

SYRIAN ARAB REPUBLIC

Damascus University

Faculty Of The Dental Medicine



الجمهورية العربية السورية

جامعة دمشق

كلية طب الأسنان



To whom it may concern

This document certifies that Dr. _____ had attended the Faculty of The Dental Medicine - Damascus University between the years 2001/2006.

We conform that Dr. _____ had studied the attached curriculum which is the equivalent to D.D.S. curriculum for undergraduate dental course at the Faculty of The Dental Medicine-Damascus University.

Vice Dean for Scientific Affairs

Dean of Faculty of Dental Medicine

Prof. Dr. Mohannad Laflouf

Prof.Dr. Khaldoun Mhd Atef Darwich

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Syllabus and Curriculum Details
For Primary Dental Qualification
For
Faculty of Dental Medicine
Damascus University
2001/2006

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Learning Objectives:

The goal of dental education is to produce dentists who are prepared to serve the fundamental purposes of dental medicine. In addition, dentists must possess the attributes that are necessary to meet their individual and collective responsibilities towards society. Emerging from this belief comes the basic aim of the dental faculty at Damascus University which is to graduate highly qualified dental professionals who are knowledgeable, skilful, dutiful and above all altruistic.

In order to fulfil the above mentioned goal, specific learning objectives have been set and developed by the faculty to be implemented through the different study stages of the student at the faculty through the five successive academic years.

The main learning objectives include:

I. To graduate socially and ethically sensitive and responsible highly qualified dental professionals who will be dedicated to serving others in the community.

II. To provide students with good knowledge of the principles that govern ethical decision making and of the major ethical dilemmas that are faced in the field of dentistry.

III. To create dental professionals who would care for compassionate treatment of patients and respect their privacy and dignity.

IV. To provide students with good knowledge of:

- Normal structures and functions of the body including major organ systems.
- Molecular, biochemical and cellular mechanisms that take place within the body.
- The altered structure and function (pathology and pathophysiology) of the body and the oral cavity.
- Relieving dental pain and minimizing the suffering of patients resulting from acute infections.
- The epidemiology of common oral diseases within a defined population and following the systematic approaches which are useful in reducing the incidence and prevalence of such diseases.

V. To make dental students have the appropriate skills for:

- Obtaining accurate medical and dental history that covers all aspects related to oral health.
- Performing complete extra and intra oral examinations.
- Interpreting results of commonly used diagnostic procedures including laboratory tests and radiographs.
- Seeking consultation from other physicians and other health professionals when needed and indicated.

VI. To enhance dental students' abilities in clinical diagnosis, treatment planning and delivery of clinical care.

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VII. To prepare trained students to become qualified general dentists who would treat patients with basic safe treatment needs in various dental disciplines which could be summarized as follows:

- To be able to perform restorative and root canal treatment for different age group patients.
- To be able to carry out removable and fixed prosthodontic treatment including partial dentures, complete dentures as well as bridges, crowns and post crowns.
- To be able to manage the child patient and execute the necessary needed treatment for such target group including restorations, pulpotomies, pulpotomies, space maintainers, orthodontic treatment and extractions.
- To know how to do dental professional teeth cleaning procedures as scaling and root planning.
- To be capable of performing simple extractions and minor oral surgeries for unrestorable teeth.
- To be capable of dealing with the medically compromised patient and seeking consultation when needed.

VIII. To increase students opportunities for research or to expose them for research opportunities and strengthen their research capabilities

IX. To graduate a dental professional who is highly competent for continuing higher education in any dental field.

Study Stages:

Study period to achieve Doctor of Dentistry Licence is Five Academic years, taking in consideration that each academic year is made of two semesters, each semester is made of 16 weeks, total weeks: $16 \times 10 = 160$ weeks.

The student passes through two main stages during which he gains all expected knowledge and training to become a highly skilled and qualified dentist who can achieve the intended goals in his future career:

The preclinical stage:

This stage is implemented in the first three years, where the student is exposed to all basic medical and dental sciences. The student receives his courses that is served and facilitated by various faculties such as the faculty of medicine, and the faculty of pharmacy.

The clinical stage:

This stage is implemented in the last two years (fourth and fifth), where the student is exposed to various specialties of the dental art and medicine; and receives the suitable training to become able to treat patients.

Exams:

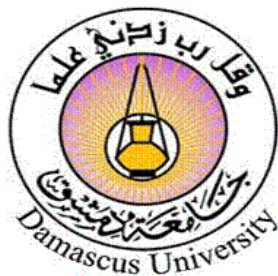
The assessment of all subjects took the form of :

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions.

Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exams for the subjects at the end of year 4 and5).

MCQs: Multiple Choice Questions

OSCE :Objective Structures Clinical Exams



Academic subjects are distributed on the academic years 2002-2003; weekly hours for each subject are as below:

B –Syllabus: Subjects and Hours Distribution			
Sixth Act: Taking into consideration the military training and productivity camps the academic subjects are distributed on all years of study and their semesters and the number of hours in each subject are assigned as follows:			
First Year First Semester			
Subject	Weekly Hours		
	Theory	Practical	
Foreign Language	4	-	
Arabic Language	٤	-	
National Socialistic Education	4	-	
Physics& Oral and Dental Biophysics	2	2	
General Chemistry	2	2	
Cell Biology	4	4	
Psychology and Biostatistics	2	-	
Total	2٢	8	28
Second Semester			
Subject	Weekly Hours		
	Theory	Practical	
Foreign Language	4	-	
Microbiology and Parasitology General and Oral	2	2	
Dental Anatomy (Drawing and Carving)	-	4	
Anatomy and Embryology General and Oral	5	2	
Biochemistry General and Oral	3	2	
Total	14	10	24



Second Year First Semester			
Subject	Weekly Hours		
	Theory	Practical	
Foreign Language	4	-	
Fixed Prosthodontics (Crowns and Bridges)	2	6	
General Histology	2	2	
Pharmacology General and Oral	2	-	
Physiology and Nutrition General and Oral	4	2	
Restorative Dental Materials	1	2	
Total	15	12	27
Second Semester			
Subject	Weekly Hours		
	Theory	Practical	
Restorative Dentistry	2	6	
Oral and Dental Histology	2	4	
Partial Removable Prosthodontics	2	4	
Radiology	2	2	
Prosthodontic Dental Materials	1	2	
Total	9	18	27

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Third Year First Semester			
Subject	Weekly Hours		
	Theory	Practical	
Partial Removable Prosthodontics	2	4	
Internal Diseases, Dermatology & Venereology	3	-	
Ophthalmology, Otolaryngology	2	-	
Public Health, History of Medicine and Ethics of Dental practice	2	-	
Restorative Dentistry	2	6	
General Histopathology	2	4	
Total	13	14	27
Second Semester			
Subject	Weekly Hours		
	Theory	Practical	
Foreign Language	4	-	
Minor Surgery and Surgical Diseases	3	1	
Occlusion	2	-	
Fixed Prosthodontics (Crowns and Bridges)	2	6	
Oral and Dental Histopathology	3	3	
Preventive Oral Medicine	2	-	
Total	16	10	26

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Fourth Year First Semester			
Subject	Weekly Hours		
	Theory	Practical	
Endodontics	1	2	
Oral Diseases	1	2	
Foreign Language	4	-	
Restorative Dentistry	1	6	
Complete Removable Prosthodontics	1	2	
Fixed Prosthodontics (Crowns and Bridges)	2	4	
Anaesthesia and Extraction	2	4	
Total	12	20	32
Second Semester			
Subject	Weekly Hours		
	Theory	Practical	
Oral Diseases	1	2	
Paediatric Dentistry	2	2	
Complete Removable Prosthodontics and Maxillofacial Prosthodontics	2	2	
Endodontics	1	2	
Anaesthesia and Extraction	1	4	
Orthodontics	4	4	
Periodontics(1)	2	4	
Total	13	20	33

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Fifth Year First Semester			
Subject	Weekly Hours		
	Theory	Practical	
Fixed Prosthodontics (Crowns and Bridges)	-	4	
Complete Removable Prosthodontics	-	4	
Paediatric Dentistry	-	4	
Anaesthesia and Extraction	-	4	
Endodontics	-	4	
Foreign Language	4	-	
Periodontics	-	4	
Total	4	24	28
Second Semester			
Subject	Weekly Hours		
	Theory	Practical	
Anaesthesia and Extraction	-	4	
Orthodontics	-	4	
Fixed Prosthodontics (Crowns and Bridges)	-	4	
Complete Removable Prosthodontics	-	4	
Oral and Maxillofacial Surgery	2	2	
Endodontics	-	4	
Restorative Dentistry	-	4	
Total	2	26	28

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Attendance and practical training:

Attendance is compulsory in all academic years, and the required attendance percentage to be qualified to take the exam is at least 80% of the total of the practical (laboratory and clinical) and theory hours, and of each subject, student how fails to achieve the required percentage is prohibited from taking the exam.

If the student failed the exam in a subject it is their right to keep the mark they obtained in the practical section, and they could retake the practical exam as long they keep the year work if not they have to retake the practical hours in order to redo the year work and the practical exam after providing a written application on the beginning of the academic semester. The student should obtain one third of the mark at least in the practical section to be allowed to take the theory exam.

Examination:

1. Subjects which include practical and theory sections are as follow:
 - Mark is divided to 50% theory and 50% practical on condition that the passing score is obtained. The student has to obtain one third of the mark at least in each section (practical and theory) to pass the exam.
2. Year work and practical training marks are as follow:
 - Practical subjects in general marks are divided to 60% year work and 40% practical exam.
 - Subject which includes practical and theory sections the 50% for the practical section is divided to 30% year work and 20% practical exam. The student has to obtain one third at least of the year work mark to be allowed to take the practical exam.
3. Practical sections in subjects comprise clinical and laboratory training according to each subject and academic year.

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Curriculum details for each year for the School of Dentistry, Damascus University

- Cell Biology: ((First year, First semester)) 60 hours theory/ 60 hours practical
The subject studies extensively the Cytology (methods of studying cells and their preparations, the chemical composition of living material, the contents of cell and their physiological functions) then it moves to study the Sexual Reproduction (evolution of sex cells, the formation of the genitals in mammals, fertilization). It also looks at the genetics in humans, before moving on to give an introduction to Animal Embryology, the subject consist of lectures in theory and practical laboratory sessions.
- Physics & Oral and Dental Biophysics: ((First year, First semester)) 30 hours theory/ 30 hours practical
The subject includes lectures research on the biophysical phenomena that occur within the mouth. It looks at the structure of bone tissue mould, solid tissues, the phenomenon of mineralization and mineral balance in the body, the process of formation and reformation of the bone, as well as the physical base for the electrolytes movement and their balance. The lectures in theory and practical lab sessions aim to show the general basics of the physical laws and phenomena in light, sound, electricity and radiation.
- Dental Anatomy (Drawing and Carving): ((First year, Second semester)) 60 hours practical
Study of the formal structure of each tooth, temporary and permanent teeth and their mutual relations in the single dental arch and their mutual relations among the upper and lower dental arches with an explanation of their role in preserving and protecting periodontium, the manual and practical skills for students in this area is being developed by practical sessions in dental drawing and carving.
- General Chemistry: ((First year, First semester)) 30 hours theory/ 30 hours practical
The lectures in theory and practical laboratory sessions aim to consolidate understanding of the organic and inorganic chemistry principles through a systematic study of the chemistry of the elements and various element groups to study the specifications, transformations and interactions of these elements with compounds representing the various classes of element groups.



- Anatomy and Embryology General and Oral: ((First year, Second semester)) 75 hours theory/ 30 hours practical
Study of head and neck anatomy by lectures in theory and practical anatomy sessions, emphasis on the profiling anatomy which is of special importance in dentistry and also studying the embryonic formation and evolution of craniofacial tissues in humans.
- Biochemistry General and Oral: ((First year, Second semester)) 45 hours theory/ 30 hours practical
The course focuses on the chemical reactions in the context of the functions of living tissue as it is researching the proteins, carbohydrates, fats and nucleic acids, chemical structure and function and the absolute interactions of energy and the synthesis and use of energy and the chemical base of heredity, the practical programme enhances the given lectures in theory.
- Microbiology and Parasitology General and Oral: ((First year, Second semester)) 30 hours theory/ 30 hours practical
Study of germs, parasites, viruses and fungi and their relative immunity to prepare the students to study infectious diseases and provide them with knowledge about the general features of the different pathogenicity factors in humans and the laboratory work gives the microbial techniques and immunity elements. It focuses on the observation of attributes to satisfy the microorganisms and its bio-chemical activity, it completes in the important diseases that caused by animal parasites and particularly those of epidemiological importance in Syrian Arab Republic.
- psychology and Biostatistics: ((First year, First semester)) 30 hours theory
Psychology: This subject seeks to develop the management behaviour skills of the students of dentistry by introduction explains the psychological and social principles and the necessary conversational basics for successful dental practice.
Biostatistics: This subject aims to provide the student with the basic knowledge necessary for statistical interpretation, reading medical articles and analysing of statistical data.
- Pharmacology General and Oral: ((Second year, First semester)) 30 hours theory
The course aims to explain the role of drugs in the cases of health and illness, with particular attention to medicines used in dentistry by examining the general principles of Pharmacology and types of drugs and their properties, mechanisms of their different effects and their toxicity to provide students with the necessary knowledge to select the necessary medicines in the medical dental practice.
- General Histology: ((Second year, First semester)) 30 hours theory/ 30 hours practical
Theoretical and laboratorial study of dissection microscopy (optical and electronic) for cells, tissues and organs that make up the human body and the emphasis is on the relationship between the structure and the function and on the recent discoveries in the field of electronic microscope and tissue chemical colouring.
- Physiology and Nutrition General and Oral: ((Second year, First semester)) 60 hours theory/ 30 hours practical
A study of the physiology of cells, tissues, organs and the integrated body functions to form a foundation enables students to understand the clinical cases in practical life and there is special attention of the physiology of the nervous system. The lectures are supported by experiments to do measurements and testing on laboratory animals.
- Restorative Dental Materials (second year/first term) 15 hours theoretical / 30 hours practical
Detailed study for physiochemical features for dental material , and also searches in their usage methods and their vital effects , the theoretical information is confirmed by laboratory-practical sessions and clinical applications for different subjects.
- Oral and Dental Histology: ((Second year, Second semester)) 30 hours theory/ 60 hours practical



In this subject there are detailed lectures in theory and laboratorial study of the structure and the development of teeth and the supporting soft and hard tissues and the rest of the tissues in the oral region.

- Radiology: ((Second year, Second semester)) 30 hours theoretical/ 30 hours practical
A comprehensive study of oral and Jaw radiology in its four aspects: the physics of radiation, energetic of radiation, radiography techniques and methods, and finally reading diagnostic radiographs and that all is through lectures in theory and laboratory and clinical sessions that allow students to apply radiography techniques on new patients and reading them with the help of specialist supervisors.

- Prosthodontics Dental Materials: ((Second year, Second semester)): Study of the mechanical and physical properties of dental materials 15 hours theory/ 30 hours practical

Impression material	Investing powder	Complete ceramic
Gypsum products	Poly-carboxylate	Dental cements
Dental waxes	Metal ceramic	

- Restorative Dentistry:((Second year, Second semester)) - ((Third year, First semester)) 30 hours theory/ 90 hours practical - 30 hours theory/ 90 hours practical, ((Fourth year, First semester)) - ((Fifth year, Second semester)) 15 hours theory/ 90 hours practical - 60 hours practical

The course for the second and third year forms lessons in theory and laboratory base for conservative restorative dental treatment and it is a comprehensive introduction, researches into dental restorations systems within the coronary that includes moulded Amalgam and golden restorations - adhesive and resin composite, while the fourth year it is the applied clinical practice of these restorative systems with an emphasis on the importance of diagnosis and the development of a comprehensive accurate treatment plan on the one hand and on the preventive aspects on the other hand, with a detailed review of the bio materials used in these techniques and methods of using them within the theory sections.

- Fixed Prosthodontics (Crowns and Bridges):((Second year, First semester)) - ((Third year, Second semester))30 hours theory/ 90 hours practical - 30 hours theory/ 90 hours practical, ((Fourth year, First semester)) - ((Fifth year, First and Second semester)) 30 hours theory/ 60 hours practical - 60 hours practical

The course for the second, third and fourth years forms the clinical section (theory/laboratorial) of the whole course, it is a comprehensive detailed study of patterns outside the coronary (covering the crown) and is a research about individual crowns and multiple bridges. There is also in-depth study of the materials used in fixed prosthodontics and techniques used with a detailed discussion of the basics of diagnosis and setting an accurate plan of treatment.

It also studies different techniques for the constant disease and indications relating to various conditions and the basics of the differential diagnosis are required for each patient with an emphasis on integration between periodontal and endodontic considerations that could affect the final outcome. As for the fifth year the clinical section extends throughout two full semesters to allow the practical application of various techniques for several types of fixed prosthodontics.

- General Histopathology: ((Third year, First semester)) 30 hours theory/ 60 hours practical
Explain the fundamental mechanisms and the general principles of pathology through lectures in theory, researches include discussion of inflammation and immune pathology and bloody lesions and tumours and are supported by practical sessions to study slides and biopsies.



- Oral and Dental Histopathology: ((Third year, Second semester)) 45 hours theory/ 45 hours practical
This subject is integrated with the general pathology to link the principles of general pathology on the one hand and the signs and symptoms of oral diseases on the other hand, and is studying the nature of the diseases affecting the oral area through the examination of the causes, mechanisms, consequences and changes associated with them in structure and oral dental function, the lectures in theory are supported by the necessary clinical and laboratory sessions.
- Minor Surgery and Surgical Diseases: ((Third year, Second semester)) 45 hours theory/ 15 hours practical
This subject is given in coordination with the Faculty of Medicine to provide a strong foundation of knowledge regarding the general principles of medical surgical examination and treatment procedures for minor surgical cases and general various paramedical cases. This subject is an extension of a deeper approach to internal diseases subject in the third year on topics of injuries in digestive system, respiratory and circulatory system and endocrine glands that require surgical intervention. It also researches with a focus on cases of trauma, burns and their treatment and the possible role of the dentist in the diagnosis and their primary care handling.
- Internal Diseases, Dermatology and Venereology: ((Third year, First semester)) 45 hours theory
This subject which is given in coordination with the Faculty of Medicine provides an overview of the principles of internal medicine and dermatology and venereology diseases with an emphasis on common diseases of particular importance to dentist, to study the phenomenon of general and oral internal, dermatology and venereology diseases, their diagnosis, methods of treatment and the importance of the role of the dentist in the early diagnosis and participation in treatment.
- Preventive Oral Medicine: ((Third year, Second semester)) 30 hours theory
Entrance to the fundamental basics of preventive dentistry includes an understanding of the pathogenesis and epidemiology of dental decays, periodontitis diseases and oral cancers also includes research into patterns of fluoride varnish application and of the dental pit and fissures sealant, oral physiotherapy, nutritional quality and oral cancers diagnosis and prevention.
- Public Health, History of Medicine and Ethics of Dental Practice: ((Third year, First semester)) 30 hours theory
An overview of the history of the profession and its evolution through history with an emphasis on studying the moral and legal principles that govern dentistry in the Syrian Arab Republic, and public health: The course discusses the essential basic principles of public health on a society level by discussing the environmental health air, water, food, habitation, environment and pollution, then moves on to discuss individual health in general before emphasis on the oral health of individual, and finally gives an idea of the institutions, public and private health in Syria and their role in maintaining the health of the society.
- Ophthalmology and Otolaryngology: ((Third year, First semester)) 30hours theory
This subject is given in coordination with the Faculty of Medicine to provide the necessary knowledge regarding this adjacent areas to the oral fossa, it studies oral anatomy and physiology of these organs and discusses the medical conditions that affect them, with an emphasis on the mutual influences between them and the oral fossa of health and disease.
- Occlusion: ((Third year, Second semester)) 30 hours theory
Series of lectures aim to explain the principles of the functional occlusion with clarification and analysis of the inclination at the normal case in order to maintain healthy occlusion patterns functionally in the context of restorative dental work or prosthodontic or orthodontic or periodontics.



- Removable Prosthodontics((Second year, Second semester) - ((Third year, First semester)) 30 hours theory/ 60 hours practical - 30 hours theory/ 60 hours practical((Fourth year, First semester) - ((Fourth year, Second semester)) 15 hours theory/ 30 hours practical - 30 hours theory/ 30 hours practical((Fifth year, First semester)) - ((Fifth year, Second semester))60 hours practical - 60 hours practical

Most of the theory and laboratorial aspects related to removable prosthodontics are covered in second and third years, followed by clinical section in the fourth and fifth years, in which theory and clinical discussion aspects related to diagnosis of partial and complete edentulous arch cases, as well as, developing a suitable plan of treatment and designing the desired prosthodontic and manufacturing it in a form that preserves the soft and hard oral tissues.

- Periodontics ((Fourth year, Second semester) - ((Fifth year, First semester))30 hours theory/ 60 hours practical - 60 hours practical

The theory section looks into in the clinical and microscopic manifestations of normal and pathological gums and periodontics also discusses the various factors leading to the onset of the disease or aggravation or modify its track, and discusses the basics of the diagnosis and handling of periodontal cases including the basics and techniques of surgical periodontal. While the clinical section aims over two semesters to filter practical basics of periodontal treatment of diagnosis, treatment plan, preventive procedures, scaling, root planing and gum cutting with the assignment of complex cases for graduate students and assist them in surgery when indicated for medical treatment.

- Endodontics ((Fourth year, First semester) - ((Fourth year, Second semester)) 15 hours theory/ 30 hours practical - 15 hours theory/ 30 hours practical ((Fifth year, First semester) - ((Fifth year, Second semester)) 60 hours practical - 60 hours practical

The theory section provides the student with a clear understanding of the vital basics of endodontic and apex lesions by emphasis on the link between the clinical signs and symptoms and the pathological tissues that demonstrate these phenomena, and on identifying the warning from rating the endodontic, periodontics and systematic

prosthodontic factors and on providing appropriate treatment for the case in question the study is to form a nucleus of expertise in medical treatment of the student which is supported by laboratorial work and expanded in the fifth year by clinical practice through the diagnosis and treatment of medical endodontic and apex conditions that require endodontic intervention.

- Paediatric Dentistry((Fourth year, Second semester) - ((Fifth year, First semester)) 30 hours theory/ 30 hours practical - 60 hours practical

The subject discusses oral health problems during the growth and development of facial and oral structures, and the principles of comprehensive dental care for children and young people and looks at the patients management, restorative and preventive procedures, treatment of traumatic dental injuries and orthodontic treatments with limited mobility and seeks to explain the dental procedures relating to the growth of the chewing oral system and there is special emphasis on research on research management how to treat children with systematic lesions and children with disabilities.

- Oral Diseases ((Fourth year, First semester))-((Fourth year, Second semester))15 hours theory/ 30 hours practical - 15 hours theory/ 30 hours practical

This subject aims through theoretical lectures and clinical sessions to clarify the essential basics for stomatology, diagnosis of its diseases and their effects on the comprehensive treatment plan for the patient with a particular focus on the diagnosis and management of patients with systemic diseases in the context of the dental procedures that had been done to them - Forensic Dentistry.



- Orthodontics ((Fourth year, Second semester)) - ((Fifth year, Second semester)) 60 hours theory/ 60 hours practical - 60 hours practical

The fourth year course (theory and laboratory) aims to provide the maximum amount of theory and laboratorial background for students on subject of facial oral growth and development and orthodontic diagnostic methods and mechanical vital basics for the orthodontic movement, and the limited preventive, predictive and corrective procedures which can be taken in a general practice clinic. The practical laboratorial section emphasizes on developing procedures for the design and manufacturing of removable prosthodontics. Whereas in fifth year, the emphasis is on the development of clinical skills in diagnosis and setting treatment plans and treatment of selected cases of malocclusion in children and adults using removable prosthodontics.

- Anaesthesia and Extraction ((Fourth year, First semester))- ((Fourth year, Second semester)) 30 hours theory/ 60 hours practical - 15 hours theory/ 60 hours practical

((Fifth year, First semester)) - ((Fifth year, Second semester)) 60 hours practical - 60 hours practical
The course lectures in theory for the fourth year are divided into two sections: The first section researches at anaesthesia and is a detailed research about methods of local anaesthesia in dentistry and is reviewing the anatomy of head and neck from the Anaesthesiology point of view discussing how to manage emergency cases, explaining in detail drugs used in local anaesthesia and its different techniques, the lectures in theory are supported by clinical sessions in which practice of the techniques is takes place. Where the second section looks at teeth extraction and provides and comprehensive study of the tools and methods used in dental extraction after discussing local and general indications and contraindications and methods of prevention or management of the complications the clinical sessions in the clinic are considered as the key element in this subject, as students practice extraction procedures under the supervision of the Department of Oral and Maxillofacial Surgery. In the fifth year students continue exercising their clinical aesthesia and extraction with the possibility to carry out a minor oral surgery and watch some complex oral surgical procedures.

- Oral and Maxillofacial Surgery: ((Fifth year, Second semester)) 30 hours theory/ 30 hours practical

The course discusses initially general anaesthesia then it moves on to study Oral and Maxillofacial Surgery basics and techniques in order to develop a foundation of professional knowledge and surgical skills for the students that enables them to diagnose and manage problems of oral surgery in the context of the general dental practice, it examines the minor oral surgery techniques extractions–Apicoectomy and looks at major oral surgeries trauma - cyst–tumours - Temporomandibular Joint TMJ - Cleft lip and palate.

Course Description

First Year

First semester

1. Foreign Language	4Theory	0 Practical
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2. National Socialistic Education	4Theory	0 Practical
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Islamic Arabic culture, Arab nation unity, Arab national, Palestinian case, Zionist Arab conflict, Arabic socialistic recreation party, Corrective evolution motion and national struggle, Arabic national safety, International variables, Development in Bashar Alasad speech.



3. Physics & Oral and Dental Biophysics	2Theory	2 Practical
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Physics: This course includes applications of physics to medicine and medical instrumentation. Topics include bio-mechanics, sound and hearing, pressure and motion of fluids, heat and temperature, electricity and magnetism in the body, optics and the eye, biological effects of light, use of ionizing radiation in diagnosis and therapy, radiation safety and medical instrumentation, x-ray properties and applications, laser and its usage in dentistry.

Biophysics: Vital tissue classification, tissue structure, organic phase, inorganic phase, classification mechanism, dental caries, acid etching for composite fixation, crystal science, solution and osmotic pressure, surface outstanding, substance and radiation, how to read x-ray films, continues current and its application in dentistry.

4. General Chemistry	2Theory	2 Practical
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This course provides dental students with basic knowledge in inorganic general chemistry including properties of solutions, kinetics, acids and bases. Laboratory sessions serve as an introduction to the principles of qualitative analysis including ionic equilibrium, ionic separation and the identification of selected simple and complex ions.

5. CellBiology	4Theory	4 Practical
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This is an elementary course in general biology and biology of the cell designed for medical, dental and pharmacy students in order to provide an understanding of basic biological principles and cell biology. The bulk of the course will concentrate on the understanding of the basic biology of living organisms especially humans and the interactions that lead to life as well as introducing structure, function and function / structure relationship of the unit of life the cell as well as the tissues, organs and systems, stages of fetus growth.

6. Psychology and Biostatistics	2Theory	0 Practical
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Psychology, its definition, fields and ways. The emotional, behaviour, cognitive and social development for individual since birth until twelve years. Personal communication procedure and the importance of language. Pain, its mechanism, psychology and ways to deal with it. Managing children with behaviour problems in dental clinic. Mental disorders (pathological fear). Cognitive and behavioural ways in treating anxiety of dental treatment. Patients' problem of not committing with dentist's oral treatment recommendations. Bad oral behaviours treatment like soaking thumb, biting lip, teeth bruxism.

Statistics: The subject aims to provide student with essential necessary knowledge to explain and read medical articles and analysing statistics constants.

Weekly Hours	18Theory	8 Practical
Total: 26		



First Year

Second semester

1. Arabic Language	2Theory	0 Practical
2. Foreign Language	4 Theory	0 Practical

3. Microbiology and Parasitology General and Oral	2Theory	2 Practical
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Introduction to the science of Microbiology and its development, General medical microbiology, factors of bacterial infectious diseases, immunity and acquired immunity, diagnosis of bacterial infectious diseases, epidemiology of infectious diseases, sterilization antiseptics, antibiotics, medical bacteria, general medical virology, medical viruses, general parasitology, medical parasites, general mycology, medical mycosis, oral microbes and oral immunity mechanism.

Microbiology subject: includes four parts; Bacteriology, Parasitology, Virology, Mycology and disease caused by them, Immunity or resistance against them and this all to prepare students to study infectious disease.

- Bacteriology: studies two main groups of bacteria: gram positive and gram negative, structure of cytoderm (cell wall) in both of them, differences between prokaryotic and eukaryotic cells in terms of sensitivity to antibiotics.
- Virology: viruses divided into two main groups: 1. DNA viruses are composed of nucleic acids and proteins and have the ability to replicate in cenocytes, zooblast and germ cells.
2. RNA- the pattern of genome: it studies the changes that occur in the cell especially antigenicity and directing cell metabolism for the production new viral particles, host response to viruses that causes symptoms of viral diseases including HIV and AIDS.
- Parasitology: studies parasites that get their food intruding on the organisms, and the host organisms problems of this intrusion. Parasites types: 1. According to their nutrition:
• obligate parasites and facultative parasites. 2. Ectoparasites and endoparasites. 3. Harmful and harmless parasites. 4. Parasites of medical importance: Variables and trypanosomatidae, protozoa, multicellular worms and insects.
- Mycology: studies mycosis which are organisms don't have chlorophyll, but have a cellwall and filamentous structure, and they produce spores that can cause many diseases to the human race. The subject studies four types of myco-diseases: 1. Hyperergy: an allergic reaction to mycosis and spores. 2. Myctesimus: poisoning caused by eating mycosis contaminated food. 3. Mushroom poisoning. 4. Infection
- Immunology: studies how to protect body from strange large particles and micro-organisms and the reactions towards them in the first defence line and killing them without need for antibodies. Also includes autoimmune towards body's cells in immunity against tumours and studies how immune system cells interact with each other by particles represent signals that help in organising the immune reaction, this signals might be proteins like lymphocytes and cytokines.
The laboratory session focuses on characteristics of microbes and their production, biochemical interactions in immune reaction and cells stimulation in immunity system.

4. Dental Anatomy (Drawing and Carving)	0 Theory	4 Practical
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A study of the structure form of each tooth (temporary and permanent), and their mutual relations within the dental arch and between the upper and lower dental arches, with an explanation of their role in maintaining the periodontal tissues. Practical and manual skills for students are developed by lab sessions for dental drawing and carving.

5. Anatomy and Embryology General and Oral

5 Theory

2 Practical

A study of anatomy of head and neck in details, through lectures in theory and lab sessions emphasizing on regional anatomy of special importance for dentistry. It studies as well the embryonic development and the development of craniofacial tissues in human.

6. Biochemistry General and Oral

3 Theory

2 Practical

This course is designed to provide an understanding of the structure of the chemical components of living matter. The course will cover the four major classes of biological molecules: proteins, carbohydrates, lipids, and nucleic acids. Emphasis will be on the chemical properties and three-dimensional structure of these molecules in relationship to their biological function. Principles of bioenergetics, the mechanisms of enzyme action, enzyme kinetics, and the control mechanisms which regulate enzymatic reactions will be discussed. Both theoretical and practical sessions, will examine the metabolic pathways and regulatory processes occurring in biological systems and to develop an understanding of some of the sophisticated levels of control within and between metabolic pathways.

Weekly Hours

16Theory

10 Practical

Total: 26

Second Year

First semester

1. Foreign Language

4Theory

0 Practical

2. Fixed Prosthodontics (Crowns and Bridges)

2Theory

6 Practical

This course includes:

1. Definitions:
 - Introduction to Fixed Prosthodontics.
 - Types of crowns.
 - Purposes of crown construction.
 - Steps in crown construction.
 - Components of bridge.
2. Biomechanical principles of tooth preparation:
 - Preservation of sound tooth structure.



- Retention and resistance form.
- Marginal integrity.
- Structural durability.
- 3. Full metal crown:
 - Indications, contra-indications, advantages, disadvantages, steps of preparation
- 4. Complete ceramic crown (Porcelain Jacket Crown):
 - Indications, contra-indications, advantages, disadvantages, and steps of preparation.
- 5. Partial veneer crown (three-quarter crown):
 - Indications, contra-indications, advantages, disadvantages, steps of preparation.
- 6. Post crown:
 - Indications, contra-indications, factors to be considered in the assessment of a tooth for post crown, components of post crown, types of post crown, steps of preparation.

3. General Histology	2Theory	2 Practical
<p>The course gives an introduction to the subject focusing on the morphological and descriptive features of the cell in human body, cell organelles, differentiation and maturation of cells, cells and extracellular environment. Furthermore the course gives adequate study about the main tissue types in human body (epithelial, supporting, blood, bone, muscle, and nervous tissues), their embryological origin, architecture, and cellular morphology. Histophysiology of each tissue type is taken in consideration also. Some organs and systems are subject of study based on fundamental knowledge of the previous material such as blood cells, skin, endocrine system, circulatory system, heart, lymphatic system, immune system, digestive system, respiratory system and urinary system.</p>		

4. Physiology and Nutrition General and Oral	4 Theory	2 Practical
<p>Upon completion of this course the student is expected to be able to understand the basic concepts of physiology which include: 1. An introductory of body fluids, electrolyte and acid-base balance. 2. An introductory overview of some basic principles and mechanisms applicable to the function of all individual body systems:</p> <ul style="list-style-type: none"> • Muscular system: anatomy, muscle nervous focal, slide fibre theory, muscle spasm, muscle metabolism, moving units. • Respiratory system: structure, pulmonary ventilation, gas exchange, transport of gases in blood, control of breath, pulmonary function test. • Cardiovascular system; <ul style="list-style-type: none"> - Heart: anatomy, heart conductive system, potential act of heart muscle, cardiac cycle, the results of heart and venous return. - Blood vessels: structure and function, blood pressure measuring and affecting factors and regulations, self-organizing, dynamitecapillary vessels, blood circulation within tooth. • Urinary system: anatomy, glomerular filtration, initial processing of filtrate, renal clearance, diuretics, urination. • Digestive system: mouth and oesophagus: saliva, salivary glands, mastication, swallowing, stomach, liver, endocrine glands, pancreas, small and large intestines, digesting and absorbing of; carbohydrates, proteins, and fat, defecation, diarrhea, constipation and peptic ulcer. • Nervous system: functional organizing of nervous system, autonomic nervous system, neurons, comfort membrane potential, action potential, synaptic transportation, synaptic integration. • Vectors and synaptic receptors; effective and reflective, pain physiology, sensory ways, motion ways, physiology and pathological physiology of cranial nerves, speech, physiology of the neural occlusion. • Endocrine system: introduction, hormones, pituitary gland, growth hormone deficiency, excessive secretion of 		



growth hormone

- Thyroid gland: hypothyroidism, hyperthyroidism, physiological effects of calcitonin.
- Parathyroid: physiology of bone and teeth, physiology effects of cholesterol, calcium metabolism, hypercalcaemia, hypocalcaemia.
- Endocrine functions of the pancreas: biological effects of insulin and glucagon, pathophysiology of the endocrine pancreas, suprarenal gland, medulla of suprarenal gland, endocrine functions of the other organs.
- Reproduction system: male reproduction system, female reproduction system, maturity.

This course provides students with basic aspects of medical physiology. Special emphasis will be on the neuronal and hormonal control to the related organs, and on body responses and adaptation to various stress conditions and physiological disorders

5. Pharmacology General and Oral	2 Theory	0 Practical
<ol style="list-style-type: none"> Section 1: Introduction to Pharmacology: an overview that enables students to understand the basic principles of pharmacokinetics and pharmacodynamics. It provides students with the knowledge of the mechanism of action, clinically significant side effects, drug-drug interaction, and immune diseases. Section 2: General Pharmacology for dentists: <ul style="list-style-type: none"> • Anti-infectious agents, anti-bacterial: Penicillin, cephalosporin, macrolides, tetracycline, clindamycin, synthetic drug. • Anti-mycotic: Pollens • Antiviral, anti-parasitic. • Analgesics: Central analgesics (opiates), peripheral analgesics (antibiotics). • Anti-inflammatory, antibleeding. • Local anaesthetics, general anaesthetics and sedation. • General drugs and dentistry: Cardiovascular drugs, central nervous system drugs, hormones. • Drugs for special purpose: Muscles relaxant, steroids, drugs effect on salivary secretion. • Medicinal preparation for special patients in dental clinic: Disabled, pregnant, cardiac and blood pressure patient, diabetics. Section 3: Oral and dental pharmacology <ul style="list-style-type: none"> • Topical application of drugs for treating oral mucosa lesions: Antibiotics, antimetabolic, painkiller, oral antiseptic, customised material for the rehabilitation of damaged tissues. • Enamel drugs: Topical fluoride, fluoride given systemically. • Dentin drugs: Temporary restorative materials and their side effects, anti-sensitivity drugs, oral and dental antiseptics. • Periodontics treatment drugs: Antibiotics within gingival pocket, caustic and antibleeding material, anti-inflammatory, gingival retraction materials • Endodontic treatment drugs: pulpal pain relievers, antiseptics, endodontic fixing and killing materials. • Alveolar bone drugs: Induced bone formation drugs applied around dental implants. 		

6. Restorative Dental Materials	1 Theory	2 Practical
<p>This course deals with physical and mechanical properties of dental materials, biocompatibility of impression materials, detailed study of various restorative materials, restorative resin and recent advances in composite resins as well as recent bonding developments. It also includes detailed description of tarnish and corrosion, dental amalgam, inlay wax, dental</p>		



cements for restoration and pulp protection (luting, liners, bases) and cavity varnishes. Advances in restorative materials and dental ceramics, finishing and polishing materials. Dental burs -design and mechanics of cutting -other modalities of tooth preparation will also be incorporated.

Weekly Hours	15 Theory	12 Practical
Total: 27		

Second Year

Second semester

1. Restorative Dentistry	2 Theory	6 Practical
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This Course is:

- Theory section studies:
 - Non carious tooth defects, Amalgam and Composite restorations, occlusion as related to conservative dentistry.
 - Using matrices in conservative dentistry.
 - Dental caries - epidemiology, recent concept of etiological factors, pathophysiology, histopathology and diagnosis will also be included.
- Laboratory sessions include:

students training on cavity preparation and use of dental cements for restorations and pulp protection (luting, liners, bases) in addition to using dental burs and other modalities of tooth preparation in laboratory (Phantom Head) sessions where tooth preparation (class I,II,V) and filling with amalgam and composite will be completed on a number of extracted teeth.

2. Oral and Dental Histology	2 Theory	4 Practical
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This course presents the microscopic structure of cells, tissues and organs emphasizing the correlation between structure and function. The course deals specifically with the oral cavity and the structures relevant to the teeth and their surroundings: The development of the oral cavity, the development of teeth, enamel, dentin, dental pulp, cement, alveolar bone periodontal ligament, oral mucous lining, mastication oral mucosa, the oral mucous membrane, the salivary glands and TMJ.

3. Partial Removable Prosthodontics	2 Theory	4 Practical
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The course is designed to provide the students with knowledge of the principles, clinical aspects, laboratory steps and practice of partial dentures including:

- Anatomy of periodontal tissues.
- Components of a removable partial denture.
- Principles of removable partial denture design
- Mouth preparation and master cast.
- Impression materials and procedures for removable partial dentures.
- Preliminary jaw relation.



- Laboratory procedures.
- Fitting the framework.
- Try-in of the partial denture.
- Completion of the partial denture.
- Inserting the removable partial denture.
- Temporary acrylic partial dentures.
- Immediate removable partial denture

4. Radiology	2Theory	2 Practical
<p>A comprehensive study of oral and jaw radiology in its four aspects: the physics of radiation, energetic of radiation, radiography techniques and methods, and finally reading diagnostic radiographs and that all is through lectures in theory and laboratory and clinical sessions that allow students to apply radiography techniques on new patients and reading them with the help of specialist supervisors.</p> <p>Discussing the basic principle of X - Ray generation, and the different radiological devices used in the dental clinic. The student will be trained to use these devices to have a radiographic picture for the oral cavity and surrounding structure in different techniques and positions, emphasizing on safety and protection of the patient and the staff in the clinic. Also the students will be trained on the processing and developing methods.</p> <p>Diagnosis: The main objective of this course is to provide detailed knowledge of the radiographic appearance of the pathological conditions affecting the oral cavity, head and neck. Also the students will be trained on viewing, describing specific lesions and formation of a differential diagnosis.</p>		

5. Prosthodontics Dental Materials	1 Theory	2 Practical
<p>This course focuses on general principles and definitions</p> <ul style="list-style-type: none"> • Impression materials:Types, and the indications, chemical composition and way of working of each type. • Casting materials: Types, and the indications, chemical composition and way of working of each type. • Dental wax:Types, and the indications, chemical composition and way of working of each type. • Resins: Types, and the indications, chemical composition and way of working of each type. • Metal mixtures:Types, and the indications, chemical composition and way of working of each type. • Dental cements: Types, and the indications, chemical composition and way of working of each type. • Dental ceramics:Types, and the indications, chemical composition and way of working of each type. 		

Weekly Hours	Theory	18 Practical
Total: 27		



Third Year

First semester

1. Partial Removable Prosthodontics(2)	2Theory	4 Practical
<p>Students are introduced to the clinical and theoretical aspects of removable partial dentures, precision attachments, over dentures, immediate dentures, single complete dentures and pre-prosthetic surgery.</p> <p>Clinical training includes: Examination of the patient, primary impression, the preparations of oral pre-artificial dentures, final impression,planning a prime example, design of artificial dentures, primary artificial dentures,registration of jaw relationship,setting of artificial teeth, cooking, finishing, delivery of removable partial denture and recommendations), inflammation of the mouth due to removable partial denture.</p>		

2. Internal Diseases, Dermatology & Venereology	3 Theory	0 Practical
<p>This subject which is given in coordination with the Faculty of Medicine.It provides an overview of the principles of internal medicine, dermatology and venereology diseases with an emphasis on common diseases of particular importance to dentist, to study the phenomenon of general and oral internal, dermatology and venereology diseases, their diagnosis, methods of treatment and the importance of the role of the dentist in the early diagnosis and participation in treatment. Itstudies the structureofnaturalskinand the principles ofdiagnosis: Parasitic skin diseases, bacterial skininfections,viralinfections, fungal infections,sexually transmitted diseases, skin diseasescausedbyphysical factors, dermatosesandlupuserythematosus,dermatosesbubble,connective tissue disease, Eczema, contact dermatitis, urticarial and drugs interactions, acne and rosacea (pink face)andrelated disorders, skin tumours, skinpigmentationdisorders hair and nails lesions, geneticsyndromesassociatedwith dental defects,themucousmembraneandoralcavitylesions.</p>		

3. Ophthalmology, Otolaryngology	2Theory	0 Practical
<p>This course includes:</p> <ul style="list-style-type: none"> Chapter I: The ear: 1- anatomy, 2- clinical examination of the ear, 3- hearing test, 4- hearing loss, 5- pavilion diseases, 6- diseases of apparent meatus, 7- eardrum injury, 8- acute media otitis, 9- chronic inflammation of the middle ear, 10-complications of ear infections, 11- media otitis with effusion, 12- hardening of the ear, 13- ear pain, 14- Tinnitus 15- dizziness, 16-facial nerve palsy. Chapter II: Anatomy and physiology of the nose 1- Anatomy of the nose 2- foreign objects in nose 3- injuries nose 4- nosebleed 5- nasal septum 6- different nose infections 7- acute and chronic sinusitis 8- tumours of the nose, sinuses, nasopharynx 9- : allergic rhinitis inflammation vasomotor rhinitis, nasal polyps, 10- stuffy nose back 11- polyps, 12- tonsils and oropharynx, 13- the eradication of tonsils, 14- retropharyngeal abscess. Chapter III: Throat 1- the anatomy and physiology of the larynx and examination of the throat 2- injuries larynx and trachea 3- disorders of acute laryngitis 4- - Chronic disorders of throat 5- tumours of the larynx, 6- paralyzesof the vocal cords 7- blockage of the respiratory route in infants and children 8- Omradiat laryngopharynx, 9- biopsy of trachea 10- salivary glands diseases - scientific terms – references. 		



4. Public Health, History of Medicine and Ethics Of Dental Practice	2Theory	0 Practical
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The course discusses:

- The essential basic principles of public health on a society level by discussing the environmental health air, water, food, habitation, environment and pollution.
- An overview of the history of the profession, teeth treatment in the Arab Scientific Heritage and their evolution through history.
- The importance and effects of social aspects of dental practice.
- An introduction to base line knowledge of ethical theories, various models of decision making and the major contemporary health care issues and dilemmas facing the dental profession. It discusses the Legal aspects of health care, and then moves on to discuss individual health in general before emphasis on the oral health of individual.
- The local Dental Practice regulations, it gives an idea of the institutions, public and private health and their role in maintaining the health of the society.

5. Restorative Dentistry (2)	2Theory	6 Practical
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This course deals with:
Examination, diagnosis and treatment plan, infection control procedures in conservative dentistry, isolation equipment.. Etc. Concepts in tooth preparation for amalgam, composite, gold, GIC, restorative techniques, material, its failures and management will also be covered.
Clinical training beginning with the basic principles of cavity formation (class I, II, V) and filling by using the restorative material as indicated in each case.

6. General Histopathology	2Theory	4 Practical
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It involves the study of the mechanisms and characteristics of the principle types of disease processes.
Examples: 1-Injury, adaptation and death of cell, 2- Metabolic and degenerative diseases, 3- hypochromemia, 4- Circulatory diseases, 5- Active and passive congestion, 6- Clots, shock and infarction, 7- Inflammation and infection, 8- Cellular restoration and regenerative, 9- Immunity and disorders, 10- Genetic factors and disease, 11- Carcinogens and tumours, 12- Disorders of growth, differentiation and embryogenesis, 13- Classification of tumours.
In addition, some systemic pathology topics will be introduced late in the course including blood vessels and heart. Histopathology glass slides and pictures of gross pathology will be discussed in the laboratories.

Weekly Hours	13Theory	14 Practical
Total: 27		



Third Year

Second semester

1. Foreign Language	4 Theory	0 practical
2. Minor Surgery and Surgical Diseases	3Theory	1 Practical

This clinical medical course is addressed to dental students to provide practical knowledge relative to the integration of general surgery knowledge into the basic knowledge the dental student need to know in order to provide dental care for patients more safely, efficiently and effectively.

Topics will include: 1. Minor Surgery:

- Patient examination, admission to hospital, the intensive care unit, vital signs, temperature check, pulse check, breathing check, blood pressure measuring, surgical infections and antibiotics, antibiotic treatment.
- Physiotherapy: The focus of physiotherapy for Temporomandibular disorders (TMDs) is relaxation, stretching, and releasing tight muscles and scar tissue. Physiotherapy is an especially important part of recovery from TM joint surgery, as it helps minimize scar tissue formation and muscle tightness.
- Drainage of the abscess, surgical instruments, sterilization and disinfection, vaginal lavage, anal lavage, intubation Stomach (gastric lavage), nasogastric intubation, helping to empty excess bronchial secretions, aerosols, oxygenic treatment, back escharosis, mouth wash, washing the ear, giving medicine by injection, intramuscular injections, subcutaneous injection, intradermal injection,
- Veins puncture and infusions, intravenous catheter, vein stripping, giving fluids intravenously, puncture pleural puncture, the chest bombing, pleural biopsy, pericardial cavity puncture, abdomen puncture, lumbar puncture, sternal puncture, puncture of the knee joint, vesical catheter, bladder Puncture, cardiac catheterization, ECG, ambulatory treatments, fainting, shock, shock caused by lack of blood volume, the shock of the cellular lesion, allergic shock, heart attack and failure, Angina, myocardial infarction, hypoglycemia, hyperglycemic coma, pharmaceutical poisonings, suffocation.
- General principles of emergency treatments end tracheal biopsy, foreign objects entering the body, blood transfusion, and treat bleeding, nosebleed, wounds and treatment, surgical sutures, wounds dressing, burns, electrical burns, bone fractures and treatment, flexion, dislocation and subluxation and mandibular deposition.

2. Surgical pathology:

- Severe abdominal pain: Definition, types, diagnostics, non-surgical causes and surgical causes of severe abdominal pain.
- Inflammation of a thromboid vein, deep thrombophlebitis, (definition, causes, clinical diagnosis and treatment), superficial thrombophlebitis, (definition, causes, clinical diagnosis and treatment).
- Pulmonary valve (definition, causes, clinical diagnosis and treatment), septic valve (definition, causes, clinical diagnosis and treatment),
- Varicose veins (definition, causes, clinical diagnosis particular test, complications and treatment), Haemorrhoids (definition, types, causes, symptoms, and treatment), surgical diseases of the Peritoneum (definition and anatomical overview) (causes, clinical manifestations, treatment), Peritonitis: (definition, types, causes, symptoms, treatment).
- Surgical diseases of the liver: Anatomical functions diagnosis of liver, fatty liver, inflammation of the liver, alcoholic cirrhosis of the liver, high tension and portal vein, liver abscesses of liver tumours, inflammation of the gallbladder, stones gallbladder.
- Surgical diseases of the pancreas : Acute pancreatitis chronic pancreatitis, pancreas tumours, pancreatic cancer, lesions appendicitis, acute appendicitis (causes, symptoms, treatment and complications)



- Peptic ulcer: Definition of ulcer treatment causes symptoms, Zollinger Ellison syndrome, upper and lower gastrointestinal bleeding, upper gastrointestinal bleeding (causes, symptoms, diagnosis, treatment), lower gastrointestinal bleeding (causes, symptoms, diagnosis, treatment).
- Surgical diseases of the spleen (anatomical overview), spleen congenital lesions rupture of the spleen, splenomegaly, splenectomy.
- Surgical kidney disease: An overview and anatomical functions of kidney, acute kidney failure, chronic kidney failure, renal calculus, hemodialysis peritoneal, kidney transplant.
- Surgical diseases of the thyroid glands and parathyroid: Anatomical functions of the thyroid glands and parathyroid diagnostic tools, thyroid disease (hyperthyroidism, hypothyroidism, goiter, cancer, hypothyroidism, rheumatoid Thyroid - Diseases of the glands parathyroid (overactive parathyroid, palaces parathyroidism)
- Breast surgery: An overview of anatomical diagnostic tools, breast disease (mass in the breast, breast pain, gonorrhoea of the nipple, inflammatory breast lesions), breast cancer, laparoscopic surgery, definition of the benefits of laparoscopic surgery complications of laparoscopic surgery contraindications, tools laparoscopic surgery, laparoscopic cholecystectomy laparoscopic surgical treatment of hernias

3. Occlusion	2 Theory	0 Practical
<p>This course presents a logical and practical approach to the study of dental occlusion and masticatory function. The normal anatomic and physiologic features of the masticatory system and dental relations, the Pathophysiologic features related to the basic clinical applications and the suitable physiotherapy are discussed. This course is considered fundamental to various courses in the dental medicine specialty especially, prosthodontics, orthodontics, conservative dentistry, and oral medicine. Oral physiology is also addressed as related to the articulatory system; the swallowing and speaking are main examples.</p>		

4. Fixed Prosthodontics (Crowns and Bridges) (2)	2 Theory	6 Practical
<p>The course studies:</p> <ol style="list-style-type: none"> 1. Impression for crown and bridge work: <ul style="list-style-type: none"> • Objectives of taking impression. • Requirements of an acceptable impression. • Impression materials, • Impression techniques. 2. Provisional restoration: <ul style="list-style-type: none"> • Definition, objectives, types (prefabricated, custom-made, and laboratory-made). 3. Working cast: <ul style="list-style-type: none"> • Advantages of working cast, definition of die, types of die material, techniques of producing die. 4. Waxing. 5. Investing. 6. Casting. 7. Finishing of the casting 8. Clinical try-in. 9. Cementation: <ul style="list-style-type: none"> • Types of cements used for cementation of crown restoration. • Techniques of cementation. 		



5. Oral & Dental Histopathology	3 Theory	3 Practical
<p>The course will focus on that part of pathology which is concerned with the scientific study of the causes and effects of oral disease, an understanding of which is essential for diagnosis and for the development of rational treatment and preventive programs.</p>		

6. Preventive Oral Medicine	2 Theory	0 Practical
<p>This course is designed to develop an appreciation of optimal oral health and Oral Hygiene and a basic understanding of the relation between oral/dental disease-producing agents and host resistance. The student will be able to identify the risk category and the dental needs of a patient and perform those professional preventive procedures identified following proper clinical assessment. Students will gain the necessary basic knowledge and skills regarding the philosophy and modalities of prevention including concepts on the etiology, microbiology, diagnosis and prevention of caries in the human dentition and its relation with diet among other factors</p> <p>Foundations of oral preventive medicine</p> <ul style="list-style-type: none"> • A historical overview of the definition of preventive medicine, society's role and its relationship in developing the oral preventive medicine, services that can be provided by the community in the field of oral preventive medicine. • The importance and objectives of oral preventive medicine: 1- Definition and stages of prevention, oral preventive methods and programs, planning for oral health programs and selection of appropriate preventive strategies, World Health Organization and investigation of basic oral health. Health services, medicine oral prophylaxis programs. <p>Nutrition and preventive oral medicine</p> <ul style="list-style-type: none"> • The importance of food for the body, effect of food in human, essential nutritional rules, basic rules to feed children - the most important causes of malnutrition disease, supervision over food, relationship between food and disease, diseases caused by contamination of food, social factors and their impact in the composition of dietary habits. • Dental caries: Definition of dental caries, enamel and dentinal caries, main factors causing Dental caries, development of dental plaque, places of dental plaque, • timetable for the emergence of dental plaque, and theories of dental caries incidence. <p>Fluoride and its relation with dentistry:</p> <ul style="list-style-type: none"> • History of fluoride use and its importance in the prevention of dental caries. The effect of fluoride before dentition. The effect of fluoride topically after teeth eruption. • How fluoride prevents dental caries • Methods of systemic fluoride application. Topical fluoride and materials and methods of application. • Contraindications of fluoride in oral treatment, fluorosis, other effects of fluoride. • The necessary recommendations to avoid misuse of fluorescent products. <p>Oral Preventive Medicine for temporary teeth in children:</p>		



- Bad oral habits: Thumb sucking, infantile swallowing, abnormal lip habits, oral breathing, pushing of the tongue.
 - Maintaining milk teeth and early compensation for lost teeth.
 - Prevention of malocclusion and maxillofacial deformities.
 - Preventive Dentistry and Restorative: sealant - composite- glass ionomer-compomers
- Prevention of periodontal disease, prevention in patients with Prosthodontics, cancer prevention, prevention of blood-borne diseases, and prevention of professional diseases.

Weekly Hours	16 Theory	10 Practical
Total: ٢6		

Fourth Year

First semester

1. Foreign Language (4)	4Theory	0 Practical
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2. Endodontics (1)	1Theory	2 Practical
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This course includes:
 Series of lectures covering different aspects of Endodontics.
 Knowledge of internal anatomy of permanent teeth, anatomy of root apex and its implications in endodontic treatment.
 Access cavity preparation - objectives and principles.
 Endodontic instruments and instrumentation.
 Laboratory sessions where root canal treatment will be completed on number of extracted teeth. (Sectioning of all maxillary and mandibular teeth in addition to the application of access cavity opening and root canal therapy, conventional preparation-step back and root canal obturation.

Exam:
 Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

3. Oral Diseases(1)	1 Theory	2 Practical
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The course deals with all types of diseases and abnormalities that affect the oral cavity. The student will be trained to achieve diagnosis of the disease through systematic approach including full examination and special tests. Discussing all treatment options for each disease:

- Teeth congenital disorders, diseases of dental pulp and periodontal tissues, white and red lesions, oral cavity cysts, diseases of the salivary glands, diseases of TMJ, diseases of maxillary sinus, pigmentary disorders, ulcerative lesions, the mouth and jaw abscesses, diseases of the tongue, nerve angioedema.
- Etiology of these diseases will be fully explained and discussed
- The laser in oral medicine



- Forensic dentistry
- Physiotherapy for periodontal and TMJ.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

4. Restorative Dentistry (3)	1 Theory	6 Practical
<p>This course deals with:</p> <p>Management of non-carious lesions. Concepts in tooth preparation for amalgam, composite and GIC. Restorative techniques and materials knowing failures and management. Direct and indirect composite restorations. Indirect tooth coloured restorations- ceramic, inlays and onlays, veneers. Cast metal restorations, indications, contraindications and tooth preparation for class II inlay. Clinical training with patients (Class II, III, and IV) and filling by using the restorative material as indicated in each case.</p> <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

5. Complete Removable Prosthodontics (1)	1 Theory	2 Practical
<p>This course covers:</p> <ul style="list-style-type: none"> • Occlusion in complete denture • Retention support & stability • Posterior palatal seal determination • Complications in complete denture • Post insertion problems • Immediate denture • Aesthetics in complete denture <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

6. Fixed Prosthodontics (Crowns & Bridges) (3)	2 Theory	4 Practical
<p>This course studies:</p> <ol style="list-style-type: none"> 1. Introduction and definition of fixed bridges and comparison with partial denture. 		



2. Clinical consideration for bridge construction
 3. Advantages and disadvantages of fixed bridge
 4. Impression materials and procedure.
 5. Types of bridge.
 6. Bite registration and articulation
 7. Temporary restoration
 8. Temporary bridges
 9. Pontic and pontic design
 10. Porcelain material.
- The clinical section allows students to apply various techniques for several types of fixed prosthodontics.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

7. Anaesthesia and Extraction (1)	2 Theory	4 Practical
<p>Includes into two parts in theory:</p> <ol style="list-style-type: none"> 1. The first looks at the anaesthesia, methods of local anaesthesia, anatomical reviews of the head and neck, how to manage emergency cases, explaining different techniques of anaesthesia and the drugs used in. 2. The second part looks at teeth extractions and it provides comprehensive study for accredited methods and ways after discussing local and general indications and contraindications, methods of preventing or dealing with complications. Clinical sessions at the teeth extracting clinic are considered as an essential part in this subject as students practice extractions procedures under the supervision of Department of Oral and Maxillofacial Surgery. Students continue clinical practice of anaesthetising and extractions with ability to perform minor surgeries and observing some complicated oral surgeries. <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

Weekly Hours	12 Theory	20 Practical
Total: 32		

Fourth Year

Second semester

1. Oral Diseases (2)	1 Theory	2 Practical
<p>These courses deal with associated tissues and structures of oral cavity such the salivary glands, bone, and the facial tissues. Also the courses will include the provision of sufficient information about oral manifestation of systemic disease,</p>		



the relevance of these diseases for dentistry and how these problems should be dealt with.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

2. Paediatric Dentistry (1)	2 Theory	2 Practical
<p>The goal of the course in Paediatric Dentistry is to introduce the student to the basic concepts of dental care for the child patient through lectures, pre-clinical workshops. The goals of the seminars and clinical rotations in Paediatric Dentistry are to expose the student to the clinical care of infants, children and adolescents.</p> <p>The topics and clinical activities specifically focus on: comprehensive diagnosis and treatment planning, infant oral health care, preventive strategies (oral prophylaxis, fluoride application, pit and fissure sealants), radiographs in paediatric dentistry, local anaesthesia for the paediatric patient, pulp therapy, trauma, restorative dentistry for primary and young permanent teeth, minor oral surgery, behaviour management, and the prevention and interception of malocclusion due to the premature loss of primary teeth or other aetiologies requiring minor orthodontic care.</p> <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

3. Complete Removable Prosthodontics and Maxillofacial Prosthodontics	2 Theory	2 Practical
<p>This course covers:</p> <ul style="list-style-type: none"> • Single complete denture • Facial prosthesis • Alveolar ridge atrophy • Over dentures <p>Detailed explanation of Maxillofacial prosthodontics and their function in replacing missing areas of bone or tissue and restore oral functions such as swallowing, speech, and chewing. In other instances, prosthesis for the face or body may be indicated for cosmetic and psychosocial reasons.</p> <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

4. Endodontics (2)	1 Theory	2 Practical
<p>This course deals with: Diagnostic procedures, dentin and pulp complex, pulp and periodical pathology. Case selection and treatment planning. Infection control procedures used in endodontics (aseptic techniques such as rubber dam, sterilization of instruments etc.)</p>		



Obturing materials.

Clinical Training with Patients(Root canal Treatment) in Anterior teeth and premolars
(Access cavity, instrumentation, preparation and obturation)

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

5. Anaesthesia and Extraction (2)	1 Theory	4 Practical
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This course includes:

Anaesthesia

- Anatomy of the oral cavity, upper jaw, lower jaw, mastication muscles, neighbourhoods of oral cavity, temporal fossa, pterygopalatine fossa, parotid gland.
- Nerves of the oral cavity, trigeminal nerve, facial nerve.
- Pain, the path of pain, pain control, psychological pain.
- Drugs used in anaesthesia, properties and pharmacokinetics of narcotic drugs, topical local anaesthetic, mechanism effect of topical local anaesthetic, systemic effects of topical narcotic drugs, the adverse effects of topical narcotic drugs.
- Vasoconstrictor, the chemical composition of vasoconstrictor, pharmacological effects of vasoconstrictor, toxic reactions and Side effects.
- Methods of local anaesthesia: application of local anaesthetic spray, solution or cream to the mucous membrane, local aesthetic injection, under the mucous membrane anaesthesia, supra-periosteal anaesthesia, gingiva anaesthesia, sub-periosteal anaesthesia maxillary incisors anaesthesia, mandibular incisors anaesthesia, periodontal ligament anaesthesia, anaesthesia in the bone, regional anaesthesia, regional anaesthesia in the lower jaw, mandibular injection, mental foramen injection, regional anaesthesia in maxillary, posterior palatine injection, injection under the orbital frontal foramen, infraorbital injection, anaesthesia from outside the mouth, general anaesthesia complications.

Extraction

- Introduction: Brief History, anatomical overview, medical history and examination of the patient, clinical examination, radiographic examination, laboratory testing.
- common diseases: Heart disease, Angina pectoris (angina), Myocardial infarction, cardiopulmonary arrest, Hypertension, Hypotension, bleeding disorders, Haemophilia, Anaemia, Jaundice, Inclusion body Hepatitis, AIDS, Herpes, Syphilis, Tuberculosis, cerebral infarction, Epilepsy, pregnancy and lactation, diabetes, Hypocortisolism (Addison's disease), fever rheumatic, rheumatic joints, respiratory disorders, pneumonia, bronchial asthma, trauma.
- Sterilization in oral surgery: Introduction, definitions, methods of sterilization, methods of cleansing, the work environment.
- Tools and instruments, the surgeon and the assistant medical team, hooks, levers, levers law, the use of levers, assistant tools in the extraction.
- Extraction indications, tooth extraction, stages of the extraction, the extraction in the maxillary, extraction in the mandibular, primary teeth extraction, roots surgical extraction, impacted tooth extraction and its indications, study of X-rays, practical steps for surgical extraction, practical steps for the extraction of the impacted upper third molar, diagnosis and set the location of impacted canines, surgical methods to remove the impacted upper



canines.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

٦. Orthodontics (1)	4 Theory	4 Practical
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Basic principles of pre- and postnatal growth and development of cranial and facial region. Mechanics of bone growth (intramembranous ossification and endochondral ossification). Development of normal dentition and occlusion, management of the developing dentition, etiology and classification of malocclusion and orthodontic assessment intra and extra orally.

The practical division of this course prepares students for the laboratory work related to removable orthodontic therapy. It aims preparing the students for the laboratory work related to removable orthodontic appliances and developing their skills in different bending techniques. Major clasps and springs used in removable appliances will be bent by the student. An acrylic removable appliance should be constructed, trimmed, polished, by the student.

Exam:

٧. Periodontics (1)	2 Theory	4 Practical
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The course includes:

1. Introduction to the anatomy and biology of the periodontium: periodontal tissues, oral mucosa and the gingiva, periodontal ligament, cement, alveolar bone and the periodontium in children.
2. Dental periodontal diseases causes: The composition of microbial dental plaque and its role in periodontal diseases, periodontal pathogens, the immunologic response to the periodontal disease, defence mechanisms of the gingiva.
3. Gingival disease: Signs and symptoms of gingival and periodontal inflammation, clinical feature of gingivitis, gingival enlargements, gingival recession, acute gingival infections, desquamative gingivitis, oral mucous membrane diseases and gingival diseases in children.
4. Classification of periodontal disease: epidemiology of gingival and periodontal disease, the periodontal pocket and patterns of bone destruction, inflammation of periodontal tissue, aggressive periodontitis (not associated with systemic diseases and associated with systemic diseases).
5. Occlusion: masticator system disorders, periodontal response to external force, pathologic tooth migration.
6. Effect of systemic diseases on the periodontium (diabetes, cardiovascular disease, respiratory disease, premature births, lack of female hormones), environmental factors (smoking, alcohol, mental stress, obesity), and AIDS.
7. Diagnosis: clinical and radiographic diagnosis of periodontal disease.
8. Periodontal treatments: mechanical periodontal therapy, surgical phase of therapy, medicinal treatment, reconstructive occlusal surgery, splints and the laser.
9. Dental implants: biological aspects, clinical aspects and surgical aspects of dental implants, diagnosis and treatment of peri-implantitis.
10. Personal oral hygiene as a preventive and therapeutic measure for periodontal diseases: supportive periodontal treatment, plaque control, hyper sensitivity and therapy.
11. The interrelationship of periodontal – endodontic, periodontal – restorative, and periodontal – orthodontic.
12. Components of periodontal instruments used in manual non-surgical periodontal treatment will be explained for the students. They need to learn the structure of scalers and curettes.

Exam:



Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs).

Weekly Hours	1 ³ Theory	20 Practical
Total: 3 ³		

Fifth Year

First semester

1. Fixed Prosthodontics (Crowns & Bridges) (4)	0 Theory	4 Practical
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The clinical section allows students to apply various techniques for several types of fixed prosthodontics on patients under supervision:

- Patient selection and examination
- Preparation: full metal crown and bridge, porcelain fused to metal crown and bridge, complete ceramic crown and bridge (porcelain jacket crown), partial veneer crown (three-quarter crown), post crown.
- Try in and shade selection
- Aesthetic considerations
- Finishing and cementation
- Failure in crown & bridge.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

2. Complete Removable Prosthodontics (2)	0 Theory	4 Practical
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This course is designed to provide the students with knowledge of the principles, clinical aspect, laboratory steps and practice of complete removable denture:

- Applied Anatomy and Physiology
- Communicating with the patient
- Diagnosis and treatment planning for patients
- Articulators
- Improving the patients denture foundation and ridge relation
- Principles of Retention, Support and Stability
- Impressions
- Record bases and occlusion rims
- Cranio-mandibular relations
- Relating the patient to the articulator.



- Recording maxilla mandibular relation.
- Tooth selection and arrangement.
- Relating inclination of teeth to concept of occlusion
- Trial dentures.
- Laboratory procedures
- Denture insertion.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)

3. Paediatric Dentistry (2)	0 Theory	4 Practical
<p>These two courses are designed to provide guidance to begin delivery of competent oral health care for healthy children. Students are expected to learn current techniques and principles based on most recent scientific literature. Students are expected to have thorough knowledge and display clinical adequacy with regards to local anaesthesia in the child patient, extractions in the paediatric patient, vital pulp therapy in primary and young permanent dentition, dento-alveolar trauma-diagnosis and principles of management as well as space management in children</p> <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		



4. Anaesthesia and Extraction (3)	0 Theory	4 Practical
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Anaesthesia: In this course clinical and practical aspects of different local and regional anaesthesia are applied on patients under super vision of Department of Oral and Maxillofacial Surgery including:

1. Anaesthesia of the mandible
 - Pterygomandibular space - boundaries, contents etc.
 - Interior Dental Nerve Block - various techniques
 - Complications
 - Mental foramen nerve block
2. Anaesthesia of Maxilla
 - Intra - orbital nerve block.
 - Posterior superior alveolar nerve block
 - Maxillary nerve block - techniques.
3. Management of emergency cases and complications

Extraction: In this course clinical and practical aspects of extraction are applied on patients under super vision of Department of Oral and Maxillofacial Surgery including:

1. Diagnosis:
 - History taking
 - Clinical examination
2. Methods of Extraction:
 - Closed method
 - Open method
3. Primary care of medical emergencies in dental practice.

This course will concentrate on practical clinic where the student will have a good working, knowledge of basic oral surgical principles and a good practice in teeth extraction.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

5. Endodontics (3)	0 Theory	4 Practical
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This course deals with:

Traumatic injuries and management, Endo emergencies and management, endodontic instruments and instrumentation, recent developments, detailed description of hand rotary system, advanced endodontic.

Clinical training with patients (root canal treatment) in posterior teeth (access cavity, root canal preparation, instrumentation and obturation).

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

6. Foreign Language (5)	4 Theory	0 Practical
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7. Periodontics (2)	0 Theory	4 Practical
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This course studies:

1. Clinical and microscopic aspects of normal and pathological periodontal and gingival mucosa.
2. Management of periodontal cases and the principles and techniques of periodontal surgery.
3. Clinical sessions on diagnosis, periodontal plan treatment, preventive procedures, scaling, root and apicectomy and referring complicated cases to master students and helping them in performing periodontal surgery when indicated

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

Weekly Hours	4 Theory	24 Practical
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Total: 28

Fifth Year

Second semester

1. Anaesthesia and Extraction (4)	0 Theory	4 Practical
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Anaesthesia: In this course clinical and practical aspects are applied on patients under super vision of Department of Oral and Maxillofacial Surgery including:

1. Local and regional anaesthesia.
2. Sedation.
3. Use of oxygen and emergency drugs.

Extraction: In this course clinical and practical aspects of extraction are applied on patients under super vision of Department of Oral and Maxillofacial Surgery including:

1. Diagnosis:
 - History taking
 - Clinical examination
2. Methods of Extraction:
 - Closed method
 - Open method
3. Impacted teeth: Surgical procedures for removal complications during and after removal for:
 - Impacted mandibular third molar.
 - Maxillary third molar.
 - Impacted maxillary canine.
4. Primary care of medical emergencies in dental practice.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)



2. Orthodontics (2)	0 Theory	4 Practical
<p>The course focuses on cephalometric radiological analysis, normal and abnormal oral function and its management. Diagnosis and treatment planning of various types of malocclusions in the sagittal, vertical, and transverse plan. In practical sessions each student should present one case presentation at least. It includes well-trimmed orthodontic study casts, intra oral photographs, extra oral photographs and cephalometric analysis. The student should describe the problems systematically using</p> <p>planes of space and orthodontic diagnostic techniques describe the goals of treatment, offer an opinion regarding the most appropriate approach to the suggested treatment plan.</p> <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs)</p>		

3. Fixed Prosthodontics (Crowns & Bridges) (5)	0 Theory	4 Practical
<p>The clinical section allows students to apply various techniques for several types of fixed prosthodontics on patients under supervision:</p> <ul style="list-style-type: none"> ● Patient selection and examination ● On patients under supervision: full metal crown and bridge, porcelain fused to metal crown and bridge, complete ceramic crown and bridge (porcelain jacket crown), partial veneer crown (three-quarter crown), post crown. ● Try in and shade selection ● Finishing and cementation ● Failure in crown & bridge. <p>And it focuses more on:</p> <ul style="list-style-type: none"> ● Aesthetic considerations: anatomy of smile, Veneers with various materials, ceramics, bleaching of teeth. <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

4. Complete Removable Prosthodontics (4)	0 Theory	4 Practical
<p>This course is designed to provide the students with knowledge of the principles, clinical aspect, laboratory steps and practice of complete removable denture:</p> <ul style="list-style-type: none"> ● Diagnosis and treatment plane of complete dentures. ● Impression for complete dentures. ● TMJ and mandibular movement. ● Jaw relation-vertical 		



- Jaw relation-horizontal
- Try in stage in complete dentures
- Laboratory procedures.
- Insertion of complete dentures
- Adjustments of complete dentures

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam

5. Oral and Maxillofacial Surgery	2Theory	2 Practical
<p>This course gives an introduction to the subject focusing on:</p> <ol style="list-style-type: none"> The principles and techniques of general anaesthesia: <ul style="list-style-type: none"> • Concept of general anaesthesia. • Indications of general anaesthesia in dentistry. • Pre-anaesthetic evaluation of the patient. • Pre-anaesthetic medication - advantages, drugs used. • Commonly used anaesthetic agents. • Complication during and after G.A. • Sedation. • Indications, mode of action, technique etc. • Cardiopulmonary resuscitation • Use of oxygen and emergency drugs. • Tracheostomy. The principles and techniques of Oral and Maxillofacial surgery: <ul style="list-style-type: none"> • Minor surgery techniques: Surgical extractions (impacted teeth), Apicoectomy. • Major oral surgery (bruises, fractures, cysts, tumours, TMJ, cleft lip and palate). • Primary care of medical emergencies in dental practice. Oral Implantology. <p>This course will concentrate on practical clinic where the student will have a good working, knowledge of basic oral surgical principles and a good practice in minor oral surgery.</p> <p>Exam: Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs) , Quiz, and OSCE (clinical exam)</p>		

6. Endodontics (4)	0 Theory	4 Practical
<p>This course focuses on: Procedural errors in endodontics and their management. Endodontic failures and retreatment. Endo-perio interrelationship, endodontic and periodontics lesions and management. Advanced Endodontics by Using Vertical condensation Technique in Obturation (applied in Extracted teeth).</p>		



Clinical Training with Patients (Root canal Treatment) in Posterior teeth (Access cavity, root canal preparation, instrumentation and obturation).

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

7. Restorative Dentistry (4)	0 Theory	4 Practical
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This course deals with recent advances in restorative materials and procedures and principles of aesthetics in terms of:

- Colour matching
- Facial analysis
- Smile design
- Principles of aesthetic integration
- Treatment planning in aesthetic dentistry

Clinical Training with Patients (Class II, III, IV), and filling by using the restorative material as indicated in each case.

Exam:

Formative assessment which involved monitoring and feedback throughout the course by answering some clinically relevant questions. Summative assessment which involved midterm and final exams (Short answers and MCQs), Quiz, and OSCE (clinical exam)

Weekly Hours	↑ Theory	26 Practical
Total: ٢٨		

Vice Dean for Scientific Affairs

Prof. Dr. Mohannad Laflouf

Dean of Faculty of Dental Medicine

Prof. Dr. Khaldoun Mhd Atef Darwich