Pharmacokinetics Exercise: Routes of medicine administration	3 1
Week 2	Lecture: Pharmacodynamics. Adverse effects of medications. Exercise: Types of medications for systemic and local use.	3 1
Week 3	Lecture: Adverse effect of medications. Local anesthetics. Exercise: Therapeutic doses and concentrations.	3 1
Week 4	Lecture: General anesthetics. Analgesic antipyretics (nonsteroidal anti-inflammatory drugs) Exercise: Instruments for local anesthesia.	3 1
Week 5	Lecture: Narcotic analgesics. Pathophysiologic basis of orofacial pain. Clinical aspects of acute and chronic orofacial pain. Exercise: Infiltration and topical anesthesia.	3 1
Week 6	Lecture: Therapeutic principles of orofacial pain management. Instruments for local anesthesia. Techniques of local anesthesia. Exercise: Regional anesthesia.	3 1
Week 7	Lecture: Infiltration and topical anesthesia. Regional anesthesia. Management of local complications of local anesthesia. Exercise: Management of local and systemic complications of local anesthesia.	3 1
Week 8	Lecture: Therapeutic procedures for management of local complications of local anesthesia. Preparation of patient for dental procedure.: oral, intravenous and inhalational sedation. Instruments for oral, intravenous and inhalational sedation. Exercise: Therapy of chronic orofacial pain.	3 1
Week 9	Lecture: Principles of intravenous anesthesia. Principles of inhalational anesthesia. Pain management in high-risk patients. Exercise: Preparation of patients for general anesthesia and conduction of general anesthesia.	3 1
Week 10	Lecture: Advantages, limitation and recommendation of different forms of pain management in dental specialties. Anxiolytics. Exercise: Preparation of patient for sedation and conduction of sedation.	3 1
Week 11	Lecture: Preanesthetic medication. Antibiotics – penicillin, tetracycline Exercise: Management of patient protocol. Final colloquium.	3 1
Week 12	Lecture: Antibiotics - pyranoside, macrolide, metronidazole and other antiviral and antifungal medications. Antiseptics and disinfectants. Seminary: Cholinergic agonists and antagonists.	3 1
Week 13	Lecture: Antihypertensive medications. Seminary: Adrenergic agonists and antagonist.	3 1
Week 14	Lecture: Antiarrhythmic medications. Medication for treatment of congestive heart insufficiency. Medication for treatment of ischemic heart diseases. Neuroleptics and antidepressants. Antiepileptic medicines, medicines for treatment of parkinsonism. Seminary: Preparing patient for dental procedure (sedation and treatment of urgent conditions)	3 1
Week 15	Lecture: Medicines for treatment of bronchial asthma and ulcer disease. Hormones, cytostatic medicines. Seminary: Application of medicines in specific group of patients: children, elderly, pregnant women, patients with kidney and liver diseases.	3 1

Week 17	Final exam (First exam): Written exam. Regular presence on lectures and exercises and positively assessed seminar paper are required to take the exam.	
Week 18-20	Corrective exam (Second exam).	
Vocation practicals: Individual work of patient is 60 hours. Content of vocational practicals: Protocol management. Preparation of instruments for local anesthesia. Preparation of instruments for sterilization.		

Code: SFDHO41	Name of the course subject: <b>ORAL MEDICINE WITH THE BASICS OF PATHOLOGY</b>		
Level: Basic vocational studies	Year: <b>II</b>	Semester: <b>IV</b>	ECTS credits: <b>7</b>
Status: <b>Compulsory</b>			Lectures: 30 Practice: 30 Total hours: 60 Professional practice: 60
Faculty advisor:	Head of Department		
Requirements for taking the course: Requirements regulated by the Rule book on studying at the I cycle of studies at the University of Sarajevo			
1. Course objectives	Gaining knowledge that enables the student to: <ul style="list-style-type: none"><li>• Specify basic terms about anatomically-morphological and histological structure of oral mucosa</li><li>• Understand the pathogenesis of soft oral tissue diseases and basic diagnostic methods in oral medicine</li><li>• Basic notions about oral infections, recurrent oral ulcerations and diseases of salivary glands</li><li>• Describe main diseases of the lips and tongue</li><li>• Understand the essence of systemic and mucocutaneous diseases and their significance in providing services of professional oral hygiene</li><li>• Describe premalignant and malignant lesions in the oral cavity, as well as damage to the oral tissue caused by medications, physical, chemical and mechanical factors</li></ul>		
2. Purpose of the course	To introduce and educate students about the basic knowledge in the domain of oral medicine.		

3. Learning outcomes	<p>After completing the course the student is qualified to:</p> <ul style="list-style-type: none"> <li>• Get medical history</li> <li>• Conduct physical examination of the oral cavity</li> <li>• Notify the dentist in case of suspicion of some soft oral tissue disease</li> <li>• Notify the dentist in case of suspicion of some systemic disease that manifests itself in the oral cavity</li> <li>• Conduct health and educational work related to all levels of prevention of soft tissue diseases in the oral cavity</li> </ul>
4. Teaching methods	<p>The course is held:</p> <ol style="list-style-type: none"> <li>1. lecture ex cathedra za for all the students</li> <li>2. clinical exercises (practice)</li> <li>3. mid-term exams (colloquiums)</li> </ol> <p>Professional practice – Individual work*</p>
5. Methods of learning assessment	<p>The assessment of theoretical knowledge from the completed semester will be conducted in the written form – by means of a test, it will be graded and it will remain in the student's portfolio as a document. Evaluation and assessment of students' knowledge will be conducted according to the following system:</p> <ul style="list-style-type: none"> <li>- activity during lectures 10%,</li> <li>- practical lessons (activity during practical exercise, work with patients) 20%.</li> <li>- mid-term exam 15%</li> <li>- written test 55%</li> </ul>
	<ol style="list-style-type: none"> <li>a) 10 (A) – exceptional results without mistakes or with insignificant mistakes, totals from 95 - 100 points;</li> <li>b) 9 (B) – above average, with few mistakes, totals from 85 - 94 points;</li> <li>c) 8 (C) – average, with noticeable mistakes, totals from 75 - 84 points;</li> <li>d) 7 (D) – generally good, but with significant shortcomings, totals from 65 - 74 points;</li> <li>e) 6 (E) – fulfils minimum criteria, totals from 55 - 64 points;</li> <li>f) 5 (F,FX) – does not fulfill minimum criteria, less than 55 points.</li> </ol>
6. Literature:	<p>Obligatory:</p> <ol style="list-style-type: none"> <li>1. Topić Berislav and associates: Oral medicine, Faculty of Dental Medicine in Sarajevo, 2001.</li> <li>2. Dedić Amira: Autoimmune oral diseases – practicum, Sarajevo, 2010.</li> </ol> <p>Supplementary:</p>

	<ol style="list-style-type: none"> <li>1. Topić Berislav: Differential diagnosis and therapy of oral mucosa diseases, Sarajevo – Zagreb, 2004.</li> <li>2. Dedić Amira: Diabetes mellitus-oral aspects, University edition, Sarajevo, 2004.</li> <li>3. Đukanović Dragoslav and associates: Atlas – diseases of the soft tissue in the oral cavity, Belgrade, 2001.</li> <li>4. Arifhodžić Faruk: Infections of the oral mucosa, Sarajevo, 2011.</li> </ol>
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#### DETAILED PLAN OF THE SYLLABUS

Week	Form of teaching and curriculum	Teacher	Number of hours
Week 1	<b>Oral mucosa:</b> anatomy, histology, function of the mucous membrane of the lips, cheeks, tongue, oral cavity floor, hard and soft palate	Doc. dr Sanja Hadžić	2
Week 2	<b>Factors of defense in the oral mucosa:</b> nonspecific and specific protection	Doc. dr Sanja Hadžić	2
Week 3	<b>Pathogenesis of soft oral tissue diseases:</b> etiological factors, pathohistological changes and clinical manifestations	Doc. dr Sanja Hadžić	2
Week 4	<b>Classification criteria of diseases in oral medicine:</b> etiological, morphological, anatomic, local and systemic <b>Prevention of oral mucosa diseases</b>	Doc. dr Mirjana Gojković Vukelić	2
Week 5	<b>Preliminary diagnosis of oral lesions</b> (clinical examination, symptoms and signs) <b>Diagnostic methods in oral medicine:</b> clinical methods and laboratory tests	Doc. dr Enes Pašić	2
Week 6	<b>Bacterial oral infections:</b> clinical picture, diagnosis, differential diagnosis and treatment	Doc. dr Enes Pašić	2
Week 7	<b>Fungal oral infections:</b> clinical picture, diagnosis, differential diagnosis and treatment	Doc. dr Sanja Hadžić	2
Week 8	<b>Viral oral infections:</b> clinical picture, diagnosis, differential diagnosis and treatment	Doc. dr Enes Pašić	2
Week 9	<b>Recurrent oral ulcerations:</b> etiology, clinical picture, diagnosis, differential diagnosis and therapy	Doc. dr Mirjana Gojković Vukelić	2
Week 10	<b>Diseases of the lips and tongue:</b> etiology, clinical picture, diagnosis, differential diagnosis and treatment	Doc. dr Mirjana Gojković Vukelić	2

Week 11	<b>Salivary glands and saliva:</b> basic characteristics, salivation disorders, salivary glands diseases	Doc. dr Sanja Hadžić	2
Week 12	<b>White and red lesions in the oral mucosa:</b> etiology, clinical picture, diagnosis, differential diagnosis and treatment	Doc. dr Enes Pašić	2
Week 13	<b>Oral mucosa and systemic diseases</b>	Doc. dr Mirjana Gojkov Vukelić	2
Week 14	<b>Oral manifestations of skin diseases:</b> pemphigus, pemphigoid, lichen planus, erythema exudativum multiforme	Doc. dr Sanja Hadžić	2
Week 15	<b>Premalignant and malignant lesions:</b> diagnostics, treatment and prevention	Doc. dr Mirjana Gojkov Vukelić	2
Week 17	Written assessment of theoretical knowledge by means of a test		
Week 18-20	Makeup exam date for students who have not passed the written test		

Detailed plan of practical exercises – methodical units and professional practice – individual work

Week	Practical lessons	Number of hours	Professional practice
Week 1	<b>Preparation of protective measures in prevention of the spread of infection</b>	2	6
Week 2	<b>Basic characteristics of healthy oral mucosa, prevention of soft oral tissue diseases</b>	2	6
Week 3	<b>Signs and symptoms of diseases in oral medicine</b>	2	6
Week 4	<b>Diagnostic methods in oral medicine</b>	2	6
	<b>Medical history</b>		
Week 5	<b>Clinical examination of oral mucosa</b>	2	6
Week 6	<b>Clinical oral and laboratory tests</b>	2	6
Week 7	<b>Taking smear samples and preparing microscopic examination preparations (native test)</b>	2	6
Week 8	<b>Treatment procedure: outpatient dental treatment, home treatment and treatment of systemic diseases</b>	2	6
Week 9	<b>Treatment procedures: elimination of irritations in the oral mucosa, intralesional and perilesional application of medications</b>	2	6
Week 10	<b>The most common oral diseases</b> Diagnosis, differential diagnosis, treatment plan, case presentation - assisting	2	6
Week 11	<b>Oral manifestations of infections</b> Diagnosis, differential diagnosis, treatment plan, case presentation - assisting	2	6

Week 12	<b>Oral mucosa and systemic diseases</b> Diagnosis, differential diagnosis, treatment plan, case presentation - assisting	2	6
Week 13	<b>Precanceroses, benign and malignant tumors</b> Diagnosis, differential diagnosis, treatment plan, case presentation - assisting	2	6
Week 14	<b>Patients with medical risk in oral medicine</b> Diagnosis, differential diagnosis, patient preparation and assistance during treatment application	2	6
Week 15	<b>Emergency states in oral medicine</b>	2	6

**Professional practice subject matter:**

Patient admission, recordkeeping and storing of health records, work place preparation for dental interventions, instrument preparation, assisting the doctor of dentistry during work, disinfection and sterilization of instruments and materials, equipment and instruments maintenance, performing tasks from the domain of oral hygienist

Code: SFDHO42	Course title: <b>DENTAL RADIOLOGY</b>		
Level: Basic vocational studies: first-degree studies	Year: II	Semester: IV	ECTS: 4
Status: Mandatory			Course load: 90 Lectures: 30 Exercises: 30 Practical training: 30
Course leader:	Head of Department		
Course attendance requirements: Course attendance requirements are in line with the Rules of Study for the First Cycle of Study at Higher Education Institutions of Sarajevo University			
1. Course objective	Introducing students to radiological procedures in dental practice		
3. Course outcome	1. Knowledge and skills acquired in the field of dental radiology 2. Practical application of radiological procedures in dental practice		
4. Teaching and learning methods	Lectures, exercises, work in small groups practical training		

5. Knowledge assessment methodology:	<p>Student knowledge will be assessed and evaluated for a number of relevant evaluation methods and criteria:</p> <ul style="list-style-type: none"> <li>- activity during lectures</li> <li>- activity during practical classes</li> <li>- colloquium</li> <li>- seminar paper</li> <li>- written test</li> </ul> <p>Grading scale system:</p> <p>g) 10 (A) - Outstanding Performance without errors or with minor errors, student scores 95-100 points;</p> <p>h) 9 (B) - Above Average, with some errors, student scores 85-94 points;</p> <p>i) (C) - Average, with noticeable errors, student scores 75-84 points;</p> <p>j) 7 (D) - Generally Good, but with significant disadvantages, student scores 65-74 points;</p> <p>k) 6 (E) – Meets the minimum required criteria, student scores 55-64 points;</p> <p>g) l) 5 (F, FX) –Fails to meet the minimum required criteria, student scores less than 55 points</p>
6. Course readings:	<p><b>Essential readings:</b></p> <p>1.Stipan Janković,Damir Miletić I sar. Dentalna radiografija i radiologija,2009 Split</p> <p><b>Additional readings:</b></p> <p>2.Rakočević Zoran, Mratinković Dragana Osnovi radiologije dentomaksilofacijalne regije. Praktikum,Beograd,2009</p> <p>3.Rakočević Zoran, Đurić Marija Radiologija u stomatološkoj praksi-Intraoralni metodi fotografisanja</p>

### WEEKLY IMPLEMENTATION PLAN BY COURSE TOPIC

Week	Form of classes and teaching units addressed in class	Number of classes
Week 1.	<b>Lecture</b> X-ray physics <b>Exercises</b> Introduction to an X-ray ward	2 2
Week 2.	<b>Lecture</b> X-ray equipment and appliances <b>Exercises</b> Introduction to radiation protection shielding	2 2
Week 3.	<b>Lecture</b> X-ray film <b>Exercises</b> Introduction to X-ray equipment and appliances	2 2
Week 4.	<b>Lecture</b> X-ray imaging <b>Exercises</b> Introduction to X-ray films	2 2

Week 5.	<b>Lecture</b> Digital imaging <b>Exercises</b> Introduction to X-ray imaging	2 2
Week 6	<b>Lecture</b> Informatization and digital image storing <b>Exercises</b> Informatization and digital image storing	2 2
Week 7	<b>Lecture</b> X-ray radiation protection <b>Exercises</b> Introduction to digital imaging	2 2
Week 8	<b>Lecture</b> Artifacts found on radiogram images <b>Exercises</b> Introduction to artifacts found on radiogram images	2 2
Week 9	<b>Lecture</b> Intraoral radiograms <b>Exercises</b> Basics of intraoral radiogram analysis	2 2
Week 10.	<b>Lecture</b> Retroalveolar and retrocrural radiograms <b>Exercises</b> Basics of retroalveolar and retrocrural radiogram analysis	2 2
Week 11.	<b>Lecture</b> Occlusal and axial radiographs <b>Exercises</b> Basics of occlusal and axial radiogram analysis	2 2
Week 12.	<b>Lecture</b> Extraoral radiograms <b>Exercises</b> Basics of extraoral radiogram analysis	2 2
Week 13.	<b>Lecture</b> Orthopantomogram <b>Exercises</b> Basics of orthopantomogram analysis	2 2
Week 14.	<b>Lecture</b> CBCT <b>Exercises</b> Introduction to CBCT devices	2 2
Week 15.	<b>Lecture</b> Principles of radiographic imaging of special patient categories <b>Exercises</b> Principles of radiographic imaging of special patient categories	2 2
Week 16.	Final exam	
Week 17-20.	Makeup exam	

**Contents of practical training:** As part of practical training, students will make intraoral radiograms independently for: adults, children, persons with special needs, pregnant women, patients suffering from various infectious diseases (HIV, HCV, HBV)

The plan is that each student should make radiographs by himself/herself on:

- 20 patients by using the retroalveolar method
- 20 patients by using the retrocoronary method
- 20 patients by using the axial intraoral method
- 20 patients by using the occlusal method

<b>CODE: SFDHO43</b>	<b>COURSE TITLE: ASEPSIS AND ANTISEPSIS</b>		
Class and level of studies: Basic profession course	YEAR: <b>II</b>	SEMESTER: <b>IV</b>	ECTS POINTS: <b>3</b>
STATUS: <b>OBLIGATORY</b>			TOTAL HOURS: 75 (lectures 30 + practical 45)
LECTURER IN CHARGE:	Head of Department		

Requirements for taking the course: Requirements regulated by the Rule book on studying at the first cycle of studies at the University of Sarajevo.	
1. Course objectives	Training students to master knowledge and skills of aseptic work and ways of breaking the chain of infection in dental practice and dental laboratory.
2. Purpose of the course	Purpose of the course is to enable the student to introduce and educate on the basic contemporary principles of asepsis and antisepsis.
3. Learning outcomes	After completing the course the student will be able to: <ul style="list-style-type: none"> <li>• Achieve the conditions of aseptic work in the dental clinic, dental surgery and dental laboratory.</li> <li>• Interrupt the infection chain in clinical conditions.</li> <li>• Performs post exposure prophylaxis procedures.</li> </ul>
4. Teaching methods	The course is conducted in a form: <ul style="list-style-type: none"> <li>- Interactive lectures</li> <li>- Practical exercises</li> <li>- Interactive learning for all students</li> <li>- Seminar works, small groups, discussion</li> <li>- Continuous assessment of knowledge</li> </ul>
5. Methods of learning assessment	By completing the pre-exam requirements and passing the exam, the student can achieve a maximum of 100 points, with pre-exams being 50% and the final exam 50% of the total grade. The final grade will be formed on the following elements: Regulars attendance and activity at the class makes a maximum 40%. During the semester it is obligatory to write one seminar work whose realization makes a maximum of 10% of the total grade. Regular attendance lectures is 20% of total grade. Regular attendance exercise is 20% of total grade. Seminar work is 10% of the total grade. Final exam – written exam, and makes 50% of the total grade. <b>GRADING SCHEMA:</b> A (10) = 95 – 100 B (9) = 85 – 94 C (8) = 75 – 84 D (7) = 65 – 74 E (6) = 55 – 64* F Student that score 55-69% can take additional exam. Students that score below 55% have to take the course again.
6. Literature:	Lecture notes 1. Arifhodžić F. i saradnici. Specifičnosti kontrole infekcije u stomatologiji. Šahinpašić TKD, Sarajevo 2014. Odabrana poglavlja 2. Medicinska mikrobiologija. Edina Bešlagić i saradnici. Medicinski fakultet Sarajevo, 2010. Odabrana poglavlja

**Consultation with students every working day from 12 am to 2 pm.**

#### **IMPLEMENTATION PLAN OF COURSE:**

WEEK	CONTENT	HOURS
Week 1	<b>Lectures:</b> Introductory notes of the course. The concept asepsis and antisepsis.	2
	<b>Exercises:</b> Use of basic principles of aseptic work in dental practice.	2
Week 2	<b>Lectures:</b> Basic principles of asepsis and antisepsis in dental practice.	2
		2

	<b>Exercises:</b> Procedure for working with contaminated instruments and dental materials. Procedure for preparation of sterilization, sterilization and control of sterilization.	
Week 3	<b>Lectures:</b> Principle and procedures of disinfection in dentistry. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in restorative dentistry.	2 2
Week 4	<b>Lectures:</b> Prevention of viral infections transmitted by blood at the dental practice. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in endodontics dentistry.	2 2
Week 5	<b>Lectures:</b> Principles of aseptic work in restorative and endodontics dentistry. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in restorative and endodontics dentistry.	2 2
Week 6	<b>Lectures:</b> Principles of aseptic work in clinical dental prosthetics. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in clinical dental prosthetics.	2 2
Week 7	<b>Lectures:</b> Principles of aseptic work in orthodontics. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in orthodontics.	2 2
Week 8	<b>Lectures:</b> Principles of aseptic work in dental laboratory. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in dental laboratory.	2 2
Week 9	<b>Lectures:</b> Principles of aseptic work in pediatric dentistry. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in pediatric dentistry.	2 2
Week 10	<b>Lectures:</b> Principles of aseptic work in dental periodontics. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in dental periodontics.	2 2
Week 11	<b>Lectures:</b> Principles of aseptic work in oral medicine. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in oral medicine.	2 2
Week 12	<b>Lectures:</b> Principles of aseptic work in oral surgery. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in oral surgery.	2 2
Week 13	<b>Lectures:</b> Principles of aseptic work in dental gerontology. <b>Exercises:</b> Procedures for aseptic work with instruments and materials in clinic of a stationary type.	2 2
Week 14	<b>Lectures:</b> PEP- post exposure practice. <b>Exercises:</b> Use post exposure practice.	2 2
Week 15	<b>Lectures:</b> Interactive recapitulation of the material received. <b>Exercises:</b> Medical waste management procedures.	2 2
Week 17	<b>First examination period</b>	
Week 18-20	Makeup exam date for students who have not passed the final exam.	

Code: SFDHO44	Course title: <b>OCCUPATIONAL SAFETY</b>		
Level:	Year: II	Semester: IV	ECTS: 3
Status: Mandatory			Course load: <b>75</b> Lectures 30 Practical training 45
Course leader:	Head of Department		

Course attendance requirements:	Course attendance requirements are in line with the Rules of Study for the First Cycle of Study at Higher Education Institutions of Sarajevo University
Course objectives:	The course objective is to introduce the student to the topic of potential risks for occurrence of occupational diseases and the basics of occupational safety theory.
Course purpose:	To enable the student to recognize the health risks for staff members during their daily work in the dental team, and enable the students to adequately protect themselves.
Course outcome:	Once the course is completed, the student should be familiar with the basic measures of protection against the effects of harmful agents originating from dental materials. The student is enabled to use dental materials and diagnostic procedures properly, and is able to make the work space arrangements properly in order to protect the health of dental staff.
Teaching and learning methods:	<ul style="list-style-type: none"> <li>• interactive lectures</li> <li>• seminar papers</li> </ul>
Knowledge assessment methodology:	<p>The course exam consists of a final test that makes up 50% of the final grade. A passing grade requires a rate of 60% correct answers. Regular attendance at classes and activities during class accounts for 50% of the grade. The final grade will be calculated as follows:</p> <p>&lt;55 points – grade 5  55-64 points – grade 6  65-74 points – grade 7  75-84 points – grade 8  85-94 points – grade 9  95-100 points – grade 10</p>
Course readings:	<ol style="list-style-type: none"> <li>1. Robert Ireland R. ed. Clinical Textbook of Dental Hygiene and Therapy 2006 Blackwell Munksgaard, Oxford.</li> <li>2. Jusupović F i sar. Zdravstvena ekologija i higijena radne sredine; Fakultet zdravstvenih studija Univerziteta u Sarajevu ; Sarajevo 2013.</li> <li>3. Lecture handouts</li> <li>4. Expert and scientific articles from relevant internet database sources (PubMed, Scopus, Ebsco...)</li> </ol>

### WEEKLY IMPLEMENTATION PLAN BY COURSE TOPIC

Week	Form of classes and teaching units addressed in class	Number of classes
Week 1	<b>Lecture:</b> Biocompatibility and toxicology of dental materials.	2
	<b>Seminar papers:</b>	3

Week 2	<b>Lecture:</b> Potential toxic effects of pathological dental materials and elements of protection <b>Seminar papers:</b>	2 3
Week 3	<b>Lecture:</b> Risk factors related to the onset of occupational diseases in dental staff - Biological and biomechanical factors <b>Seminar papers:</b>	2 3
Week 4	<b>Lecture:</b> Risk factors related to the onset of occupational diseases in dental staff – Chemical, physical and psychogenic causes <b>Seminar papers:</b>	2 3
Week 5	<b>Lecture:</b> Allergic diseases in patients and dental staff caused as a result of the use of dental materials, appliances and accessories <b>Seminar papers:</b>	2 3
Week 6	<b>Lecture:</b> Occupational injuries in dental practice <b>Seminar papers:</b>	2 3
Week 7	<b>Lecture:</b> Protecting the health of dental staff in surgery and periodontology <b>Seminar papers:</b>	2
Week 8	<b>Lecture:</b> Protecting the health of dental staff in restorative dentistry, pedodontics and prosthetics <b>Seminar papers:</b>	2 3
Week 9	<b>Lecture:</b> Occupational diseases in dental technicians Silicosis, effects of nickel and beryllium, hand disinfection, disinfection of dental casts and molds, study models, alginate impressions and dental restorations <b>Seminar papers:</b>	2 3
Week 10	<b>Lecture:</b> Protecting the health of dental staff against ionizing radiation; protection against noise and other physical factors <b>Seminar papers:</b>	2 3
Week 11	<b>Lecture:</b> Protecting the health of dental staff against biological and biomechanical factors <b>Seminar papers:</b>	2 3
Week 12	<b>Lecture:</b> Effects of water, air and soil pollution on general and oral health <b>Seminar papers:</b>	2 3
Week 13	<b>Lecture:</b> Medical waste, dental waste and waste management <b>Seminar papers:</b>	2 3
Week 14	<b>Lecture:</b> Making proper work space arrangements in order to protect the health of dental staff <b>Seminar papers:</b>	2 3
Week 15	<b>Lecture:</b> Interactive recapitulation <b>Seminar papers:</b>	2 3

Final exam		
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Code:            Course title: **DIET AND ORAL HEALTH**

#### SYLLABUS

Level: basic professional studies – first level	Year: II	Semester:	ECTS credits: 6
Status: elective	Total load: 75		Hours total: 30+0+45
Proffesor in charge:	Head of Department		
Entry requirements: Regulated by the rules of the University of Sarajevo			
1. Goals	To get basic knowledge about all aspects of medical dietetic and getting competences to prevent and treat nutritive disruptions in clinical practice, that influence oral health		
2. Purpose	The goal is to train the student to know how to recognise patients with nutritive disruptions and to correct nutritive disruptions.		
3. Learning outcomes	After finishing the course, student should know to recognise nutritive risk factors for general and oral health, to identify the role of nutrients in oral diseases development, to access diet and health of the patient and to give recomendations for correct diet and diet therapy of patient.		

4. Teaching methods	<ul style="list-style-type: none"> <li>• Lectures ex catedra for all students</li> <li>• Interactive learning for all students during lectures</li> <li>• Writting an essay</li> <li>• Problem based learning</li> <li>• Group presentations and discussions</li> </ul>
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5. Knowledge assessment methods	<p>Final record will be formed based on following elements:</p> <p>Obligate presence and activity during the course, form 30% of the total mark (student fullfill this criteria if he was not obtaining maximally 20% of course).</p> <p>The essay contain 20% of the mark.</p> <p>The final exam is in the form of test, and contain 50% of final mark. Minimal mark for passing this part of the exam is 6.</p> <p>Mark scale</p> <table> <tr> <td>Test:</td><td>Final mark:</td></tr> <tr> <td>6 - 6,4=10%</td><td>A (10) =95 – 100%</td></tr> <tr> <td>6,5 - 7,4=20%</td><td>B (9) =85 – 94%</td></tr> <tr> <td>7,5 - 8,4=30%</td><td>C ( 8) = 75 – 84%</td></tr> <tr> <td>8,5 - 9,4=40%</td><td>D (7) =65 – 74 %</td></tr> <tr> <td>9,5 - 10=50%</td><td>E ( 6 ) = 55 –64%</td></tr> <tr> <td></td><td>F below 55%</td></tr> </table>	Test:	Final mark:	6 - 6,4=10%	A (10) =95 – 100%	6,5 - 7,4=20%	B (9) =85 – 94%	7,5 - 8,4=30%	C ( 8) = 75 – 84%	8,5 - 9,4=40%	D (7) =65 – 74 %	9,5 - 10=50%	E ( 6 ) = 55 –64%		F below 55%
Test:	Final mark:														
6 - 6,4=10%	A (10) =95 – 100%														
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8,5 - 9,4=40%	D (7) =65 – 74 %														
9,5 - 10=50%	E ( 6 ) = 55 –64%														
	F below 55%														
<p>6. Literature:</p> <p>Required:</p> <p>Harris NO, Garcia-Godoy FG, Nathe CN. Primary preventive dentistry. Eight edition. Pearson 2013</p> <p>Dean JA, Avery DR, McDonald RE. Dentistry for the child and adolescent. Ninth edition. St Louis: Mosby; 2011</p> <p>Additional:</p> <p>Thylstrup A, Fejerskov O, editors. Textbook of Clinical cariology. 2nd ed. Copenhagen: Munksgaard; 1994. p.333-53</p>															

DENTAL HYGIENE PROFESSIONAL PROGRAM  
CURRICULUM: DIET AND ORAL HEALTH

Week	Course form and content	Number of hours
1	Lectures:  Nutrients (proteins, fats, carbohydrates) – role in the human body, food content	2
2	Lectures:  Recommendations for dietary and energetic allowances of nutrients	2
3	Lectures:  Consequences of insufficient energy and nutrient intake and comorbidities  Obesity and comorbidities, the impact of obesity on oral health	2
4	Lectures:  Vitamins, role in the body, content in foods, impact on general and oral health  Mineral substances, role in the body, content in foods, impact on general and oral health	2
5	Lectures:  Foods, chemical composition, biological value, quality of foodstuffs, supplements and additives in foodstuffs  Recommendations for Healthy Eating, Planning Daily Meals, Pyramids of Nutrition, Food and Nutrition Policies	2
6	Lectures:  Nutrition diary	2
7	Lectures:  Eating disorders (irregular habits, anorexia, bulimia, organic diseases and eating)	2
8	Lectures:  Nutrition of children, pregnant women and breastfeeding women, the elderly	2
9	Lectures:  Alternative dietary options (veganism, vegetarianism, macrobiotics), organic food	2
10	Lectures:  Nutrition and caries - general considerations, digestion in the mouth, systemic impact	2
11	Lectures:  Nutrition and caries - a local effects on the occurrence of oral diseases	2
12	Lectures:  Nutrition and caries - a local effect on the occurrence of caries	2

# DENTAL HYGIENE PROFESSIONAL PROGRAM

13	Lectures: Sweeteners, Probiotics	2
14	Lectures: Diet and early childhood caries	2
15	Lectures: Nutrition counseling	2
16	Final exam	
17-20	Final exam/retake	
	Professional practice - independent work *  Professional practice-independent work: independent work of students outside the intended fund for practical teaching  Independent work and work in collaboration with the teacher in order to apply the methods of examination of the diet of the individual and the population. Visit to a nutrition counseling center, work at a dental counseling center.	45

# DENTAL HYGIENE PROFESSIONAL PROGRAM

Code: SFDHI45	Course: <b>MANAGEMENT IN DENTISTRY</b>		
<b>Level: Basic professional studies</b>	Year: <b>II</b>	Semestar: <b>IV</b>	ECTS credits: <b>4</b>
Status: <b>Elective course</b>			Total hours: <b>75 (30L+45E)</b>
<b>Responsible teacher:</b>	Head of Department		
Conditions for attending to lectures are in relation with the rules for the first level of studying in the high educational system in University of Sarajevo			
<b>1. Objectives of the course</b>	<ul style="list-style-type: none"><li>- Introducing students to health care system</li><li>- Allow understanding managements' role in everyday dental practice as well as managing the dental office;</li><li>- Understanding the importance of service planning and follow quality standards in the health system as well;</li></ul>		
<b>2. Purpose of the course</b>	Providing the basic information about dental health care organisation as well as about planning, management and entrepreneurship which are applicable in dental practice;		
<b>3. Learning outcomes</b>	<p>Student would be able:</p> <ul style="list-style-type: none"><li>- to know awareness of health care systems</li><li>- to know an explanation of the basic terms in management (efficiency, effectiveness, strategic planning, Swot analyse, human resources);</li><li>- to master the basis of the process in the business of the dental office</li><li>- to master the principles of the organization and dental dokumentation records</li><li>- to master the basics of marketing needed to complete the dentistry service.</li></ul>		
<b>4. Learning methods</b>	Interactive lectures and simulations		
<b>5. Knowledge assessment methods</b>	<p>Final exam is consisted of passing the test, which imply the 50% of complete mark(evaluation). Student should answer 60% of questions correctly in the test for passing it, while regular attendance in the class and activity makes 50% of final evaluation (mark).</p> <p>The final mark is formed according this scale:</p>		

# DENTAL HYGIENE PROFESSIONAL PROGRAM

	<p>&lt;55 points – mark 5</p> <p>55-64 points – mark 6</p> <p>65-74 points – mark 7</p> <p>75-84 points – mark 8</p> <p>85-94 points – mark 9</p> <p>95-100 points – mark 10</p>
<p><b>6. Obligatory</b></p> <p><b>Mandatory:</b></p> <p>-Lectures- notes</p> <p>-Hands-out</p> <p><b>Optional:</b> - Chapters chosen from journals.</p>	

## COURSE IMPLEMENTATION PLAN:

Week	Teaching methods	Number of hours
1.	<p><b>Lecture:</b> The health care system: Beveridge's, Bismark's, market's and Semasco's model of health care.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>
2.	<p><b>Lecture:</b> Organisation types in dentistry- primary, secondary and tertiary level of health care.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>
3.	<p><b>Lecture:</b> Health care facilities and types of dental care facilities.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>
4.	<p><b>Lecture:</b> Documentation at the dental health care facility, business policies and procedures.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>
5.	<p><b>Lecture:</b> Management- definition, history, basics and functions of management.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>
6.	<p><b>Lecture:</b> Specifics of healthcare management; Organisations' types in dentistry.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>
7.	<p><b>Lecture:</b> Organisation of business process in dentistry.</p> <p><b>Practice:</b></p>	<p>2</p> <p>3</p>

**DENTAL HYGIENE PROFESSIONAL PROGRAM**

8.	<b>Lecture:</b> Quality management of dental health care. <b>Practice:</b>	2 3
9.	<b>Lecture:</b> Economics and the financing of dental facilities. <b>Practice:</b>	2 3
10.	<b>Lecture:</b> Human resource management: dental team in relation to procedure as well as motivation in dental health care. <b>Practice:</b>	2 3
11.	<b>Lecture:</b> Training of employees in dental practice. <b>Practice:</b>	2 3
12.	<b>Lecture:</b> Management of time, risk management. <b>Practice:</b>	2 3
13.	<b>Lecture:</b> Reports and records in dentistry. <b>Practice:</b>	2 3
14.	<b>Lecture:</b> Accreditation and certification of dental healthcare institutions. <b>Practice:</b>	2 3
15.	<b>Lecture:</b> Marketing services in dentistry, ethical aspect of public appearance. <b>Practice:</b>	2 3
16.	Final exam	
18.-20. week	Exam- the second term	
Note:	Consultations with students will be organised from 12 until 14 every day!	

Lectures will be followed by the practice which will be organized in the form of interactive communication, like the simulation of the case in everyday practice as well as in the form of discussion and problem based learning too.

CODE: SFDH146	COURSE TITLE: INFORMATICS	
LEVEL: Basic vocational studies - Dental hygiene	YEAR: II SEMESTER: IV	ECTS POINTS: 4
STATUS: ELECTIVE	TOTAL HOURS: 75	
LECTURER IN CHARGE: Head of Department		

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<b>REQUIREMENTS FOR ATTENDING THE COURSE:</b> Regulated by the Study rules for the I cycle studies at University of Sarajevo	
7. Aims and objectives of the course	Student should get an insight in basic terms of health informatics and to get familiar with electronic surrounding as a part of future integrated healthcare information system. Student should learn how to use different program tools needed to manage plenty of tasks they will be encountered with in modern dental office.
8. Purpose of the course	To enable student to work with standard program tools for entering and updating data, to manage data registration and to create reports.
9. Learning outcomes	Upon finalization of the course student will be able to: recognize basic terms in informatics and statistics, describe theoretic principles of informatics, differentiate types of data, know how to use basic text, data and picture processing programs, apply acquired knowledge for electronic communication and searching, use electronic dental charts.
10. Learning methods	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Exercises</li> </ul>
11. Assessment methods	<p>Written exam: Exam is in form of final test which is 50% of the final grade. Minimum of 60% of correct answer is required to get a positive grade.</p> <p>Obligatory presence and active involvement of the student in lectures and exercises accounts for 50% of the final grade.</p> <p><b>GRADING SCHEMA:</b></p> <p>&lt;55 – grade 5  55-64 – grade 6  65-74 – grade 7  75-84 – grade 8  85-94 – grade 9  95-100 – grade 10</p>
12. Literature	<p>Mandatory: Slides from lectures,</p> <ul style="list-style-type: none"> <li>- Mašić Izet, Riđanovi Zoran. Medicinska informatika. Knj. 2, Aplikativna medicinska informatika.</li> <li>- Mašić Izet, Riđanović Zoran. Medicinska informatika. Knj. 1, Osnove medicinske informatike.</li> </ul> <p>Complementary: J. Erić-Marinković I saraadnici.: Mali rečnik informatike u medicine I zdravstvu.  <a href="http://www.med.bg.ac.rs/dloads/nastavni_sadrz_statistika/mali%20recnik%20informatike.pdf">http://www.med.bg.ac.rs/dloads/nastavni_sadrz_statistika/mali%20recnik%20informatike.pdf</a></p> <p>Extended: N. Mitić Uvod u organizaciju računara, Matematički fakultet, Beograd, 2009</p>

## SYLLABUS

NO	CONTENT	HOURS
Week 1	Lecture: Computer industry – Informatics in stomatology. Exercise: Word processing programs (MS Word) – Filling in the questionnaires, text editing	1 2
Week 2	Lecture: Medical information, data, knowledge. Exercise: Word processing programs (MS Word) – designing text according to pattern	1 2
Week 3	Lecture: Data management, antivirus protection, backup.	1 2

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	Exercise: MS EXCELL. Basic terminology and practical skills: data description and basics of statistic analysis.	
Week 4	Lecture: Information and unspecificity, information entropy and information size. Exercise: MS EXCELL: table presentation of data acquired by statistical description of data.	1 2
Week 5	Lecture: Medical statistics – definition, basic terminology, data description. Exercise: MS EXCELL: graphic presentation of data acquired by statistical description of data.	1 2
Week 6	Lecture: Information sources in electronic surroundings. Exercise: Electronic billing of laboratory services.	1 2
Week 7	Lecture: Internet and searching. Exercise: Electronic billing of medical services.	1 2
Week 8	Lecture: Text files and programs for text processing Exercise: Electronic dental chart.	1 2
Week 9	Lecture: Numeric data and programs for table management. Exercise: Electronic dental chart.	1 2
Week 10	Lecture: Database management programs. Exercise: Electronic dental chart.	1 2
Week 11	Lecture: Presentation making programs. Exercise: Presentation making programs (MS Power Point)	1 2
Week 12	Lecture: Electronic services in healthcare, service billing. Exercise: Electronic dental chart.	1 2
Week 13	Lecture: Electronic services in healthcare, service billing. Exercise: Electronic dental chart.	1 2
Week 14	Lecture: Dental information systems. Exercise: Internet and knowledge data bases search.	1 2
Week 15	Lecture: Medical decision making. Exercise: Internet and medical knowledge bases search.	1 2
Week 17	Final exam (First exam).	
Week 18-20	Corrective exam (Second exam).	

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Code: SFDHO45	Name of the course subject: <b>Individual professional practice II</b>		
Level: <b>Basic vocational studies DH</b>	Year: <b>II</b>	Semester: <b>IV</b>	ECTS credits: <b>10</b>
Status: <b>compulsory</b>			Total hours: <b>200</b>
Faculty advisor:	Head of Department		
Requirements for taking the course: Regulated by the Rule book on studying at the I cycle of studies at the University of Sarajevo			
1. Course objectives	Practical work and application of skills acquired during theoretical and practical lessons, seminars and half-term exams that the students attended during the previous year of study.		
2. Purpose of the course	Qualifying students with basic knowledge and skills from the area of internal medicine and microbiology, dental pharmacology and radiology, preventive dentistry and oral medicine, as well as work safety.		
3. Learning outcomes	<p>After completed summer professional practice student will, with additional performing of acquired knowledge and skills, be qualified to:</p> <ul style="list-style-type: none"><li>- understand the etiology of oral diseases and risk factors for their occurrence</li><li>- understand and apply preventive and prophylactic measures in oral diseases</li><li>- monitor epidemiological indicators of oral diseases</li><li>- organise and keep health records and registers</li><li>- use electronic chart of dental services</li><li>- meet conditions of aseptic work in a dental practice office, surgical room, dental laboratory</li><li>- break a chain of infection in clinical conditions</li><li>- prepare a work place and working area</li><li>- take medical history</li><li>- perform a physical examination of the oral cavity</li><li>- informs the dentist in case of suspicion of some disease of the oral tissue or a systemic disease that manifests itself in the oral cavity</li><li>- assists during medical and dental procedures</li><li>- takes swabs from oral mucosa and performs its preparation for observation under the microscope</li><li>- receives, distributes and grow samples of materials</li><li>- prepares medications and materials for use in dental procedures</li><li>- assesses which patients need caution and emergency pharmacotherapy</li><li>- performs methods of intraoral radiography on their own</li></ul>		

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	<ul style="list-style-type: none"> <li>- examines nutrition and nutritional status of their patients</li> <li>- creates recommendations for proper nutrition and patients' diet therapy</li> </ul>
4. Teaching methods	<p>During professional practice the student will:</p> <ul style="list-style-type: none"> <li>- maintain health documents and records in dental health institutions</li> <li>- implement principles of asepsis and antisepsis in all clinical conditions and all clinical areas of dentistry</li> <li>- prepare work place and working area</li> <li>- admit patients</li> <li>- remove soft plaque, remove hard plaque, local application of highly concentrated fluorides, sealing the fissures</li> <li>- organise work</li> <li>- assist during medical and dental procedures</li> <li>- calculate therapy concentration of medications for local application</li> <li>- individually perform intraoral methods of radiography</li> <li>- take biological material for examination on doctor's request</li> <li>- maintain utensils and equipment for diagnostics and therapy</li> <li>- familiarise with practical tools for using medical data bases</li> <li>- use electronic charts of dental services</li> <li>- apply methods of nutrition examination of individuals and population</li> <li>- create recommendations for regular diet and diet therapy for patients</li> </ul>
5. Methods of learning assessment	<p>Summer professional practice takes place at the Clinics of the Faculty of Dentistry according to the programme and with the control of faculty advisor, mentor, co-mentor or expert from practice in charge (report on completed professional practice is filled out by the mentor, co-mentor or expert from practice, and the number of ECTS credits in the index is filled out by the faculty advisor). Teacher, in charge of professional practice, creates the plan of students' summer professional practice and checks the register of regular attendance and students' activity, and the student keeps a journal of professional practice where they note the activities they performed. After completed professional practice student does not receive a grade, but is obligated to complete it in order to attain a stipulated number of ECTS credits.</p>

<b>Code: SFDHO51</b>	<b>Course title: PEDIATRIC DENTISTRY</b>		
<b>Course level: basic structural studies-first level</b>	<b>Year: Third</b>	<b>Semester: V</b>	<b>ECTS credits: 7</b>
<b>Course status: compulsory</b>		<b>Teaching hours: 165 total (30 + 45 + 90)</b>	
<b>Professor in charge:</b>	<b>Head of Department</b>		
<b>Entry requirements:</b>			

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<b>These requirements are regulated by the Rules for first cycle studying in University of Sarajevo</b>	
<b>1. Course objectives:</b>	Introduction with the specificities of dental practice in child and adolescent patients as well as with the characteristics of treatment during primary, mixed and permanent dentition.
<b>2. Course purpose:</b>	To enable the student to recognize the normal psychophysical growth and development from conception to the end of the adolescent period, to notice deviations from this complex process and the causes that lead to it. The purpose is also to enable students to plan basic clinical treatment in relation to the orofacial pathology of this part of the population in order to deal with these conditions, as well as to know the modern dental materials used for this purpose.
<b>3. Course outcomes:</b>	<p>After completing the course, the students will be capable to:</p> <ul style="list-style-type: none"> <li>– distinguish the differences between primary and permanent dentition</li> <li>– recognize the psychological types of children</li> <li>– collaborate effectively within the dental team for the care of children and adolescents</li> <li>– adjust children for dental work</li> <li>– specify the basic principles in the treatment of dental caries</li> <li>– specify the basic principles in the treatment of dental injuries</li> <li>– make a therapy plan adjusted to the type of dentition</li> </ul>
<b>4. Learning methods:</b>	<p>The course content will be presented in the form of:</p> <ul style="list-style-type: none"> <li>• ex-cathedra lectures for all students;</li> <li>• practical classes - clinical exercises for students within groups, according to standards;</li> <li>• interactive learning for all students (within the lectures and practical exercises);</li> <li>• seminars - work in small groups of students, discussion</li> <li>• • *professional practice</li> </ul>
<b>5. Methods of student knowledge assessment:</b>	<p>The final grade will be formed on the following elements:</p> <p>Compulsory attendance and activity at the classes accounts for a maximum of 30 points of the grade (15 points in lectures and 15 points in practical exercises). A student will be considered to have met this criterion if he / she has reasonably been absent of a maximum of 20% of number of teaching hours in semester.</p> <p>During the semester it is obligatory to write one seminar paper whose realization makes a maximum of 20 points of the grade. Seminar work will be evaluated through grades/points ratio as follows:</p> <p><b>5</b> ≤ 5 points; <b>6</b> – 6-8 points; <b>7</b> – 9-11 points; <b>8</b> – 12-14 points; <b>9</b> – 15-17 points; <b>10</b> – 18-20 points.</p> <p>The final examination will be in verbal form and constitutes of 50 points of the final grade. The minimum for passing this section of the exam is a grade of 6 for each of the 3 questions asked. The final exam is taken on the 17-18th week of semester, and the corrective term is on the 19-20th week of semester.</p>

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	<p>The grading/points ratio in the final exam is done as follows:</p> <ul style="list-style-type: none"> <li>▪ <b>6,0-6,4</b> =5 points</li> <li>▪ <b>6,5-7,4</b> =20 points</li> <li>▪ <b>7,5-8,4</b> =30 points</li> <li>▪ <b>8,5-9,4</b> =40 points</li> <li>▪ <b>9,5-10,0</b>=50 points</li> </ul> <p>After passing the exam completely, students are able to score maximally 100 points.</p> <p>Grading scale:</p> <ul style="list-style-type: none"> <li>▪ <b>A (10)</b> = 95 – 100 points</li> <li>▪ <b>B (9)</b> = 85 – 94 points</li> <li>▪ <b>C (8)</b> = 75 – 84 points</li> <li>▪ <b>D (7)</b> = 65 – 74 points</li> <li>▪ <b>E (6)</b> = 55 – 64 points</li> <li>▪ <b>F (5)</b> under 55 points</li> </ul>
<b>6. Literature</b>	<ol style="list-style-type: none"> <li>1. Casamassimo PS, Fields HW, McTigue DJ, Nowak AJ. Pediatric Dentistry. Infancy through adolescence. Fifth edition. St. Louis: Elsevier; 2013. (selected chapters)</li> <li>2. 5. Cameron AC, Widmer RP. Handbook of Pediatric Dentistry. Fourth edition. St. Louis: Mosby; 2013. (selected chapters)</li> <li>3. Dean JA, Avery DR, McDonald RE. Dentistry for the Child and Adolescent. Ninth edition. St. Louis: Mosby; 2011. (selected chapters)</li> <li>4. Koch G, Poulsen S. Pediatric Dentistry. A Clinical Approach. Second edition. Wiley-Blackwell; 2009. (selected chapters)</li> </ol>

## WEEKLY TEACHING PLAN

Week	Course form and content	Teaching hours
<b>Week 1</b>	<u>Lecture:</u> Introduction to pediatric dentistry (goals, tasks and specificities; importance of preserving the health of the mouth and teeth)	2
	<u>Practicals:</u> Introductory exercise (workplace preparation). Types of dental records. Practical work with patients - the role of the oral hygienist.	3
<b>Week 2</b>	<u>Lecture:</u> Practical work with children and adolescents (psychological types of children; division of children by age; cooperation with parents or accompanying persons)	2
	<u>Practicals:</u> Admission of child patients, preparation, attitude towards the child and parents, making appointments - role of oral hygienist	3

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<b>Week 3</b>	<p><u>Lecture:</u> Pain control in pediatric dentistry</p> <p><u>Practicals:</u> Application of pain and behaviour management control methods in children in dental office and out of it – role of oral hygienist</p>	<p align="center">2</p> <p align="center">3</p>
<b>Week 4</b>	<p><u>Lecture:</u> Growth and development of orofacial system, and developmental disturbances</p> <p><u>Practicals:</u> Developmental disturbances of teeth – role of oral hygienist</p>	<p align="center">2</p> <p align="center">3</p>
<b>Week 5</b>	<p><u>Lecture:</u> Caries in primary teeth (early childhood caries, severe forms; specificities) and its treatment</p> <p><u>Practicals:</u> Characteristics of primary dentition (identifying of primary and permanent teeth) – role of oral hygienist; Hard dental tissues diseases in children – role of oral hygienist</p>	<p align="center">2</p> <p align="center">3</p>
<b>Week 6</b>	<p><u>Lecture:</u> Specificities and therapy of caries in young permanent and permanent teeth in children and adolescents</p> <p><u>Practicals:</u> Hard dental tissues diseases in children and adolescents – role of oral hygienist</p>	<p align="center">2</p> <p align="center">3</p>
<b>Week 7</b>	<p><u>Lecture:</u> Dental materials in pediatric dentistry</p> <p><u>Practicals:</u> Dental materials and devices in pediatric dentistry</p>	<p align="center">2</p> <p align="center">3</p>
<b>Week 8</b>	<p><u>Lecture:</u> Dental pulp diseases in primary and permanent dentition</p> <p><u>Practicals:</u> Dental pulp diseases in children and adolescents and therapy basics – role of oral hygienist</p>	<p align="center">2</p> <p align="center">3</p>
<b>Week 9</b>	<p><u>Lecture:</u> Specificities in orosurgical interventions in children and adolescents (Preparation of a child patient for the intervention, informed consent of parents and of proper kind of medical specialty practitioners)</p> <p><u>Practicals:</u> Orosurgical interventions in children and adolescents – role of oral hygienist</p>	<p align="center">2</p> <p align="center">3</p>

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<b>Week 10</b>	<u>Lecture:</u> Dental traumas in children and adolescents (etiology, epidemiology, classification, therapy basics)	2
	<u>Practicals:</u> Soft and hard orodental tissues injuries in children and adolescents – role of oral hygienist	3
<b>Week 11</b>	<u>Lecture:</u> Periodontal tissues diseases in children and adolescents	2
	<u>Practicals:</u> Periodontal tissues diseases in child and adolescent period – role of oral hygienist	3
<b>Week 12</b>	<u>Lecture:</u> Oral soft tissues diseases in children and adolescents	2
	<u>Practicals:</u> Oral soft tissues diseases in child and adolescent period – role of oral hygienist	3
<b>Week 13</b>	<u>Lecture:</u> Dental care of medically compromised patients	2
	<u>Practicals:</u> Specificities in practical work with medically compromised patients. Team work. Dental examination – role of oral hygienist	3
<b>Week 14</b>	<u>Lecture:</u> Dental urgencies in pediatric dentistry (odontogenic infections in children and adolescents, anaphylactic shock, local allergic reactions, acute asthmatic attack, syncope, collapse, hysterical attack, epileptic attack, airway obstruction, hypoglycemia, hypo- and hyperventilation syndrome)	2
	<u>Practicals:</u> Acute odontogenic infections in children and adolescents and other dental urgencies in pediatric dentistry – role of oral hygienist	3
<b>Week 15</b>	<u>Lecture:</u> Interceptive orthodontics. Dental prosthodontics in pediatric dentistry.	2
	<u>Practicals:</u> Importance of timely diagnosis of some orthodontic irregularities and implementation of preventive measures; the problem of premature loss and lack of primary teeth – role of oral hygienist	3
<b>Week 16</b>		
<b>Week 17-18</b>	Final exam – first winter term	
<b>Week 19-20</b>	Final exam – corrective winter term	

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\*It is planned that the students should have 90 teaching hours outside the envisaged fund for practical teaching through the implementation of professional practice

## Contents of the professional practice

Within the professional practice, the students should:

- receive and prepare children and adolescents for dental practical work;
- perform a systematic dental examination with a treatment planning;
- implement preventive and prophylactic measures in children and adolescents (removal of dental plaque and calculus, fissure sealing, topical application of fluorides);
- conduct health educational work with children and parents / accompanying persons.

CODE: <b>SFDHO43</b>	COURSE TITLE: ORAL SURGERY		
Class and level of studies: Basic profession course	YEAR: <b>III</b>	SEMESTER: <b>V</b>	ECTS POINTS: 4
STATUS: <b>OBLIGATORY</b>			TOTAL HOURS: 75 (lectures 30 + practical 45)
LECTURER IN CHARGE:		Head Of Department	
Requirements for taking the course: Requirements regulated by the Rule book on studying at the first cycle of studies at the University of Sarajevo.			
7. Course objectives	Introducing students to the basic principles of oral surgery and training them to actively assist the oral surgeon in the preparation and implementation of oral surgery.		
8. Purpose of the course	Purpose of the course is to enable the student to introduce systematically collect, analyze and present patient data necessary for diagnosis.		
9. Learning outcomes	After completing the course the student will be able to: <ul style="list-style-type: none"><li>• Independently prepare work field and instruments.</li><li>• Assists oral surgeon in performing oral surgery intervention.</li><li>• Teaches patients how to maintain oral hygiene after oral surgery.</li></ul>		
10. Teaching methods	The course is conducted in a form: <ul style="list-style-type: none"><li>- Interactive lectures</li><li>- Practical exercises</li><li>- Interactive learning</li><li>- Seminar works</li><li>- Continuous assessment of knowledge</li></ul>		
11. Methods of learning assessment	By completing the pre-exam requirements and passing the exam, the student can achieve a maximum of 100 points, with pre-exams being 50% and the final exam 50% of the total grade. The final grade will be formed on the following elements: Regulars attendance and activity at the class makes a maximum 40%. During the semester it is obligatory to write one seminar work whose realization makes a maximum of 10% of the total grade. Regular attendance lectures is 20% of total grade. Regular attendance exercise is 20% of total grade. Seminar work is 10% of the total grade. Final exam – written exam, and makes 50% of the total grade. GRADING SCHEMA: A (10) = 95 – 100 B (9) = 85 – 94		

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	<p>C (8) = 75 – 84  D (7) = 65 – 74  E (6) = 55 – 64* F</p> <p>Student that score 55-69% can take additional exam. Students that score below 55% have to take the course again.</p>
12. Literature:	<ul style="list-style-type: none"> <li>• Lecture slides</li> <li>• Todorović Lj, Petrović V, Kafedziska V, Jurisic M. Oralna hirurgija 2002</li> <li>• Markovic A, Čolić S. Praktikum oralne hirurgije 2011</li> </ul>

**Consultation with students every working day from 12 am to 2 pm.**

## BASIC PROFESSION COURSE

### IMPLEMENTATION PLAN OF COURSE:

WEEK	CONTENT	HOURS
Week 1	<p><b>Lectures:</b> Medical history and clinical examination of oral surgical patients.</p> <p><b>Exercises:</b> Admitting patients and recording data obtained during medical history and clinical examination.</p>	2
Week 2	<p><b>Lectures:</b> Control of asepsis and antisepsis in oral surgery.</p> <p><b>Exercises:</b> Preparation instruments for sterilization, control of sterilization, preparation oral surgeon and place of oral surgery.</p>	2 3
Week 3	<p><b>Lectures:</b> Instruments for tooth extraction and basic principles of tooth extraction.</p> <p><b>Exercises:</b> Introduction with instruments for tooth extraction, preparation and basic principles of application.</p>	2 3
Week 4	<p><b>Lectures:</b> General principles of tooth extraction, stages of tooth extraction and wound care after tooth extraction.</p> <p><b>Exercises:</b> Introduction with instruments for oral surgery interventions, preparation and basic principles of application.</p>	2 3
Week 5	<p><b>Lectures:</b> General principles of oral surgery.</p> <p><b>Exercises:</b> Assisting during the ordinary and complicated tooth extraction.</p>	2 3
Week 6	<p><b>Lectures:</b> Instruments for oral surgery interventions. Materials in oral surgery.</p> <p><b>Exercises:</b> Preparing, taking, marking and sending materials for laboratory analysis.</p>	2 3
Week 7	<p><b>Lectures:</b> Impacted teeth: term definition, clinical picture and diagnostics. General principles of surgical therapy of impacted teeth.</p> <p><b>Exercises:</b> Giving postoperative instructions to the patient and training in oral hygiene after oral surgery.</p>	2 3
Week 8	<p><b>Lectures:</b> Chronic periapical process: definition, clinical pictures and diagnostics. Methods of surgical therapy.</p> <p><b>Exercises:</b> Control of postoperative, toilet wounds, intramuscular drug application for swelling control.</p>	2 3
Week 9	<p><b>Lectures:</b> Basic surgical procedures within orthodontic treatment.</p> <p><b>Exercises:</b> Removal of thread, rinse of cystic cavity as part of decompression, testing of vitality of teeth, scheduling checkups.</p>	2 3
Week 10	<p><b>Lectures:</b> Oroantral communication and fistulas; diagnostics, indication of oral surgery and methods of treatment.</p> <p><b>Exercises:</b> Diagnostic of odontogenic infections and introduction with the basic principles of treatment, the role of the oral hygienist.</p>	2 3
Week 11	<p><b>Lectures:</b> Odontogenic infections. Term and types of odontogenic infections. Clinical pictures and diagnostic, the basic principles treatment.</p>	2 3

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	<b>Exercises:</b> Diagnostic of periapical lesion and jaw cysts and introduction with the basic principles of treatment, the role of the oral hygienist.	
Week 12	<b>Lectures:</b> Hemorrhages in oral surgery and methods of hemostasis. Resources for artificial hemostasis. <b>Exercises:</b> Diagnostic oroantral communication and fistulas, and introduction with the basic principles of treatment, the role of the oral hygienist.	2 3
Week 13	<b>Lectures:</b> Pre-prosthetic surgery, basic principles of working on soft and bone tissues. <b>Exercises:</b> Diagnostic of impacted teeth and introduction with the basic principles of treatment, the role of the oral hygienist.	2 3
Week 14	<b>Lectures:</b> Aspect of risk-patients in oral surgery, characteristics of general diseases for oral surgery. <b>Exercises:</b> Diagnostic and indication for oral surgery in prosthetic and orthodontic treatments- the role of the oral hygienist.	2 3
Week 15	<b>Lectures:</b> Jaw cysts, term and definition, clinical pictures and diagnostics. Methods of oral surgery treatment. <b>Exercises:</b> Identification and introducing with principles of therapy post-operative complication.	2 3
Week 17	<b>Final exam</b>	
Week 18-20	Makeup exam date for students who have not passed the final exam.	

**Students should have 60 working hours besides the planned hours for practical training by preforming professional practice in operating room and oral surgery ambulance**

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Code: SFDHO53	<b>Restorative dental medicine and endodontics</b>		
	Study year: <b>III</b>	Semester: <b>V</b>	<b>ECTS points: 7</b>
Status: <b>obligatory</b>			<b>Course load: 165 (30P+45V + 90 SP)</b>
<b>Course leader</b>	Head of Department		
Objectives of the course	Introduce students to basic clinical protocols during restorative and endodontics procedures, as well as, qualify them for active participation in the same.		
Purpose of the course	Training students for assisting dentist during restorative and endodontics procedures.		
Learning outcomes	<p>After mastering the class students will be able to:</p> <ul style="list-style-type: none"> <li>• Prepare workplace and instruments for work.</li> <li>• Preparation of instruments for sterilization.</li> <li>• Assisting dentist during restorative procedures.</li> <li>• Prepares medicines and materials for temporary and permanent tooth restoration.</li> <li>• Assists during the of endodontic procedures and therapy.</li> <li>• Prepares medicines and materials for endodontics procedures.</li> </ul>		
Learning methods	<p>Interactive lecture</p> <p>Special clinical practicals</p> <p>Seminars</p> <p>Continuous assessment of knowledge and skills</p>		
Knowledge assessment methods and rules of grading	<p>At the end of the V semester final exam is taken.</p> <p>Attendance and active participation takes 40% of total rating.</p> <p>Seminars 10 % of total rating.</p> <p>Final exam is 50% of total rating.</p> <p>The final grade is formed as follows:.</p> <p>&lt;55 points –grade 5</p> <p>55-64 points –grade 6</p> <p>65-74 points – grade 7</p>		

# DENTAL HYGIENE PROFESSIONAL PROGRAM

	<p>75-84 points – grade 8</p> <p>85-94 points – grade 9</p> <p>95-100 points – grade 10</p>
<p>Literature:</p> <ol style="list-style-type: none"> <li>1. Mount GJ, Hume WR. Preservation and restoration of tooth structure. Mosby International Ltd. 1998.</li> <li>2. Summit JB, Robbins JW, Hilton TJ, Schwartz RS. Fundamentals of operative dentistry: a contemporary approach: Quintessence Publishing Co Inc, 2013.</li> <li>3. Konjhodžić A. i saradnici, Endodontska propedeutika; Stomatološki fakultet Sarajevo 2017.</li> <li>4. Walton RE, Torabinejad M, Fouad A. Endodontics: principles and practice. Elsevier Saunders ,St. Louis, 2015.</li> </ol>	

## Implementation plan of course:

Course load

Week 1.	<p><b>Lecture:</b> The place and role of the oral hygienist in the field of restorative dentistry and endodontics.</p> <p><b>Clinical Practicals:</b> Getting acquainted with the workplace and basic stages of work in restorative dentistry.</p>	<p>2</p> <p>3</p>
Week 2.	<p><b>Lecture:</b> Dental workplace and basic characteristics of instruments for work in restorative dentistry.</p> <p><b>Clinical Practicals:</b> Introduction to the stages of work in endodontic therapy.</p>	<p>2</p> <p>3</p>
Week 3.	<p><b>Lecture:</b> Characteristics of basic endodontic instruments and method of use.</p> <p><b>Clinical Practicals:</b> Introduction to basic materials and instruments used in restorative dentistry.</p>	<p>2</p> <p>3</p>

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Week 4.	<b>Lecture:</b> Asepsis in restorative procedure and endodontics.  <b>Clinical Practicals:</b> Basic endodontic instruments and the way it used during endoterapy.	2  3
Week 5.	<b>Lecture:</b> Field isolation  <b>Clinical Practicals:</b> Preparation of instruments for sterilization	2  3
Week 6.	<b>Lecture:</b> Caries Definition, Epidemiology , Diagnosis.  <b>Clinical Practicals:</b> Assisting during dental procedure.	2  3
Week 7.	<b>Lecture:</b> Caries clasification; Basic principles of cavity preparation (Black's principles), adhesive cavity preparation, indirect restaurations (Inlay, onlay, overlay).  <b>Clinical Practicals:</b> Demonstration of rubber-dam use.	2  3
Week 8.	<b>Lecture:</b> Temporary cavity filling materials..  <b>Clinical Practicals:</b> Assistance during cavity preparation; assisting during endodontic therapy.	2  3
Week 9.	<b>Lecture:</b> Materials used for pulp-dentin complex protection and reintegration.  <b>Clinical Practicals:</b> Preparation of temporary cavity filling materials; materials used for pulp-dentin complex protection and glass ionomer cements .	2  3
Week 10.	<b>Lecture:</b> Glass ionomer cements in restorative procedures. Properties, indications, contraindications and application.  <b>Clinical Practicals:</b> Matricing systems and interdental wedges; preparation and placement.	2  3

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Week 11.	<b>Lecture:</b> Dental composites. Physical and chemical components and properties.	2
	<b>Clinical Practicals:</b> Assistance during the composite fillings.	3
Week 12.	<b>Lecture:</b> Dental amalgam. Physical and chemical components and properties; clinical application	2
	<b>Clinical Practicals:</b> Assistance during the amalgam fillings.	3
Week 13.	<b>Lecture:</b> Diagnostic procedures in endodontics. Basics of pulp and apical periodontal pathology, clinical classification of pulpal and periapical pathology.	2
	<b>Clinical Practicals:</b> Demonstration of diagnostic procedures	3
Week 14.	<b>Lecture:</b> Basics of endodontic therapy.	2
	<b>Clinical Practicals:</b> Priprema medikamenata za endodontsku terapiju (anestetici, kanalani antiseptici, paste za kanalnu medikaciju).  Preparation of root canal medicaments.	3
Week 15.	<b>Lecture:</b> Materials in endodontics.	2
	<b>Clinical Practicals:</b> Obturating materials	3
Week16.	Final exam	
Week 17-20	Remedial	

CODE: <b>SFDHO54</b>	<b>COURSE TITLE: ORAL HEALTHCARE FOR DISABLED PERSONS</b>		
Class and level of studies: Basic profession course	YEAR: <b>III</b>	SEMESTER: <b>V</b>	ECTS POINTS: <b>5</b>
STATUS: <b>OBLIGATORY</b>			TOTAL HOURS: 75 (lectures 30 + practical 30+seminars 15)
LECTURER IN CHARGE: <b>HEAD OF DEPARTMENT</b>			
Requirements for taking the course: Requirements regulated by the Rule book on studying at the first cycle of studies at the University of Sarajevo.			
1. Course objectives	Introducing students to the specifics oral healthcare for disabled persons. Training of students for planning and implementation of health education work, preventive and prophylactic measures as well as assistance in performing therapeutic procedures in the oral healthcare for disabled persons.		

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2. Purpose of the course	Purpose of the course is to enable the student to implementation of health education work, preventive and prophylactic measures in the oral healthcare for disabled persons.
3. Learning outcomes	<p>After completing the course the student will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the most common types of developmental disabilities as well as their general medical, epidemiological and socio-economic characteristics.</li> <li>• Describe the most common oral conditions and diseases in the oral healthcare for disabled persons.</li> <li>• Predict by need for special forms of patient access and the implementation of dental treatments.</li> <li>• Apply the most common techniques and skills to establish effective communication with disabled persons.</li> <li>• Assist in performing dental therapeutic procedures in the ambulatory conditions as well as in the conditions of sedation and general anesthesia.</li> </ul>
4. Teaching methods	<p>The course is conducted in a form:</p> <ul style="list-style-type: none"> <li>- Interactive lectures</li> <li>- Practical exercises</li> <li>- Seminar works</li> <li>- Continuous assessment of knowledge</li> </ul>
5. Methods of learning assessment	<p>By completing the pre-exam requirements and passing the exam, the student can achieve a maximum of 100 points, with pre-exams being 50% and the final exam 50% of the total grade.</p> <p>The final grade will be formed on the following elements:</p> <p>Regulars attendance and activity at the class makes a maximum 40%.</p> <p>During the semester it is obligatory to write one seminar work whose realization makes a maximum of 10% of the total grade.</p> <p>Regular attendance lectures is 20% of total grade.</p> <p>Regular attendance exercise is 20% of total grade.</p> <p>Seminar work is 10% of the total grade.</p> <p>Final exam – written exam, and makes 50% of the total grade.</p> <p><b>GRADING SCHEMA:</b></p> <p>A (10) = 95 – 100</p> <p>B (9) = 85 – 94</p> <p>C (8) = 75 – 84</p> <p>D (7) = 65 – 74</p> <p>E (6) = 55 – 64* F</p> <p>Student that score 55-69% can take additional exam. Students that score below 55% have to take the course again.</p>
6. Literature:	<p>Lecture notes</p> <ol style="list-style-type: none"> <li>1. Neville BW, Damm DD, Allen CM, Bouquot JE. Oral and maxillofacial pathology. 3<sup>rd</sup> edition . Saunders Elsevier 2009</li> <li>2. Zukanović A, Gržić R. Stomatološko liječenje medicinski kompromitiranih pacijenata. Hrvatska Komora dentalne medicine, 2012.</li> </ol> <p>Lazarevski P, Škrinjarić I, Vranić A. Psihologija za stomatologe. Naklada Slap, 2005.</p>

**Consultation with students every working day from 12 am to 2 pm.**

## IMPLEMENTATION PLAN OF COURSE:

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WEEK	CONTENT	HOURS
Week 1	<b>Lectures:</b> Introductory notes of the course. Dental healthcare for disabled persons: psychosocial and social medical aspects. <b>Exercises:</b> Communication methods with specific patient groups. <b>Seminar:</b> Distribution of themes for seminar works.	2 2 1
Week 2	<b>Lectures:</b> Disabled persons, types of disabilities, division, characteristics and incidence. <b>Exercises:</b> Admission and examination of patients for disabled persons. <b>Seminar:</b>	2 3
Week 3	<b>Lectures:</b> Admission for disabled persons. Communication methods and techniques. <b>Exercises:</b> Prevention of oral diseases for disabled persons. <b>Seminar:</b>	2 2 1
Week 4	<b>Lectures:</b> Preventive and prophylactic measures in disabled children. <b>Exercises:</b> Prophylaxis of oral diseases for disabled persons. <b>Seminar:</b>	2 2 1
Week 5	<b>Lectures:</b> The risk of caries for disabled persons. <b>Exercises:</b> Individual health education work. <b>Seminar:</b>	2 2 1
Week 6	<b>Lectures:</b> Pain control, premedication, sedation and general anesthesia for disabled persons. <b>Exercises:</b> Health education work in group. <b>Seminar:</b>	2 2 1
Week 7	<b>Lectures:</b> Restorative and endodontic therapy for disabled persons. <b>Exercises:</b> Ambulance work with disabled persons (preparation of workplace and instruments). <b>Seminar:</b>	2 2 1
Week 8	<b>Lectures:</b> Periodontal disease for disabled persons. <b>Exercises:</b> Ambulance work with disabled persons (assistance in the implementation of dental procedures). <b>Seminar:</b>	2 2 1
Week 9	<b>Lectures:</b> The most common changes on the oral mucosa for disabled persons. <b>Exercises:</b> The medical care disabled persons in general anesthesia (preparation of workplace and instruments). <b>Seminar:</b>	2 2 1
Week 10	<b>Lectures:</b> The specificity of oral surgery for disabled persons. <b>Exercises:</b> The specificity of medical care for disabled persons (assistance in the implementation of dental procedures). <b>Seminar:</b>	2 2 1
Week 11	<b>Lectures:</b> Oral and teeth therapy for disabled children. <b>Exercises:</b> Ambulance work with disabled persons with high medical risks (preparation of workplace and instruments). <b>Seminar:</b>	2 2 1
Week 12	<b>Lectures:</b> Prosthetics rehabilitation opportunities for disabled persons. <b>Exercises:</b> Ambulance work with disabled persons with high medical risks (preparation of workplace and instruments). <b>Seminar:</b>	2 2 1
Week 13	<b>Lectures:</b> Orthodontic treatment for disabled person with cleavages jaw and palate in different types of handicaps. <b>Exercises:</b> Ambulance work with disabled persons outside the healthcare facility (preparation of workplace and instruments). <b>Seminar:</b>	2 2 1
Week 14	<b>Lectures:</b> Orthodontic treatment for disabled person with severe craniofacial deformities. <b>Exercises:</b> Ambulance work with disabled persons outside the healthcare facility (assistance in the implementation of dental procedures).	2 2 1

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	<b>Seminar:</b>	
Week 15	<b>Lectures:</b> Persons with high medical risks in the dental clinic. <b>Exercises:</b> Motivation and demotivation disabled persons and parents/guardian for maintaining oral hygiene and oral health. <b>Seminar:</b>	2 2 1

Week 17	<b>Final exam</b>	
Week 18-20	Makeup exam date for students who have not passed the final exam.	

\*It is provided that cooperation with Association “DUGA” in Sarajevo will be achieved through the implementation of professional practice.

Code: SFDHO61	Course title: DENTAL PROSTHETICS		
Level: Basic Professional Program	Year: III	Semester: VI	ECTS credits: 7
Status: <b>Mandatory</b>			Total hours: <b>165 (30L +45E +90Sp)</b>
Teacher in-charge of the program:	Head Of Department		
Course admission requirements: As provided under the Rules of Academic Programs for the first cycle of study at higher education institutions of the Sarajevo University			
1. Objective of the Course	The objective of the course is to teach students on basic theoretical knowledge and skills in the field of mobile and fixed dental prosthetics that will effectively allow them to independently practice dental prosthetics on the basis of their competences.		
2. Purpose of the Course	The purpose of the Course is to enable students to acquire basic theoretical knowledge in the area of dental prosthetics and independently practice dental prosthetics procedures and interventions withing their competences.		
3. Learning Outcomes	Upon completion of the Course, the students will be able to: – Assist in the work of DMD’s at dental office at various clinical stages of the production of conventional prosthetic restorations. – Prepare patients, the workplace, and organize processes in the dental office during the course of prosthetic interventions. – Assist during the clinical stage of the production of fixed prosthetic work, ceramic restorations, and implants and also learns about the specifics.		
4. Learning Methods	– Lectures – Practical classes – Seminars – Work in small groups – Discussions		
5. Knowledge evaluation methods	Acquired knowledge and skills are tested continuously throughout the course of the semester. Once they have met their pre-examination requirement, students may take the final examination for their final grade. The overall final grade is calculated on the basis of points and it		

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	<p>includes (i) class attendance and activity at lectures, which accounts for maximum 15% of the final grade, (ii) attendance and activity at exercises, which account for maximum 30% of the final grade, seminar paper, which accounts for 5% of the final grade, and (iii) the final examination, which accounts for maximum 50% of the final grade – maximum 20% on test and maximum 30% on practical part of the examination.</p> <p>The final examination will be scored only if student correctly answered at least 55% of the questions.</p> <p>Accordingly, the grading scale is as follows:</p> <table><tr><th>Grade</th><th>Points</th><th>Grade description</th></tr><tr><td>10 (A)</td><td>95-100</td><td>Exceptional performance without or with minor errors</td></tr><tr><td>9 (B)</td><td>85-94</td><td>Above average performance with sporadic errors</td></tr><tr><td>8 (C)</td><td>75-84</td><td>Average performance with evident errors</td></tr><tr><td>7 (D)</td><td>65-74</td><td>Good performance in general, but with significant shortcomings</td></tr><tr><td>6 (E)</td><td>55-64</td><td>Meets the minimum criteria</td></tr><tr><td>5 (F)</td><td>&lt; 55</td><td>Fails of meet the minimum criteria</td></tr></table>	Grade	Points	Grade description	10 (A)	95-100	Exceptional performance without or with minor errors	9 (B)	85-94	Above average performance with sporadic errors	8 (C)	75-84	Average performance with evident errors	7 (D)	65-74	Good performance in general, but with significant shortcomings	6 (E)	55-64	Meets the minimum criteria	5 (F)	< 55	Fails of meet the minimum criteria
Grade	Points	Grade description																				
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7 (D)	65-74	Good performance in general, but with significant shortcomings																				
6 (E)	55-64	Meets the minimum criteria																				
5 (F)	< 55	Fails of meet the minimum criteria																				
<p><b>6. Textbooks:</b></p> <ol style="list-style-type: none"><li>1. Trifunović D., Radlović S., Kandić M. Nastić M., Petrović A., Krstić M., Sinobad D., Stomatološka protetika: pretklinika. 4th edition, Beograd: Zavod za udžbenike i nastavna sredstva; 2003. (selected chapters)</li><li>2. Stamenković D. at al. Stomatološki materijali. 1st edition, Belgrade: Univerzitet u Beogradu Stomatološki fakultet; 2009. (selected chapters)</li><li>3. Tihaček-Šojić Lj., Namenski ispuni. Nauka Beograd, 2000 (selected chapters)</li></ol>																						

## CURRICULUM

Week	Form of teaching and teaching materials	Hours
Week 1	<b>Lectures:</b> Basic concepts on full dental prosthesis/dentures: parts, supporting tissues, transfer of masticatory pressure. Anatomical impressions: definition, selection of impression spoons, material, and impression process. Preparation of patients and the workplace for anatomical impressions taking, assisting in this phase, disinfection of the impressions and transportation of the impressions to the laboratory.	2

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	<p><b>Exercises:</b> First contact with patients, how to open a dental record, getting to know the dental office and the staff. Patients and workplace preparation in order to take patient's medical history, clinical examination, diagnosis, and the treatment plan.</p> <p><b>Internship</b></p>	<p>3</p> <p>6</p>
Week 2	<p><b>Lectures:</b> Functional dental impressions: definition, selection of spoons, materials, and the procedure for taking impressions. Preparing patients and the workplace for functional impressions taking, assisting in this stage, disinfection of the impressions and transportation of the impressions to the laboratory.</p> <p><b>Exercises:</b> Preparing patients and the workplace for anatomical impressions, assisting in impressions taking. Disinfection of anatomical impressions, preparation for transport of impressions to dental laboratory, filling out patient's dental record, filling out work orders for dental laboratories. Contacts with dental laboratories and patient scheduling.</p> <p><b>Internship</b></p>	<p>2</p> <p>3</p> <p>6</p>
Week 3	<p><b>Lectures:</b> Determination of intermaxillary relationship in patients with edentulous jaws. Preparing patients and the workplace to determine the intermaxillary relationships and tooth color. Transportation of the model to dental laboratory. Tooth placement check. Preparing patient and workplace for teeth placement check.</p> <p><b>Exercises:</b> Preparing the patient and workplace for functional impressions taking, assisting in impressions taking. Disinfection of functional impressions, preparing impressions for transportation to dental laboratory, filling out patient's dental record, filling out work orders for dental laboratories. Contacts with dental laboratories and patient scheduling.</p> <p><b>Internship</b></p>	<p>2</p> <p>3</p> <p>6</p>
Week 4	<p><b>Lectures:</b> Handover of finished complete dentures: Preparing patients and the workplace for handover of finalized complete dentures, providing patient with instructions and brief training on how to maintain oral cavity and dentures hygiene, scheduling of follow up examinations.</p> <p><b>Exercises:</b> Preparing patients and the workplace to determine the intermaxillary relationships in patients who are partially or completely edentulous and teeth color. Filling out patient's dental record, filling out work orders for dental laboratories. Contacts with dental laboratories and patient scheduling.</p> <p><b>Internship</b></p>	<p>2</p> <p>3</p> <p>6</p>
Week 5	<p><b>Lectures:</b> Basic concepts of partial dentures: parts, supporting tissues, transfer of masticatory pressure. Specific issues related to impression taking in partially edentulous patients, selection of impression spoons and materials. Preparing patients and the workplace for impression taking. Impressions taking for complex dentures.</p> <p><b>Exercises:</b> Preparing patients and workplace for teeth placement check. Filling out patient's dental record, filling out work orders for the laboratory. Contacts with dental laboratories and patient scheduling.</p> <p><b>Internship</b></p>	<p>2</p> <p>3</p> <p>6</p>
Week 6	<p><b>Lectures:</b> Determination of intermaxillary relationship in partially edentulous patients. Skeletal partial dentures skeleton check. Preparing</p>	<p>2</p>

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	patients and the workplace to determine the inter-maxillary relationships in patients who are partially or completely edentulous and teeth color. Transportation of the model to the laboratory. Teeth placement check. Preparing patient and workplace for teeth placement check.	
	<b>Exercises:</b> Preparing the patient and the workplace for handover of finalized complete mobile dental restorations. Providing patient with instructions and brief training on how to maintain oral cavity and dentures hygiene. Filling out patient's dental records and scheduling of follow up examinations. <b>Internship</b>	3 6
Week 7	<b>Lectures:</b> Handover of finished partial dentures to the patient. Preparing patients and the workplace for handover of partial dentures. Handover of complex partial dentures and cementing of fixed dental restorations. Providing patient with instructions and brief training on how to maintain oral cavity and dentures hygiene. Scheduling of follow up examinations. <b>Exercises:</b> Preparing patients and workplace for skeletal partial dentures impressions taking. Specific features of impressions taking in partially edentulous patients, selection of spoons and materials. Assisting in impressions taking for complex partial dentures. Filling out patient's dental record, filling out work orders for the laboratory. Contacts with dental laboratories and patient scheduling. <b>Internship</b>	2 3 6
Week 8	<b>Lectures:</b> Adjustments, repairs, and lining of mobile prosthetic restorations (complete and partial dentures). Selection of lining and repair materials and methods. Preparation of patients and workplace for adjustments, lining, and repairs of mobile prosthetics restorations. <b>Exercises:</b> Preparing patients and workplace for adjustments, lining, and repairs of mobile prosthetics restorations. Filling out patient's dental record, filling out work orders for the laboratory. Contacts with dental laboratories and patient scheduling. <b>Internship</b>	2 3 6
Week 9	<b>Lectures:</b> Basic principles of teeth preparation, work methods, and instruments for teeth preparation. Preparing patients and the workplace for teeth preparation. Assisting during the course of teeth preparation procedures. <b>Exercises:</b> Preparing patients and workplace for teeth preparation. Filling out patient's dental record, filling out work orders for the laboratory. Contacts with dental laboratories and patient scheduling. <b>Internship</b>	2 3 6
Week 10	<b>Lectures:</b> Prosthetic restorations on depulped teeth. Preparing patients and workplace for root canal procedure. Making of cast restoration model, assisting in the modeling using autopolymerizing acrylate. Application of finalized metal and composite posts. Preparing patients, the workplace, and assisting in the process of applying prefabricated posts and restorations and making of the core build-up. <b>Exercises:</b> Preparing patients and workplace for root canal procedure, application of prefabricated posts and restorations and making of the core build-up. Assisting in modeling using autopolymerizing acrylate and application of prefabricated posts. Filling out patient's dental record, filling out work orders for the laboratory. Contacts with dental laboratories and patient scheduling. <b>Internship</b>	2 3 6

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Week 11	<b>Lectures:</b> Crowns and bridges: fundamental concepts, components, supporting tissues, and manner in which masticatory pressure is transferred. Impressions for fixed prosthetic restorations – selection of spoons and material, preparation of gingival sulcus. Preparing patient and the workplace for taking impressions of filed down teeth during the course of making fixed prosthetic restorations. Assistance in impression taking process, disinfection of impressions, transportation to the dental laboratory.	2
	<b>Exercises:</b> Preparing patient and the workplace for taking impressions on filed down teeth during the course of fixed prosthetic restorations making procedure. Assistance in impression taking process, disinfection of impressions, transportation to dental laboratory. Filling out patient's dental record, filling out work orders for the laboratories. Contacts with dental laboratories and patient scheduling.	3
	<b>Internship</b>	6
Week 12	<b>Lectures:</b> Temporary crowns: fundamental concepts, materials, and method of temporary covers making process. Preparing patients and the workplace for temporary crowns making process. Cementing process and assisting during the course of crown temporary cementing procedure.	2
	<b>Exercises:</b> Preparing patients and workplace for temporary crowns making process, cementing, and assisting during the course of crown temporary cementing procedure.	3
	<b>Internship</b>	6
Week 13	<b>Lectures:</b> Metal structure and ceramics checks during the course of metal ceramic crowns making process. Preparing patients and the workplace for metal structure and/or ceramic check. Specific issues regarding the clinical stages of ceramic crowns making process.	2
	<b>Exercises:</b> Preparing patient and the workplace for metal structure and/or ceramic check during the course of making metal ceramic crowns. Specificity issues involved in clinical stages of ceramic crowns making process. Filling out patient's dental record, filling out work orders for dental laboratories. Contacts with dental laboratories and patient scheduling.	3
	<b>Internship</b>	6
Week 14	<b>Lectures:</b> Fixed prosthetic restorations cementing - types, selection of cements, and preparations for cementing procedure. Preparing patients and the workplace for final cementing of fixed restorations, assisting during the course of cementing procedures that use different cements. Providing oral hygiene instructions to patients.	2
	<b>Exercises:</b> Preparing patients and the workplace for final cementing of fixed restorations, assisting during the course of cementing procedures that use different cements. Providing oral hygiene instructions to patients. Filling out patient's dental record and scheduling follow-up examinations.	3
	<b>Internship</b>	6
Week 15	<b>Lectures:</b> Restorations on dental implants, specific issues related to impressions taking, checks, and handover of finalized dental implant restorations. Preparing patients and the workplace for the clinical stages of dental implant restorations making process. Providing instructions and a brief training to patients on how to maintain oral hygiene following completion of dental implant restorations.	2

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	<b>Exercises:</b> Preparing patients and the workplace for the clinical stages of dental implant restorations making process. Providing instructions and a brief training to patients on how to maintain oral hygiene following completion of dental implant restorations. Filling out patient's dental record, filling out work orders for dental laboratories. Contacts with dental laboratories and patient scheduling. <b>Internship</b>	3  6
Week 17	Final examination	
Week 18-20	Make up examination	

Internship include individual and independent work of students outside planned practical teaching classes.

**During the course of internship, the students are required to:**

- Organize work in a dental office which provides dental prosthetics services.
- Establish the first contact with the patient, prepare the workplace and establish communication with the dental laboratory.
- Once the interventions are finalized, clean the workplace, disinfect the workplace and equipment, and prepare the instruments for sterilization.

**Compulsory student work as part of a practical classes:**

Students are required to prepare patients and the workplace for different clinical stages of dental prosthetics process, including mandatory administrative work.

Code:SFDHO62	Title of the course: <b>Dentofacial orthopedics - Orthodontics</b>		
Level: <b>Basic vocational studies: first-degree studies</b>	Year: <b>III</b>	Semester: <b>VI</b>	ECTS: <b>4</b>
Status: <b>Mandatory</b>			<b>Course load: 75</b>
Course head:	Head Of Department		
Requirements for the course: Defined by the Law			
1. Aims of the course	Acquire the knowledge about diagnostic procedures and treatment of the patients in orthodontics		

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2.Learning Objectives	The purpose of the course is to study the specific requirements in orthodontic preclinical procedures (diagnostics) and to be informed about treatment stages in orthodontics.
3. Learning outcomes	<p>By the end of the course, the student will</p> <p><b>Acquire the skills in:</b>  photography (intra and extra oral)  taking the impressions  oral hygiene patient training and how to maintain orthodontic appliances  how to assistant orthodontist during the orthodontic patient care  Knowledge in orthodontic instruments</p>
4. Teaching and learning methods	Lectures, clinical practice , tests and problem based learning (PBL)
5. Assessment methodology	<p>Student knowledge is assessed during semesters. At the end of the course, there is the final exam.</p> <p>All scheduled written and oral exams during the semesters are mandatory and student will earn points. Final score is calculated based presence of the students 30% (define by law). Test is scored as 20%</p> <p>The final exam is written (4 questions based essay) is 50% of the total score.</p> <p>Scale grades:  A(10) = 95-100%  B(9) = 85-94%  C(8) = 75-84%  D(7) = 65-74%  E(6) = 55-64%  F(5) = below 55%</p>

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Literature:

1. Osnovi ortodonske dijagnostike - E. Nakaš i sur.
2. E-learning content

## WEEKLY TEACHING PLAN:

Week	Teaching methodology L (lectures) P (practice)	
Week 1.	<b>L: Intro (About orthodontics, psihosomcial aspects of orthodontic treatment)</b>	2
	<b>P: Intro (about working place, instruments etc.)</b>	3
Week 2.	<b>L: Theories of growth and development , normal occlusion</b>	2
	<b>P: Making impressions and models, information about model analysis in different growing stages</b>	3
Week 3.	<b>L: Psycho-social development stages of the child - how to approach patient in different stages</b>	2
	<b>P: Anamnestic details (importance and legal aspects)</b>	3
Week 4.	<b>L: Psycho-social development stages of the child - disturbances and how to approach individually</b>	2
	<b>P: Dental Photography (intra and extra-oral)</b>	3
Week 5.	<b>L: Malocclusions</b>	2
	<b>P: Dental Photography (intra and extra-oral)</b>	3

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Week 6.	<b>L: Malocclusions - etiology</b>  <b>P: Taking the impressions and central occlusion registration</b>	2  3
Week 7.	<b>L: Disturbances in growth and development</b>  <b>P: Taking the impressions and central occlusion registration</b>	2  3
Week 8.	<b>L: Disturbances in growth and development - multidisciplinary and team approach in patient care</b>  <b>P: Personal records and legislations relevant for dental assistants</b>  <b>Knowledge assessment</b>	2  3
Week 9.	<b>L: Orthodontic pre-treatment procedures (impressions, phot and anamnesis)</b>  <b>P: Malocclusion - introduction</b>	2  3
Week 10.	<b>L: Orthodontic diagnostic</b>  <b>P: X-ray in orthodontics</b>	2  3
Week 11.	<b>L: Patient preparation for removable orthodontic treatment</b>  <b>P: Motivation in orthodontic removable appliances treatment</b>	2  3
Week 12.	<b>L: Patient preparation for fixed orthodontic treatment</b>  <b>P: Motivation in orthodontic fixed appliances treatment</b>	2  3

DENTAL HYGIENE PROFESSIONAL PROGRAM

Week 13.	<b>L: Special needs patient preparation for orthodontic treatment</b> <b>P: Special needs care in orthodontic treatment</b>	2   3
Week 14.	<b>L: Patient preparation for surgical-orthodontic treatment</b> <b>P: Patient preparation and motivation in surgical-orthodontic treatment</b>	2   3
Week 15.	<b>L: Adult orthodontic treatment</b> <b>P: Patient preparation and motivation in interdisciplinary - orthodontic treatment</b>	2   3
Week 17.	Final exam	
Weeks 18.-20.	Makeup exam and summer school (if necessary)	

Code: SFDHO63	Name of the course subject: <b>PERIODONTOLOGY</b>		
Level: Basic vocational studies	Year: <b>III</b>	Semester: <b>VI</b>	ECTS credits: 6
Status: Compulsory			Total hours: <b>150</b> (30L+30P +90PP)
Faculty advisor:	Head Of Department		
Requirements for taking the course: Requirements regulated by the Rule book on studying at the I cycle of studies at the University of Sarajevo			
1. Course objectives	- Providing students with qualifications to differentiate between healthy and diseased periodont, to complete the implementation of initial stage of periodontopathy therapy with supervision by the dentist and periodontologist.		
2. Purpose of the course	To introduce and educate students about the basic knowledge in the domain of oral medicine.		

# DENTAL HYGIENE PROFESSIONAL PROGRAM

3. Learning outcomes	<p>After completing the course the student is qualified to:</p> <ul style="list-style-type: none"> <li>- Get medical history</li> <li>- Conduct clinical examination of the periodont</li> <li>- Classify different types of periodontal diseases</li> <li>- Register the level of oral hygiene and the state of the periodont using appropriate indices and input the data in the periodontal chart</li> <li>- Remove all soft and hard dental plaque using manual and ultrasonic instruments</li> <li>- Recognize and distinguish acute and chronic periodontal diseases</li> <li>- Recognize a relapse of periodontal disease</li> </ul>
4. Teaching methods	<p>The course is held:</p> <ol style="list-style-type: none"> <li>1. lecture ex cathedra za for all the students</li> <li>2. clinical exercises (practice)</li> <li>3. mid-term exams (colloquiums)</li> </ol> <p>Professional practice – individual work*</p>
5. Methods of learning assessment	<p>The assessment of theoretical knowledge from the completed semester will be conducted in the written form – by means of a test, it will be graded and it will remain in the student's portfolio as a document. Evaluation and assessment of students' knowledge will be conducted according to the following system:</p> <ul style="list-style-type: none"> <li>- activity during lectures 10%,</li> <li>- practical lessons (activity during practical exercise, work with patients) 20%.</li> <li>- mid-term exam 15%</li> <li>- written test 55%</li> </ul> <ol style="list-style-type: none"> <li>a) 10 (A) – exceptional results without mistakes or with insignificant mistakes, totals from 95 - 100 points;</li> <li>b) 9 (B) – above average, with few mistakes, totals from 85 - 94 points;</li> <li>c) 8 (C) – average, with noticeable mistakes, totals from 75 - 84 points;</li> <li>d) 7 (D) – generally good, but with significant shortcomings, totals from 65 - 74 points;</li> <li>e) 6 (E) – fulfils minimum criteria, totals from 55 - 64 points;</li> <li>f) 5 (F,FX) – does not fulfill minimum criteria, less than 55 points.</li> </ol>
6. Literature:	<p>Obligatory:</p> <ol style="list-style-type: none"> <li>1. Berislav Topić, Periododontology, biology, iimmunopathogenesis, practice. Sarajevo -Zagreb, 2005</li> </ol> <p>Supplementary:</p> <ol style="list-style-type: none"> <li>2. Jan Lindhe, Clinical periodontology and dental implantology. According to the Fourth English edition (translation in Croatian language). Zagreb 2004.</li> </ol>

# DENTAL HYGIENE PROFESSIONAL PROGRAM

	3. Đajic Dragoljub: Atlas-Periodontology, Belgrade 2001.
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## DETAILED PLAN OF THE SYLLABUS

Week	Form of teaching and curriculum	Teacher	Number of hours
Week 1	<b>Lecture</b> Anatomy and histology of healthy periodont	Prof dr Enes Pašić	2
	<b>Practice</b> Anamnestic-diagnostic procedure		2
Week 2	<b>Lecture</b> Etiology of periodontitis	Prof dr Sanja Hadžić	2
	<b>Practice</b> Anamnestic-diagnostic procedure		2
Week 3	<b>Lecture</b> Etiology of periodontitis	Prof dr Sanja Hadžić	2
	<b>Practice</b> Instruments in periodontology		2
Week 4	<b>Lecture</b> Classification and differential diagnosis	Prof dr Mirjana Gojkov Vukelić	2
	<b>Practice</b> X-ray image analysis		2
Week 5	<b>Lecture</b> Epidemiology of periodontitis indices	Prof dr Enes Pašić	2
	<b>Practice</b> Assessment of the level of oral hygiene and gingival condition using appropriate indices		2
Week 6	<b>Lecture</b> Acute states of the periodont – clinical picture, differential diagnosis, diagnosis, treatment	Prof dr Enes Pašić	2
	<b>Practice</b> Assessment of the state of the periodont using appropriate indices		2
Week 7	<b>Lecture</b> Chronic states of the periodont – clinical picture, differential diagnosis, diagnosis, treatment	Prof dr Sanja Hadžić	2
	<b>Practice</b> Motivation and education of patients for appropriate oral hygiene maintenance, selection of supplies for oral hygiene maintenance		2
Week 8	<b>Lecture</b> Chronic states of the periodont - clinical picture, differential diagnosis, diagnosis, treatment	Prof dr Mirjana Gojkov Vukelić	2
	<b>Practice</b> Motivation and education of patients for appropriate oral hygiene maintenance, selection of supplies for oral hygiene maintenance		2
Week 9	<b>Lecture</b> Treatment plan	Prof dr Mirjana	2

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	<b>Practice</b> Manual instruments for removal of hard tooth plaque – work technique	Gojkov Vukelić	2
Week 10	<b>Lecture</b> Initial treatment <b>Practice</b> Manual instruments for removal of hard tooth plaque – work technique	Prof dr Sanja Hadžić	2 2
Week 11	<b>Lecture</b> Initial treatment <b>Practice</b> Subgingival curettage, instruments and work technique – patient demonstration	Prof dr Sanja Hadžić	2 2
Week 12	<b>Lecture</b> Subgingival curettage <b>Practice</b> Ultrasonic instruments for removal of hard supra- and subgingival plaque – work technique	Prof dr Enes Pašić	2 2
Week 13	<b>Lecture</b> Emergency states in periodontology <b>Practice</b> Ultrasonic instruments for removal of hard supra- and subgingival plaque – work technique	Prof dr Mirjana Gojkov Vukelić	2 2
Week 14	<b>Lecture</b> Traumatic occlusion and occlusal trauma <b>Practice</b> Control examinations. Assessment of the level of oral hygiene and the condition of the periodont using indices. Remotivation.	Prof dr Enes Pašić	2 2
Week 15	<b>Lecture</b> The importance of control examinations - recalls <b>Practice</b> Control examinations. Assessment of the level of oral hygiene and the condition of the periodont using indices. Remotivation.	Prof dr Mirjana Gojkov Vukelić	2 2
Week 17	Written assessment of theoretical knowledge by means of a test		
Week 18-20	Makeup exam date for students who have not passed the written test		

**Individual students' work, outside of the scheduled number of hours for practical lessons, predicts 90 hours of professional practice.**

## Professional practice course contents:

- Patient admission
- Disinfection and sterilization of instruments and materials
- Workplace preparation for dental interventions
- Assisting the doctor of dentistry
- Conducting initial treatment and control of maintaining acquired treatment results
- Recordkeeping and storing of health records.

**DENTAL HYGIENE PROFESSIONAL PROGRAM**

CODE: <b>SFDHO64</b>	<b>COURSE TITLE: URGENT CONDITIONS IN DENTISTRY</b>		
Class and level of studies: Basic profession course	YEAR: <b>III</b>	SEMESTER: <b>VI</b>	ECTS POINTS: <b>4</b>
STATUS: <b>OBLIGATORY</b>			TOTAL HOURS: 90 (lectures 30 + practicals 45+seminars 15)
LECTURER IN CHARGE: <b>HEAD OF DEPARTMENT</b>			
Requirements for taking the course: Requirements regulated by the Rule book on studying at the first cycle of studies at the University of Sarajevo.			
7. Course objectives	Training students to provide first aid in simple emergency situations, as well as assisting physicians in solving complicated emergency situations.		
8. Purpose of the course	Purpose of the course is to enable the student to recognize emergencies and successfully assist the physician in providing first aid to life-threatening patients.		
9. Learning outcomes	After completing the course the student will be able to: <ul style="list-style-type: none"><li>• Recognizes and provides appropriate first aid for simpler urgent conditions</li><li>• Successfully participates in providing assistance within the dental team</li></ul>		
10. Teaching methods	The course is conducted in a form: <ul style="list-style-type: none"><li>- Interactive lectures</li><li>- Practical exercises</li><li>- Seminar works</li><li>- Continuous assessment of knowledge</li></ul>		
11. Methods of learning assessment	By completing the pre-exam requirements and passing the exam, the student can achieve a maximum of 100 points, with pre-exams being 50% and the final exam 50% of the total grade. The final grade will be formed on the following elements: Regular attendance and activity at the class makes a maximum 40%. During the semester it is obligatory to write one seminar work whose realization makes a maximum of 10% of the total grade. Regular attendance lectures is 20% of total grade. Regular attendance exercise is 20% of total grade. Seminar work is 10% of the total grade. Final exam – written exam, and makes 50% of the total grade. <b>GRADING SCHEMA:</b> A (10) = 95 – 100 B (9) = 85 – 94 C (8) = 75 – 84 D (7) = 65 – 74 E (6) = 55 – 64* F Student that score 55-69% can take additional exam. Students that score below 55% have to take the course again.		
12. Literature:	Lecture notes V.Petrović, M.Gavrić Urgent conditions in dentistry, Belgrade 1995.		

**Consultation with students every working day from 12 am to 2 pm.**

DENTAL HYGIENE PROFESSIONAL PROGRAM  
IMPLEMENTATION PLAN OF COURSE:

WEEK	CONTENT	HOURS
Week 1	<b>Lectures:</b> The most common emergency in dental office <b>Exercises:</b> Basic equipment and medicines for medical emergencies <b>Seminar:</b>	2 1 1
Week 2	<b>Lectures:</b> Urgent cardiovascular and respiratory conditions <b>Exercises:</b> Identification risk patients (medical history and health questionnaire). Access to the patient in critical condition. <b>Seminar:</b>	2 1 1
Week 3	<b>Lectures:</b> Hypoglycemic shock, acute adrenaline crisis <b>Exercises:</b> Differential diagnosis of emergency, first aid and reanimation. <b>Seminar:</b>	2 1 1
Week 4	<b>Lectures:</b> Episodic disorders of consciousness: syncope, collapse, epileptic attack, hysterical attack, and other forms of disorders of consciousness. <b>Exercises:</b> First aid for short-term reversible disorders of consciousness. <b>Seminar:</b>	2 1 1
Week 5	<b>Lectures:</b> Allergic reaction – systemic and local. Anaphylactic shock. <b>Exercises:</b> Management of toxic and allergic reactions. <b>Seminar:</b>	2 1 1
Week 6	<b>Lectures:</b> Bleeding as a result of surgical interventions in the oral cavity. <b>Exercises:</b> Hemostasis techniques and procedures; The role of the dental hygienist. <b>Seminar:</b>	2 1 1
Week 7	<b>Lectures:</b> Bleeding as a result of injuries to the soft and bones structures of jaws and face. <b>Exercises:</b> First aid for injuries to the teeth, face and jaws. The role of the dental hygienist. <b>Seminar:</b>	2 1 1
Week 8	<b>Lectures:</b> Odontogenic infections- etiology, clinical conditions and symptoms. <b>Exercises:</b> Basic therapy for odontogenic infection; The role of the dental hygienist. <b>Seminar:</b>	2 2 1
Week 9	<b>Lectures:</b> Odontogenic infections some areas, propagation odontogenic infections. <b>Exercises:</b> The role of the dental hygienist in performing the infusion and setting the drain. <b>Seminar:</b>	2 2 1
Week 10	<b>Lectures:</b> Emergencies in pediatric dentistry. <b>Exercises:</b> Child friendly procedures and therapeutic doses. <b>Seminar:</b>	2 1 1
Week 11	<b>Lectures:</b> Emergency conditions during dental therapy when extracting teeth, aspiration and swallowing foreign bodies. <b>Exercises:</b> Heimlich grip. <b>Seminar:</b>	2 1 1
Week 12	<b>Lectures:</b> Emergency conditions during dental therapy when extracting teeth. <b>Exercises:</b> Respiratory failure mechanical ventilation, resuscitation. <b>Seminar:</b>	2 1 1
Week 13	<b>Lectures:</b> Emergency and complication during endodontic therapy. <b>Exercises:</b> Reanimation, the role of the dental hygienist. <b>Seminar:</b>	2 1 1
Week 14	<b>Lectures:</b> Emergency and complication during periodontal treatment. <b>Exercises:</b> Reanimation II, the role of the dental hygienist. <b>Seminar:</b>	2 1 1
Week 15	<b>Lectures:</b> Interactive recapitulation of the material received. <b>Exercises:</b> Recapitulation of basic first aid methods for emergency and emergency situations.	2 1 1

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	<b>Seminar:</b>	
Week 17	<b>Final exam</b>	
Week 18-20	Makeup exam date for students who have not passed the final exam.	

Code: SFDHI55	<b>Course: DENTAL TREATMENT PLANNING FOR ORAL HYGIENIST</b>		
	<b>Study year: III</b>	<b>Semester: V</b>	<b>ECTS points: 3</b>
<b>Status:</b>			<b>Course load:60 (45P + 15S)</b>
<b>Elective</b>			
<b>Course leader</b>	Head Of Department		
Objectives of the course	The objective of the course is to introduce students with the basic knowledge necessary to develop a plan for dental treatment of adult patients.		
Purpose of the course	<p>The course provides students informative knowledge about:</p> <ul style="list-style-type: none"> <li>• The basic stages of dental therapy.</li> <li>• Specific conditions and diseases that can significantly affect modification of the dental treatment plan.</li> <li>• The role of the dental hygienist in the various stages of the diagnostic procedure and therapy.</li> </ul>		
Learning outcomes	<p>Upon course, the student is able to:</p> <ul style="list-style-type: none"> <li>• Actively collaborates with the Doctor of Dental Medicine in the phase of collecting information, documentation and diagnosis.</li> <li>• Assists the dentist in the first aid and initial phase of therapy.</li> <li>• Be the main carrier of the disease control.</li> <li>• Identify conditions and diseases that may affect change in the plan therapy.</li> </ul>		
Learning methods:	<ul style="list-style-type: none"> <li>• Interactive lecture</li> <li>• Seminars</li> </ul>		
Knowledge assessment methods:	At the end of the V semester final exam is taken.		

Literature:	<ol style="list-style-type: none"> <li>1. Stephen J. Stefanac, Samuel Paul. Treatment planning in dentistry; Nesbit.—2nd ed. Mosby Elsevier, St. Louis, 2007.</li> <li>2. Lectures</li> </ol>
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DENTAL HYGIENE PROFESSIONAL PROGRAM  
COURSE IMPLEMENTATION PLAN

Week		Course load
Week 1.	<b>Lecture:</b> The role of dental hygienists in the stage of collecting the information, documentation and setting the basic diagnosis.  <b>Seminar</b>	3 1
Week 2 .	<b>Lecture:</b> Dental treatment planning. Risk assessment, prognosis and planned outcome of treatment. Basic guidelines for treatment planning by stages. Factors influencing the modification of the treatment plan. Computer software to aid decision making.  <b>Seminar</b>	3 1
Week 3	<b>Lecture:</b> Develop a treatment plan. Identifying treatment goals from the point of view of dental team and the patient. Dental treatment division into phases: systemic, initial phase, disease control phase and maintenance phase. Presentation of the treatment plan to the patient.  <b>Seminar</b>	3 1
Week 4.	<b>Lecture :</b> Ethical and legal issues. Ethical codes, admission of new patients, the role of written informed forms, the role of dental documentation. Questions regarding the form of documentation. Keeping documentation, issuing for inspection and authorized persons.  <b>Seminar</b>	3 1
Week 5.	<b>Lecture:</b> Systemic phase treatment planning, records and control of systemic diseases. Influence of systemic conditions on planning of dental treatments, importance of record of systemic conditions  <b>Seminar</b>	3 1
Week 6	<b>Lecture:</b> Initial treatment phase. Most common acute conditions and diagnosis. Documenting treatments at the initial stage and the importance of screening.  <b>Seminar</b>	3 1
Week 7	<b>Lecture :</b> Disease control phase during treatment and importance of dental hygienist engagement. Key factors for successful disease control.  <b>Seminar:</b>	3 1

Week 8	<b>Lecture:</b> The final phase of treatment. Clinical conditions, treatment options, and parameters relevant to decision making.  <b>Seminar</b>	3 1
Week 9	<b>Lecture:</b> The role of the maintenance phase in the longevity of successful therapy. The importance of screening in determining new conditions that require a therapeutic approach and developing a treatment plan for these conditions. Maintenance phase documentation and data recovery.  <b>Seminar</b>	3 1

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Week 10	<b>Lecture:</b> Identification and evaluation of a adults with disabilities patients.  Patient diagnoses as a basis for a specific approach in therapy. Provision of physical access dental office, transportation and positioning. The importance and applicability of each stage of care for a disabili patient.  <b>Seminar</b>	3
Week 11	<b>Lecture:</b> Patients with oral cancer. Prevention strategies, diagnosis, and a multidisciplinary approach to treatment. The role of the dental team in patient care. Therapeutic modalities. Dental treatment after oral cancer diagnosis  <b>Seminar</b>	3 1
Week 12	<b>Lecture:</b> Alcoholism and other addictions. The challenge for the dental team. Signs and symptoms of addiction. Planning and conducting dental therapy in these patients.  <b>Seminar</b>	3 1
Week 13	<b>Lecture:</b> Characteristics of dental anxiety, fear and phobia. Perception of pain. Cause and recognition of anxiety. Therapy plan medicaton preparation for treatment.  <b>Seminar</b>	3 1
Week 14	<b>Lecture:</b> Planning dental treatment in patients with mental problems and disorders. Impact of these conditions and disorders on oral health.  <b>Seminar</b>	3
Week 15	<b>Lecture:</b> Dental treatment planning for unmotivated and financially disadvantaged patients. Compromise between ideal treatment and complete absence of treatment.  <b>Seminar</b>	3 1
Week 17	Final exam	
Week 18-20	Remidial	

Code: SFDHI65	BASIC OF COMMUNICATION SKILLS		
Level: Basic vocational studies: first-degree studies	Year: III	Semester:	ECTS: 3
Status: Elective			Course load: 60
Course head:	Head Of Department		
Requirements for the course: Defined by the Law			
1. Aims of the course	Understanding the importance of communication in healthcare. Acquire the knowledge and improving communication skills in the healthcare.		

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2.Learning Objectives	The purpose of the course is to study the specific types of communication in healthcare, to be informed about different communication technics and acquire the knowledge about communication in the healthcare.
3. Learning outcomes	By the end of the course, the student will be able to successfully performs oral hygienist duties through proper communication with the: patient (pre schoolchildren, teenagers, adolescents and adults) parents doctor and colleagues
4. Teaching and learning methods	Lectures, clinical practice , tests and problem based learning (PBL)
5. Assessment methodology	<p>Student knowledge is assessed during semesters. At the end of the course, there is the final exam.</p> <p>All scheduled written and oral exams during the semesters are mandatory and student will earn points. Final score is calculated based presence of the students 30% (define by law). Test is scored as 20%</p> <p>The final exam is written (4 questions based essay) is 50% of the total score.</p> <p>Scale grades:</p> <p>A (10) = 95-100%</p> <p>B (9) = 85-94%</p> <p>C (8) = 75-84%</p> <p>D (7) = 65-74%</p> <p>E (6) = 55-64%</p> <p>F (5) = below 55%</p>

Literature: 1. M Lloyd R. Communication skills for medicine. Elsevier 2004.

2. Lecture notes

3. e- learning content

## WEEKLY TEACHING PLAN:

Week	Teaching methodology L (lectures) P (practice)	
Week 1.	<b>L: Intro- Generally topics and types of communications</b> <b>P: Intro - about communication in healthcare</b>	

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Week 2.	<b>L: Components of the learning process</b>  <b>P: Psycho-social development stages of the person</b>	
Week 3.	<b>L: Importance and types of motivation in the learning process</b>  <b>P: : Psycho-social development stages of the person - disturbances and how to approach individually</b>	
Week 4.	<b>L: Content of communication in healthcare</b>  <b>P: Practical work</b>	
Week 5.	<b>L: The importance of the different types of communication to promoting oral health</b>  <b>P: Practical work</b>	
Week 6.	<b>L: Social interaction in the healthcare</b>  <b>P: Practical work</b>	
Week 7.	<b>L: Dispersion of information in a healthcare</b>  <b>P: Practical work</b>	
Week 8.	<b>L: Communication problems in healthcare</b>  <b>P: Barriers and taboos in health care communications</b>  <b>Knowledge assessment</b>	
Week 9.	<b>L: Healthcare communication and modern technologies</b>  <b>P: Recommendation for successful communication</b>	

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Week 10.	<b>L: Importance of the written communication in healthcare</b>  <b>P: Practical work</b>	
Week 11.	<b>L: Importance of communication to oral health promotion</b>  <b>P: Information in orthodontic removable appliances treatment</b>	
Week 12.	<b>L: Content of oral health promotional leaflets</b>  <b>P: Information about orthodontic fixed appliances treatment</b>	
Week 13.	<b>L: Community work methods to oral health promotion</b>  <b>P: Oral health promotion in specific population groups</b>	
Week 14.	<b>L: Interdisciplinary communication and teamwork</b>  <b>P: Patient preparation and motivation in interdisciplinary treatment</b>	
Week 15.	<b>L: Roll models in healthcare</b>  <b>P: Practice work</b>	
Week 17.	<b>Final exam</b>	
Weeks 18.-20.	<b>Makeup exam and summer school (if necessary)</b>	

# DENTAL HYGIENE PROFESSIONAL PROGRAM

Code: SFDHI66	Course title: <b>GERIATRIC DENTISTRY</b>		
Level: Basic Professional Program	Year: <b>III</b>	Semester: <b>VI</b>	ECTS credits: <b>6</b>
Status: <b>Elective</b>			Total hours: <b>90 (30L +15E +45Sp)</b>
Teacher in-charge of the program:	Head Of Department		
Course admission requirements: As provided under the Rules of Academic Programs for the first cycle of study at higher education institutions of the Sarajevo University			
1. Objective of the Course	The objective of the course is to teach the students fundamental theoretical knowledge in the field of geriatric dentistry so that they can properly identify general health and oral health status of elderly patients. Students are taught on how to independently conduct surveys and interventions in their daily dental work.		
2. Purpose of the Course	The purpose of the Course is to enable the student to identify the general and oral health status of senior citizens and to independently perform interventions that are important in dentists' daily work.		
3. Learning Outcomes	Upon completion of the Course, the students will be able to: <ul style="list-style-type: none"><li>– Correctly interpret the patient's diagnosis</li><li>– Correctly interpret the determined therapeutic prosthetic care plan for both functionally independent and functionally dependent elderly patients</li><li>– Maintain adequate oral hygiene in both functionally independent and functionally dependent elderly patients of someone else's care</li><li>– Carry out appropriate preventive measures</li></ul>		
4. Learning Methods	The Course involves the following forms of teaching: <ul style="list-style-type: none"><li>– <i>Ex cathedra</i> lectures (L) for all students</li><li>– Practical classes</li><li>– Colloquium</li><li>– Seminar paper</li></ul>		
5. Knowledge evaluation methods	<p>Students who successfully completed their pre-examination requirements and passed the final examination are able to earn maximum 100 points. Pre-examinations requirement account for 50% and the final examination 50% of the final grade. Acquired knowledge and skills are tested continuously throughout the course of the semester.</p> <p>In total number of points students earn, attendance and activity in class make up maximum 25%, the colloquium 20%, the seminar paper 5%, and a final examination accounts for maximum 50% of points.</p> <p>The final exam is taken in the form of a test, which is compiled separately for each examination term. It is divided into groups A and B (or if necessary, C, and D). The final examination will be scored only if student correctly answered at least 55% of the questions.</p>		

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Accordingly, the rating scale is as follows:

Grade	Points	Grade description
10 (A)	95-100	Exceptional performance without or with minor errors
9 (B)	85-94	Above average performance with sporadic errors
8 (C)	75-84	Average performance with evident errors
7 (D)	65-74	Good performance in general, but with significant shortcomings
6 (E)	55-64	Meets the minimum criteria
5 (F)	< 55	Fails of meet the minimum criteria

Internship include individual and independent work of students outside planed practical teaching classes

**During the course of internship, the students are required to**

- Assist during the course of various dental interventions and prosthetic rehabilitation in elderly patients at the Sarajevo University Faculty of Dental Medicine Dental Clinics
- Provide training and maintain of oral hygiene in elderly patients living in nursing homes and specialized geriatric institutions, assisting in the implementation of required causal measures due to impaired oral health.

### 6. Textbooks

4. Tihaček-Šojić Lj., Stančić I., Stomatološka gerontoprotetika. Kragujevac: Koraci; 2009.
5. Stamenković D., Stomatološka protetika – parcijalne proteze, Beograd, Interprint, 2006.

# DENTAL HYGIENE PROFESSIONAL PROGRAM

## CURRICULUM

Week	Form of teaching and teaching materials	Hours
Week 1	<b>Lectures:</b> Biological aspects of aging: general concepts of health and aging. Aging and aging problems. Theories on aging. The biological basis of aging. The physiology of aging. Immunology and aging. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 2	<b>Lectures:</b> Changes in teeth, oral mucosa, periodontium, and salivary glands during aging process. Sense of smell and aging. Sense of taste and aging. Aging of bone tissue. Changes in the stomatognathic system's osteomuscular structures. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 3	<b>Lectures:</b> Health care of elderly persons: Demographics and epidemiology of aging. The length of human life. Modern organization of health care and dental health care of elderly patients. Primary health care programs. Specialized geriatric services. Hospital-provided geriatrics. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 4	<b>Lectures:</b> Psychological and behavioral aspects of aging: Psychological perspectives on aging. Impact of environment and society on aging process. The roles of dentists, oral hygienists, and dental technicians in an interdisciplinary team. Communication with elderly patients. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 5	<b>Lectures:</b> Medical aspects of aging: Clinical assessment of the general health status of elderly patients; General diseases and conditions in the elderly patients. Mental disorders in elderly people. Assessment and significance of cognitive status in dental rehabilitation. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 6	<b>Lectures:</b> Relation between status of general health and status of oral health in elderly patients. Medication therapy and its importance in geriatrics. Oral manifestations of systemic diseases and side effects of medication in elderly patients. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 7	<b>Lectures:</b> Importance and role of oral hygienist in periodontal treatment of elderly patients <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 8	<b>Lectures:</b> Importance and role of oral hygienist in endodontic treatment of elderly patients. Modalities of prosthetic treatments in endodontically treated teeth in elderly patients. <b>Exercises:</b> <b>Internship</b>	2 +1  3

# DENTAL HYGIENE PROFESSIONAL PROGRAM

Week 9	<b>Lectures:</b> Quality of life in older patients: Determining the impact of oral health on the quality of life of older patients. Quality of life indexes. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 10	<b>Lectures:</b> Masticatory function and nutrition of elderly people. Nutritional status of older patients. Importance of prosthetic treatment on nutritional status and masticatory function of elderly persons. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 11	<b>Lectures:</b> Planning of prosthetic treatment in elderly patients. Importance and role of oral hygienist in prosthetic therapy of edentulous elderly patients. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 12	<b>Lectures:</b> Importance and role of oral hygienist in prosthetic therapy of partially edentulous elderly patients. Conventional and complex dentures. Supradental prostheses in elderly patients. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 13	<b>Lectures:</b> Importance and role of oral hygienist in prosthetic therapy of elderly patients with fixed dental restorations. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 14	<b>Lectures:</b> Importance and role of oral hygienist in the planning and prosthetic rehabilitation in functionally dependent elderly patients. <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 15	<b>Lectures:</b> Importance and role of oral hygienist in oral surgery and implantology in gerontological patients. Maxillofacial surgery and elderly patients <b>Exercises:</b> <b>Internship</b>	2 +1  3
Week 17	Final examination	
Week 18-20	Make up examination	

Code: SFDHO65	Course title: <b>Independent practical training internship III</b>		
Level: <b>Basic vocational studies: first-degree studies</b>	Year: <b>III</b> DENTAL HYGIENE PROFESSIONAL PROGRAM	Semester: <b>VI</b>	ECTS: <b>10</b>
Status: <b>Mandatory</b>			Course load: <b>200</b>
Course leader:	Head Of Department		
Course attendance requirements are in line with the Rules of Study for the First Cycle of Study at Higher Education Institutions of Sarajevo University			
1. Course objectives:	Practical work and application of the skills acquired during theoretical and practical classes, seminars and colloquiums that the students have attended and taken in the course of the previous year of study.		
2. Course purpose:	Training the student by imparting basic knowledge and skills in the field of pediatric dentistry, oral surgery and periodontology, restorative dentistry and endodontics, orthodontics and prosthetics, by enabling them to work with patients with special needs and to deal with emergency conditions in dentistry.		
3. Course outcomes:	Once the practical training internship is completed, through additional application of the acquired knowledge and skills the student will be able to: - distinguish between deciduous and permanent dentition - recognize the psychological types of children - cooperate effectively within the dental team providing care for children and adolescents - prepare the work field and instruments independently -assist in performing surgical interventions - teach patients how to maintain oral hygiene after surgery - assist and prepare medications and materials during a restorative intervention - assist and prepare medications and materials during an endodontic intervention - prepare the workplace and patient for dental prosthetics interventions		
4. Teaching and learning methods	During the practical training internship the student will be trained how to: - prepare the workplace, maintain administration, keep patient records and other documentation. - carry out admission of juvenile patients, prepare juvenile patients, establish relationship with the child and parents, schedule an appointment - prepare instruments for sterilization, control sterilization, prepare surgical space and operating field -assist during the ordinary and complicated tooth extractions - prepare, take, label and send materials designated for laboratory testing and analysis - gives postoperative instructions to the patient and train the patient to maintain oral hygiene after surgical interventions		

# DENTAL HYGIENE PROFESSIONAL PROGRAM

	<ul style="list-style-type: none"> <li>- perform postoperative control, wound hygiene, intramuscular drug administration for swelling control</li> <li>- remove stiches, perform wound hygiene, examine tooth vitality, schedule check-ups</li> <li>- prepare materials for temporary cavity closure, prepare medicaments or substrates</li> <li>- prepare medications for endodontic therapy (anesthetics, tooth canal antiseptics, canal medication pastes)</li> <li>- prepare the workplace, communicate with a dental laboratory, organize work in a dental prosthetic office</li> </ul>
5. Knowledge assessment methodology:	<p>Summer practical training internship takes place at the clinics of the Faculty of Dental Medicine according to the plan and with the control of a responsible teacher (i.e. course leader), mentor, co-mentor or practitioner (the report on the completed practical training internship will be completed by the mentor, co-mentor or practitioner, while the number of ECTS credits will be recorded by the responsible teacher). The teacher responsible for practical training internship prepares a plan of summer practical training internship for students and checks the records of student regular attendance and activities, while the student keeps a journal or logbook of practical training internship in which he or she keeps record of the activities performed. Once the practical training internship is completed, the student does not receive a grade, but is still obligated to perform the internship in order to acquire an estimated number of ECTS credits.</p>