



Jordan University of Science and Technology
Faculty of Dentistry

Curriculum for the Bachelor degree in Dental Surgery

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Introduction

The *vision* of the Faculty of Dentistry at Jordan University of Science and Technology is to be a universally acknowledged institution in dental education, research and patient care.

The *mission* of the Faculty of Dentistry is to have an internationally recognized impact on oral health education, research and dental health care by providing excellent education to the undergraduate and postgraduate students and dental professionals throughout their careers. Our educational environment promotes active co-operative learning in context. We have informed and will continue to inform dentistry nationally and internationally through our basic and applied research. Through these endeavors we aim to provide leadership to the health professions and the community. Our mission serves as the foundation of our commitment to providing quality dental education and service to our community.

The primary *objective* of the Faculty of Dentistry is to remain a nationally and internationally recognized leader of academic excellence in the areas of research, oral health education, training and practice:

1. To pursue excellence in research, both basic and applied, in which the encouragement of individual endeavors is complemented by the development of productive collaborative research groups both within the Faculty and University limits and internationally.
2. To provide an environment, accessible to all sectors of the community, for the provision of the highest quality undergraduate and postgraduate education and training in the disciplines of Dentistry, Dental assisting and dental technology in cooperation with Faculty of Applied Medical Sciences.
3. To provide clinical expertise, consultative advice and first-class clinical services to the people of Jordan, nationally, and - in some disciplines - internationally.

4. Foster interdisciplinary cooperation and achievements within the Faculty and with the other faculties at the University, with various teaching hospitals, research institutes, the industrial sector and international academic institutions.
5. Generation of knowledge and understanding of the scientific basics of modern dentistry, through excellence in research-informed teaching and continuous efforts to improve quality.
6. Provision of an academic and clinical environment for the progressive development of all the disciplines within the Faculty.
7. The personal development of all staff members, based on equity and justice.

- **Curriculum for the Bachelor Degree in Dental Surgery**
 - **Numbering and coding system of the curriculum courses.**
 - **Course Coding and Numbering**

The courses are tabled and numbered in a manner to recognize each course regarding its subject area, year or level, and semester offered. The symbol (Dent xyz) denotes Faculty of Dentistry and (xyz) is a 3-digits number.

Department	Level/year	Field	Sequence
DENT	x	y	z

The first digit (x) denotes the year level of the course according to student's study plan as follows:

Code	Level/year
1	First year
2	Second year
3	Third year
4	Fourth year
5	Fifth year

The second digit (y) denotes the field of the course as follows:

Second number	Specialization
0	Basic Sciences
1	Joined Theoretical courses
2	Joined Clinical/Practical courses
3	Pediatric Dentistry
4	Conservative Dentistry
5	Oral Medicine/Oral Pathology/Radiology/Oral
6	Prosthodontics
7	Periodontics
8	Oral Surgery
9	Orthodontics

The third digit (z) denotes for the semester.

Example: **Dent 533**

Dent	5	3	2
Faculty of Dentistry	Level (fifth year)	Field (Paediatric Dentistry)	Sequence (1 st semester)

A Bachelor Degree in Dental Surgery (B.D.S.) at JUST is awarded in accordance with the statute stated by JUST regulations (adjusted) for awarding issued by the Deans' Council based on the 1987 law for awarding scientific degrees and certifications at JUST, and after the successful completion of 213 credit hours, distributed as indicated in the following table.

Table (1): Distribution of Dentistry program Credit hours

Classification	Credit Hours				
	Compulsory	Elective	Theoretical	Practical	Total
University Requirements	16	9	25	0	25
Basic Science Requirements (from Faculty of Science and Art and Faculty of Computer & IT)	18	-	15	3	18
Requirements from Faculty of Medicine	47	-	42	5	47
Requirements from the Faculty of Dentistry	123	-	55	68	123
Total	204	9	134	76	213

Degree Requirements

A Bachelor Degree of Dental Surgery at JUST is awarded in accordance with the statute stated by JUST regulations (adjusted) for B.Sc. awarding issued by the Deans' Council based on the 1987 law for awarding scientific degrees and certifications at JUST, and after the successful completion of 213 credit hours, distributed as follows.

A. University Requirements (25 Credit Hours)

1. Compulsory University Requirements: (16 Credit Hours)

Course No.	Course title	Credit hours	Theoretical	Practical
HSS110	Social Responsibility	3	2	1
ARB101	Arabic Language	3	3	-
MS100	Military Sciences	3	3	-
HSS129	General Skills	2	2	-
ENG112	English Language(2)	3	3	-
HSS119	Entrepreneurship And Innovation	2	2	-

- (1) Pre-requisite: Passing ENG 099 or passing English Language Placement Test with a grade > 50%.
- (2) Pre-requisite: Eng 111 or passing the English Language Placement Test with a grade > 80%. Students who have a TOEFL score of > 500 are exempted from both ENG 099 and Eng. 111.
- (3) A student who passes the Computer Skills Placement Test with a grade > 50% is exempted from CIS 100.
- (4) This course is required from Jordanian students only; graded on Pass/Fail basis. Students graduating from Royal Military faculty and military candidate's school and equivalent institutes are exempted from taking this course. Non-Jordanian Arabic speaking students are required to take a substitute for this course from the elective courses and in this case the grade of this course is included in their grade point average (GPA).

Note: All non-Arabic speaking international students in the University are required to study one course in Arabic language as shown below:

Course No.	Course title	Credit hours	Theoretical	Practical
ARB101A ⁽¹⁾	Fundamentals of Arabic Language (for non-Arabic speaking students as a substitute for the course ARB 101 Arabic Language)	3	3	-

(1) The director of the Admission and Registration Department is permitted to determine the students from non-Jordanian/non-Arabic speaking who are eligible to take ARB 101A.

2. Elective courses: (9) credit hours selected from the following courses:

Course No	Course Title	Credit Hours			Pre- & Co-requisites
		Theory	Lab	Total	
ARB200	APPRECIATION OF LITERARY TEXTS	3	3	-	-
HSS115	ISLAM AND RECENT PROBLEMS	3	3	-	-
HSS116	ECONOMIC SYSTEM IN ISLAM	3	3	-	-
HSS121	PRINCIPLES OF SOCIOLOGY	3	3	-	-
HSS126	PRINCIPLES OF PSYCHOLOGY	3	3	-	-
HSS127	EDUCATIONAL TECHNOLOGY	3	3	-	-

HSS131	ISLAMIC CIVILIZATION	3	3	-	-
HSS132	THE HISTORY OF THE CITY OF JERUSALEM	3	3	-	-
HSS133	CIVILIZATION AND RECENT CULTURES	3	3	-	-
HSS135	ISLAMIC CULTURE	3	3	-	-
HSS137	HUMAN RIGHTS	3	3	-	-
HSS161	CONTEMPORARY PROBLEMS	3	3	-	-
HSS211	SOCIOLOGY	3	3	-	-
HSS213	INDIVIDUAL AND SOCIETY	3	3	-	-
HSS121	PRINCIPLES OF SOCIOLOGY				
HSS231	HISTORY OF SCIENCES IN ISLAM	3	3	-	-
ES103	ENVIRONMENT PROTECTION (FOR NON ENVIRONMENTAL SCIENCES STUDENTS)	3	3	-	-
ME102	INTRODUCTION TO RENEWABLE ENERGY (FOR NON ME STUDENTS)	3	3	-	-
ME211	FUNDAMENTALS OF AUTOMOBILE ENGINEERING (FOR NON ME STUDENTS)	3	3	-	-
CHE191	INTRODUCTION TO NANOTECHNOLOGY	3	3	-	-
NF177	FOOD PRESERVATION "IN ENGLISH"(FOR NON NUTRITION&FOOD TECHNOLOGY STUDENTS)	3	3	-	-

AP200	XXX	3	3	-	
PP200	XXXXXX	3	3	-	
PP201	XXXX	3	3	-	
NR200	XXXX	3	3	-	
NUR100	HEALTH PROMOTION(NON MEDICINE ,NURSING AND MIDWIFERY)	3	3	-	
PH104	COMMUNITY HEALTH AND NUTRITION	3	3	-	
VM211	ANIMAL-HEALTH	3	3	-	
VM212	PET ANIMAL CARE	3	3	-	
P.T100	WELLNESS& LIFESTYLE (NOT FOR PHYSICAL & OCCUPATIONAL THERAPY)	3	3	-	

3. Basic Science Requirements (18 credit hours) (from Faculty of Science and Art and Faculty of Computer & IT) distributed as follows:

Course No	Course Title	Credit Hours			Pre- & Co-requisites
		Theory	Lab	Total	
Bio 103	General Biology	3	3	0	
Bio 107	General Biology Practical	1	-	1	Bio103
Phy 103	General Physics	3	3	0	
Chem 103	General Chemistry	3	3	0	
Chem 107	General Chemistry Lab	1	-	1	
Chem 217	Organic Chemistry	3	3	0	Chem 103
Chem 262	Biochemistry	3	3	0	
Chem 266	Biochemistry Lab	1	-	1	
Total		18	15	3	

B. Faculty of Medicine Requirements: (47 credit hours) distributed as follows:

Course No	Course Title	Credit Hours			Pre- & Co-requisites
		Theory	Lab	Total	
Med 211A	Molecular Genetics	3	3	0	
Med 215A	General Anatomy & Embryology	3	3	0	
Med 215B	General Anatomy & Embryology Lab	1	0	1	
Med 216	General Histology	4	3	1	
Med 217A	Head and Neck Anatomy	3	3	0	
Med 217B	Head and Neck Anatomy Lab	1	0	1	
Med 230A	Human Physiology	3	3	0	
Med 230B	Human physiology lab	1	0	1	
Med 231	General Pathology	3	2	1	
Med 232	Immunology	3	3	0	
Med 314	Clinical Psychology	3	3	0	
Med 315	Systemic Pathology	3	3	0	
Med 316	Communication skills	3	3	0	

Med 323	Basic Emergency Care	1	1	0	
Med 351	General Pharmacology	3	3	0	
Med 265	General Microbiology	3	2	1	
Med 372	Pathophysiology	3	3	0	
Med 373	General Internal Medicine	2	2	0	
Med 374	General Surgery & Anaesthesia	2	2	0	
Med 391	Biostatistics	2	2	0	
Total		47	41	6	

C. Faculty of Dentistry Requirements: (123 Credit Hours) distributed as follows:

Course No	Course Title	Credit Hours			Pre- & Co-requisites
		Theory	Lab	Total	
Dent 201	Dental Anatomy and Occlusion	3	1	2	
Dent 202	Oral Physiology	1	1	0	
Dent 204	Oral Histology and Embryology	4	2	2	
Dent 240	Fundamentals of Dental Caries	1	1	0	
Dent 250	Oral Radiology I	1	1	0	
Dent 311	Basic Infection Control Measures	1	1	0	
Dent 315	Dental Ethics and Jurisprudence	1	1	0	
Dent 317	Dental Therapeutics	1	1	0	
Dent 341	Dental Materials I	2	2	0	

Dent 343	Operative Dentistry	3	1	2	
Dent 351	Oral Radiology II	2	2	0	
Dent 355	Oral Pathology I	3	2	1	
Dent 361	Removable Prosthodontics I	3	1	2	
Dent 381	Dental Anesthesia and Sedation	1	1	0	
Dent 330	Paediatric Dentistry I	2	1	1	
Dent 342	Dental Materials II	1	1	0	
Dent 344	Endodontics	3	1	2	
Dent 350	Oral Diagnosis	1	1	0	
Dent 352	Preclinical Oral Diagnosis and Oral Radiology	1	0	1	
Dent 356	Oral Pathology II	3	2	1	
Dent 362	Removable Prosthodontics II	3	1	2	
Dent 370	Periodontology I	2	1	1	
Dent 320	Introduction to Clinical Dentistry	1	0	1	
Dent 411	Oral Epidemiology	1	1	0	
Dent 431	Paediatric Dentistry II	2	1	1	
Dent 445	Conservative Dentistry I	4	1	3	
Dent 453	Clinical Oral Diagnosis/Clinical Oral Radiology I	1	0	1	
Dent 463	Removable Prosthodontics III	3	1	2	
Dent 465	Fixed Prosthodontics	1	1	0	
Dent 471	Periodontology II	2	1	1	
Dent 483	Oral Surgery I	2	1	1	
Dent 491	Orthodontics I	2	1	1	
Dent 412	Preventive Dentistry	2	2	0	
Dent 432	Paediatric Dentistry III	2	1	1	
Dent 446	Conservative Dentistry II	3	1	2	
Dent 454	Clinical Oral Diagnosis/ Clinical Oral Radiology II	1	0	1	
Dent 456	Oral Medicine I	1	1	0	
Dent 464	Removable Prosthodontics IV	2	1	1	
Dent 466	Pre-clinical Fixed Prosthodontics I	2	0	2	
Dent 472	Periodontology III	2	1	1	

Dent 484	Oral Surgery II	2	1	1	
Dent 492	Orthodontics II	2	1	1	
Dent 420	Comprehensive Dental Care I	5	0	5	
Dent 513	Research Project	2	1	1	
Dent 521	Comprehensive Dental care II	2	0	2	
Dent 533	Paediatric Dentistry IV	2	1	1	
Dent 547	Conservative Dentistry III	3	1	2	
Dent 555	Oral Medicine II	2	1	1	
Dent 567	Prosthodontics I	3	1	2	
Dent 573	Periodontology IV	2	1	1	
Dent 585	Oral and Maxillofacial Surgery I	2	1	1	
Dent 593	Orthodontics III	1	0	1	
Dent 516	Dental Practice Management	1	1	0	
Dent 518	Oral Implantology	1	1	0	
Dent 522	Comprehensive Dental care III	2	0	2	
Dent 524	Community Dentistry	3	1	2	
Dent 534	Paediatric Dentistry V	1	0	1	
Dent 540	Aesthetic Dentistry	1	1	0	
Dent 548	Conservative Dentistry IV	2	0	2	
Dent 556	Oral Medicine III	1	0	1	
Dent 568	Prosthodontics II	2	0	2	
Dent 574	Periodontology V	1	0	1	
Dent 586	Oral and Maxillofacial Surgery II	2	1	1	
Dent 594	Orthodontics IV	1	0	1	
Total		123	55	68	

Study Plan

FIRST YEAR

First semester						Second semester							
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite	Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab						Lecture	Lab		
Hss 110	Social Responsibility	3	2	1			Chem 217	Organic Chemistry	3	3	0		
Hss 100	Student Culture & University Behavior	1	1	0			Med 215A	General Anatomy & Embryology	3	3	0		
Bio 103	General Biology	3	3	0			Med 215B	General Anatomy & Embryology Lab	1	0	3		
Bio 107	General Biology Lab	1	0	2			Med 216	General Histology	4	3	3		
Chem 103	General Chemistry	3	3	0			Med 230A	Human Physiology	3	3	0		
Chem 107	General Chemistry Lab	1	0	2			Med 230B	Human Physiology Lab	1	0	3		
Phy 103	General Physics	3	3	0			CIs 100	Computer Skills	3	2	3		
English 112	English Language II	3	3	0	English 99		ARB101	ARABIC LANGUAGE	3	3	0		
Total		18	16	4			Total		18	15	12		

FIRST YEAR

Summer semester

Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab		
	University Elective	3	3	0		
Chem 262	Biochemistry	3	3	0		
Chem 266	Biochemistry Lab	1	0	2		
Ms 100	Military Sciences	3	3	0		
Total		10	9	2		

SECOND YEAR													
First semester						Second semester							
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite	Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab						Lecture	Lab		
Med 211	Molecular Genetics	3	3	0			Med 232	Immunology	3	3	0		
Med 217A	Head and Neck Anatomy	3	3	0			Med 351	General Pharmacology	3	3	0		
Med 217B	Head and Neck Anatomy Lab	1	0	3			Med314	Clinical Psychology	3	3	0		
Med 231	General Pathology	3	2	3			Med315	Systemic Pathology	3	3	0		
Med 265	General Microbiology	3	2	3			Dent 202	Oral Physiology	1	1	0		
Dent 201	Dental Anatomy and Occlusion	3	1	4			Dent 204	Oral Histology and Embryology	4	3	2		
HSS129	General Skills	3	3	0	English 112		Dent 240	Fundamentals of Dental Caries	1	1	0		
							Dent 250	Oral Radiology I	1	1	0		
Total		19	14	13			Total		19	18	2		

SECOND YEAR						
Summer semester						
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab		
Med 373	General Internal Medicine	2	2	0		
Med 374	General Surgery and Anaesthesia	2	2	0		
Med	Basic Emergency Care	1	1	0		
HSS119	Entrepreneurship And Innovation	2	2	0		
	University Elective	3	3	0		
Total		8	8	0		

THIRD YEAR													
First semester						Second semester							
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite	Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab						Lecture	Lab		
Dent 311	Basic Infection Control Measures	1	1	0			Dent 330	Paediatric Dentistry I	2	1	2		
Dent 315	Dental Ethics and Jurisprudence	1	1	0			Dent 342	Dental Materials II	1	1	0		
Dent 317	Dental Therapeutics	1	1	0			Dent 344	Endodontics	3	1	4		
Dent 341	Dental Materials I	2	2	0			Dent 350	Oral Diagnosis	1	1	0		
Dent 343	Operative Dentistry	3	1	4			Dent 352	Preclinical Oral Diagnosis and Oral Radiology	1	0	2		
Dent 351	Oral Radiology II	2	2	0			Dent 356	Oral Pathology II	3	2	2		
Dent 355	Oral Pathology I	3	2	2			Dent 362	Removable Prosthodontics II	3	1	4		
Dent 361	Removable Prosthodontics I	3	1	4			Dent 370	Periodontology I	2	1	2		
Dent 381	Dental Anesthesia and Sedation	1	1	0			Med 391	Biostatistics	2	2	0		
Total		17	12	10			Total		18	10	16		

THIRD YEAR						
Summer semester						
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab		
	University Elective	3	3	0		
HAS 209	Communication skills	3	3	0		
Dent 320	Introduction to Clinical Dentistry	1	0	2		
Total		7	6	2		

FOYRTH YEAR													
First semester						Second semester							
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite	Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab						Lecture	Lab		
Dent 411	Oral Epidemiology	1	1	0			Dent 412	Preventive Dentistry	2	2	0		
Dent 431	Paediatric Dentistry II	2	1	2			Dent 432	Paediatric Dentistry III	2	1	2		
Dent 445	Conservative Dentistry I	4	1	6			Dent 446	Conservative Dentistry II	3	1	4		
Dent 453	Clinical Oral Diagnosis/Clinical Oral Radiology I	1	0	2			Dent 454	Clinical Oral Diagnosis/Clinical Oral Radiology II	1	0	2		
Dent 463	Removable Prosthodontics III	3	1	4			Dent 456	Oral Medicine I	1	1	0		
Dent 465	Fixed Prosthodontics	1	1	0			Dent 464	Removable Prosthodontics IV	2	1	2		
Dent 471	Periodontology II	2	1	2			Dent 466	Pre-clinical Fixed Prosthodontics I	2	0	4		
Dent 483	Oral Surgery I	2	1	2			Dent 472	Periodontology III	2	1	2		
Dent 491	Orthodontics I	2	1	2			Dent 484	Oral Surgery II	2	1	2		
							Dent 492	Orthodontics II	2	1	2		
Total		18	8	20			Total		19	9	20		

FOYRTH YEAR						
Summer semester						
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab		
Dent 420	Comprehensive Dental Care I	5	0	10		
Total		5	0	10		

FIFTH YEAR

First semester						Second semester							
Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite	Course No.	Course name	Total credits	Weekly hours		Prerequisite	Corequisite
			Lecture	Lab						Lecture	Lab		
Dent 513	Research Project	2	1	2			Dent 516	Dental Practice Management	1	1	0		
Dent 521	Comprehensive Dental care II	2	0	4			Dent 518	Oral Implantology	1	1	0		
Dent 533	Paediatric Dentistry IV	2	1	2			Dent 522	Comprehensive Dental care III	2	0	4		
Dent 547	Conservative Dentistry III	3	1	4			Dent 524	Community Dentistry	3	1	4		
Dent 555	Oral Medicine II	2	1	2			Dent 534	Paediatric Dentistry V	1	0	2		
Dent 567	Prosthodontics I	3	1	4			Dent 540	Aesthetic Dentistry	1	1	0		
Dent 573	Periodontology IV	2	1	2			Dent 548	Conservative Dentistry IV	2	0	4		
Dent 585	Oral and Maxillofacial Surgery I	2	1	2			Dent 556	Oral Medicine III	1	0	2		
Dent 593	Orthodontics III	1	0	2			Dent 568	Prosthodontics II	2	0	4		
							Dent 574	Periodontology V	1	0	2		
							Dent 586	Oral and Maxillofacial Surgery II	2	1	2		
							Dent 594	Orthodontics IV	1	0	2		
Total		19	7	24			Total		18	5	26		

Course Catalogue

Title	Dental Anatomy and Occlusion, Dent 201
Course Credit hours	3 (1 Theory, 2 practical)
Course Description	Detailed dental macroscopic anatomy and the basic principles of dental occlusion. The dental notation systems and chronology of development. Fundamentals of dental occlusion. Skills of carving different teeth out of wax blocks. Practicing on dental notation, age determination from teeth, teeth interaction in occlusion as well as tooth identification.
Title	Oral Physiology, Dent 202
Course Credit hours	1 (1 Theory, 0 practical)
Course Description	Oral and Facial Physiology that dental students need to apply at a later stage for their clinical training. Saliva, mechanisms of taste and olfaction, nociception, mechanosensation, dynamics of mastication and swallowing, mechanism of speech, bone and calcium metabolism, dynamics of temporomandibular joint and occlusion, physiology of eruption and some applied comparative orofacial physiology.
Title	Oral Histology and Embryology, Dent 204
Course Credit hours	4 (2 Theory, 2 practical)
Course Description	Oral and Maxillofacial Histology including the different stages of odontogenesis, details of tooth structure and its supporting tissues as well as the oral tissues and adjoining structures. Orofacial embryology, which is significant for understanding the development of teeth and oral tissues.

Title	Fundamentals of Dental Caries, Dent 240
Course Credit hours	1 (1 Theory, 0 practical)
Course Description	Introduction to dental caries, classification of dental caries, etiology of dental caries, microbiology of dental caries, epidemiology of dental caries, sugars substitutes, saliva and dental caries, dental plaque, diet nutrition and dental caries. The most recent research concerned with diagnosis and prevention of dental caries.
Title	Oral Radiology 1, Dent 250
Course Credit hours	1 (1 Theory, 0 practical)
Course Description	Basic principles of X ray generation, and the different radiological devices used in the dental clinic. Knowledge of the principles and practice of intra-oral radiography. The knowledge of the principles and practice of intra-oral radiography and the radiological appearance of normal tissues
Title	Basic Infection Control, Dent 311
Course Credit hours	1 (1 Theory, 0 practical)
Course Description	Achieve competency in dental infection control and safety principles; Provide the latest information on the implementation and management of effective infection control and occupational health and safety programs for dental settings emphasizing infectious diseases and occupational risks associated with dentistry; Achieve a consistent level of competency among dental students.
Title	Dental Ethics and Jurisprudence, Dent 315
Course Credit hours	1 (1 Theory, 0 practical)
Course Description	The ethical and legal obligations of the dentists to the community and public.

Title **Dental Therapeutics, Dent 317**

Course Credit hours 1 (1 Theory, 0 practical)

Course Description Prescribing for dental patients with various medical conditions. Antiinfective agents of use in dental practice, Drugs acting on the oral tissues, Hemostasis pharmacology, Drugs used for pain and anxiety management

Title **Introduction to Clinical Dentistry, Dent 320**

Course Credit hours 1 (0 Theory, 1 Clinical)

Course Description First clinical component in the study plan. Introduction to the clinics, basic concepts of infection control, dentist and patient positioning, record keeping and administration of local anesthesia.

Title **Paediatric Dentistry 1, Dent 330**

Course Credit hours 2 (1 Theory, 1 practical)

Course Description Introduction to the scope of paediatric dentistry including clinical examination, diagnosis and treatment planning of dental problems in children, common oral problems in children and theories of occlusal development, restorative treatment in children and pulp therapy.

Pre-clinical component include: patient examination, radiographic assessment and treatment planning, record keeping, aspects of restorative dentistry in primary teeth, pulp therapy in primary teeth.

Title **Dental Materials 1, Dent 341**

Course Credit hours 2 (2 Theory, 0 practical)

Course Description The science of dental materials used in the dental procedures. Basics of dental materials' science including composition, chemical, physical, mechanical and handling characteristics. Dental materials used in conservative dentistry and fixed and removable Prosthodontic.

Title **Dental Materials 2, Dent 342**

Course Credit hours 1 (1 Theory, 0 practical)

Course Description Continuation of dental materials I. Dental materials used in endodontics, crown and bridge restorations, dental implant materials and preventive dental materials. Introduction to advances in dental materials.

Title **Operative Dentistry, Dent 343**

Course Credit hours 3 (1 Theory, 2 practical)

Course Description Basic cognitive knowledge of the principles, terminology, instruments, materials and techniques utilized in the practice of Operative Dentistry. Initial experience in the application of restorative procedures for managing the carious process on phantom heads. Clinical exercises utilizing current instrumentation, materials, and techniques.

Title **Endodontics, Dent 344**

Course Credit hours 3 (1 Theory, 2 practical)

Course Description Basic theory and practice of endodontic therapy. Topics include pulp canal anatomy and the techniques, materials and instruments used to clean, shape, and obturate root-canal spaces.

Title **Oral Radiology 2, Dent 351**

Course Credit hours 2 (2 Theory, 0 practical)

Course Description Basic and practical account of the extra oral radiography. Diagnosis of radiolucent and radiopaque lesions of the jaws, antral disease, trauma to the teeth and facial skeleton, disorders of the salivary glands, oral and perioral cysts, benign tumors, radiology of malignant tumors and dysplastic diseases. Training on paralleling technique, occlusal radiography, panoramic radiography, automatic processing, loading cassettes, troubleshooting and quality assurance.

Title **Oral Diagnosis, Dent 350**

Course Credit hours 1 (1 Theory, 0 practical)

Course Description Introduction to the process of the history taking, charting symbols, applied anatomy, intra oral examination, teeth examination, diagnostic tests, guidelines for prescribing radiographs, diagnosis of dental pain, diagnosis of ulcers, diagnosis of white lesions, and diagnosis of head and neck swellings.

Title **Oral Pathology 1, Dent 355**

Course Credit hours 3 (2 Theory, 1 practical)

Course Description Introduction to basic knowledge in the pathogenesis, clinical features and basic radiographic features of diseases affecting the Oral and Maxillofacial region which include: developmental disturbances, cysts of the oral region, infections of teeth and bone, bone lesions and soft tissue lesions. Problem based type of learning in presenting cases through clinic-pathologic scenarios so that the students arrive at the correct diagnosis at the end of the discussion.

Title **Oral Pathology 2, Dent 356**

Course Credit hours 3 (2 Theory, 1 practical)

Course Description Introduction to basic knowledge in the pathogenesis, clinical features and basic radiographic features of diseases affecting the Oral and Maxillofacial region which include: infections affecting Oral and Maxillofacial region, vesiculobullous diseases, salivary gland lesions and tumors, TMJ diseases, odontogenic tumors and epithelial disorders. Problem based type of learning in presenting cases through clinic-pathologic scenarios so that the students arrive at the correct diagnosis at the end of the discussion.

Title **Preclinical Oral Diagnosis and Oral Radiology, Dent 353**

Course Credit hours 1 (0 Theory, 1 practical)

Course Description Skills of history taking, extra and intra oral examination, charting, radiographic examination and establishment of a diagnosis. Introduction to the x-ray machine, different types of films (different sizes, intra and extraoral films and film holders. Taking different intraoral radiographs on dummy heads (periapicals, bitewings, occlusals) and processing these films manually or by automatic processors.

Title **Removable Prosthodontics 1, Dent 361**

Course Credit hours 3 (1 Theory, 2 practical)

Course Description Introduction to rehabilitation of edentulous patients using complete dentures. Chairside and laboratory procedures of complete denture production. Skill and understanding of laboratory procedures required for construction of the complete denture prosthesis. A series of exercises conducted to prepare the student for the clinical phase of managing edentulous patients.

Title **Removable Prosthodontics 2, Dent 362**

Course Credit hours 3 (1 Theory, 2 practical)

Course Description Introduction to the theoretical background of managing partially edentulous patients and the laboratory steps for removable partial denture production. The classification of edentulous ridges and partial denture types and designs. Hands on training on the various steps involved in the fabrication of removable partial dentures.

Title **Periodontology 1, Dent 370**

Course Credit hours 2 (1 Theory, 1 practical)

Course Description Review of the structure and function of periodontium, microbiological consideration and structure treatment plan with periodontal instrumentation. Information on the diagnosis, treatment plan & prognosis of most common forms of periodontal diseases and emergencies, the basic concepts in periodontal disease

pathology, the local and systemic predisposing factors, relation of traumatic occlusion and periodontium.

Introduction to basic information in periodontology with emphasis on the anatomy and physiology of the periodontium and the definition, classification, etiology and prevention of periodontal diseases.

Title **Dental Anesthesia and Sedation, Dent 381**

Course Credit hours 1 (1 Theory, 0 practical)

Course Description Introduce to the general principles of oral surgery. Basic knowledge and practice of local anesthesia in dentistry. Theoretical and practical aspects of exodontias.

Title **Oral Epidemiology, Dent 411**

Course Credit hours 1 (1 Theory, 0 practical)

Course Description This course is designed to provide students with the current knowledge in oral epidemiology. This includes concepts, terms and approaches used in epidemiology, epidemiological measures and indices relevant to oral health, measurements of population health methodological consideration, measurement of dental caries, periodontal disease as well as other dental diseases and conditions. This course will also provide information about distribution of epidemiology of oral and dental diseases such as tooth loss, dental caries, periodontal disease, and oral cancer.

Title **Preventive Dentistry, Dent 412**

Course Credit hours 2 (2 Theory, 0 practical)

Course Description Current knowledge in prevention of dental diseases. Public health methods for the prevention and control of dental caries, periodontal disease, dental trauma, malocclusion and oral mucosal lesions with an emphasis on the use of fluoride in prevention of dental caries. Introduction to evidence based dentistry.

Title	Comprehensive Dental Care 1, Dent 420
Course Credit hours	5 (0 Theory, 5 Clinical)
Course Description	<p>Comprehensive clinical care model that emphasizes faculty-guided, student-provided, high-quality care of patients. Students are assigned patients having increasingly challenging needs. Students are assigned patients within the context of a mentorship team. Mentorship teams function as small-group dental practices and consist of a group of students led by a faculty mentor. The mentor has been specifically trained to coach members of his or her team in all aspects of managing their mini-practices.</p> <p>The mentorship team approach emphasizes coordination of each aspect of the patient's oral health care with the patient's overall dental and physical health. The mentor and the clinical faculty not only take responsibility for teaching this holistic approach but also challenge students to engage in inquisitiveness, critical thinking, and self-evaluation to provide comprehensive dental care to their patients in a General Practice Clinic setting.</p>
Title	Paediatric Dentistry 2, Dent 431
Course Credit hours	2 (1 Theory, 1 Clinical)
Course Description	Basic topics in pediatric dentistry including preventive measures such as fissure sealants, preventive resin restorations and fluoride application. Chemotherapeutic agents in pediatric dentistry, behavior management, intracoronal and extracoronal restorations, pulp therapy for primary and young permanent teeth, Early Childhood Caries and developmental dental anomalies. Guidance to begin delivery of competent oral health care for healthy children.
Title	Paediatric Dentistry 3, Dent 432
Course Credit hours	2 (1 Theory, 1 Clinical)
Course Description	The aspects of pulp therapy, dental trauma. Elaborate operative techniques as well as behavior management of children through clinical sessions where students practice dentistry on children.

Title	Conservative Dentistry 1, Dent 445
Course Credit hours	4 (1 Theory, 3 Clinical)
Course Description	Basic knowledge on management of various clinical aspects in operative dentistry and endodontics. The fundamental knowledge of occlusion. Providing dental patients with fillings using different restorative materials and management of simple cases of endodontics.
Title	Conservative Dentistry 2, Dent 446
Course Credit hours	3 (1 Theory, 2 Clinical)
Course Description	A continuation of previous courses. Intensive clinical training in operative dentistry including amalgam, composite and glass-ionomer fillings in addition to root canal therapy for a single-rooted tooth
Title	Clinical Oral Diagnosis/Clinical Oral Radiology 1, Dent 453
Course Credit hours	1 (0 Theory, 1 Clinical)
Course Description	<p>The clinical Oral Diagnosis part is constructed to apply on patients attending the oral diagnosis clinic the skills learned in previous oral diagnosis courses including history taking, extra and intra oral examination, charting, radiographic examination and establishment of a diagnosis.</p> <p>The clinical Radiology part includes training on paralleling technique, occlusal radiography, panoramic radiography, automatic processing, loading cassettes, troubleshooting and quality assurance as well as radiographic interpretation.</p>
Title	Clinical Oral Diagnosis/Clinical Oral Radiology 2, Dent 454
Course Credit hours	1 (0 Theory, 1 Clinical)
Course Description	This course is a continuation of Oral Diagnosis/Oral Radiology I.

Title Oral Medicine 1, Dent 456

Course Credit hours 1 (1 Theory, 0 Clinical)

Course Description Basic knowledge required for building a systematic approach to the management of patients with dental, oral and paraoral conditions. The medical management of inflammatory and infectious diseases, oral ulcerations, benign over-growth, and diseases of paraoral structures, mucocutaneous diseases, connective tissue disorders, gastrointestinal diseases, immunodeficiency, hypersensitivity, autoimmunity and oral reactions to drug therapy.

Title Removable Prosthodontics 3, Dent 463

Course Credit hours 3 (1 Theory, 2 Clinical)

Course Description Introductory clinical course to:

- Basic principles of prosthetic dentistry
- Identifying patient's problems and rendering a diagnosis requires insight to a patient's social and medico dental background.
- clinical and theoretical aspects of removable prosthodontics which involves the examination, diagnosis, treatment planning, construction of the prostheses and maintenance of the hard and soft tissues.
- Concepts involved in the design and production of partial dentures
- Health and safety in the clinics.
- Communication with the laboratory.

Title Removable Prosthodontics 4, Dent 464

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description The assessment, diagnosis and treatment planning of patients in need for complete or removable partial dentures, managing complaints and complications, oral pathological conditions related to complete

dentures, overdentures, relining, rebasing, and repairs of removable prostheses, copy dentures and immediate complete dentures

Title	Fixed Prosthodontics, Dent 465
Course Credit hours	1 (1 Theory, 0 Clinical)
Course Description	<p>To provide instructions in the theoretical aspects of planning and making crowns and bridges. At the end of the course the student should be able to:</p> <ul style="list-style-type: none">• Understand the principles of case assessment and selection.• Understand the principles and procedures involved in crown-bridgework preparation, provisional crown & bridge construction and the fitting of crowns.• Understand the periodontal and occlusal implications of crown-Bridgework.• Understand the principles and process of the laboratory procedures involved in manufacturing metal, porcelain, and metal/ceramic crown-bridgework.• Identify failures and methods of repair.• To comprehend briefly the all-ceramic restorations.

Title	Pre-Clinical Fixed Prosthodontics, Dent 466
Course Credit hours	2 (0 Theory, 2 Practical)
Course Description	<p>To provide instructions in the practical aspects of planning and making crowns and bridges. At the end of the course the student should be able to:</p> <ul style="list-style-type: none">• Practice the principles and procedures involved in crown-bridgework preparation, provisional crown & bridge construction and the fitting of crowns.• Understand the principles and process of the laboratory procedures involved in manufacturing

metal, porcelain, and metal/ceramic crown-bridgework.

- Identify failures and methods of repair.
- To comprehend briefly the all-ceramic restorations.

Title	Periodontology 2, Dent 471
Course Credit hours	2 (1 Theory, 1 Clinical)
Course Description	Review of the structure and function of periodontium, microbiological consideration and structure treatment plan with periodontal instrumentation. Information on the diagnosis, treatment plan & prognosis of most common forms of periodontal diseases and emergencies, the basic concepts in periodontal disease pathology, the local and systemic predisposing factors, relation of traumatic occlusion and periodontium. Provide guidance, experience of different periodontal problems and the associated skills, knowledge which is necessary to practice clinical periodontology. Understand the periodontal therapy as a part of comprehensive dental care and design a complete treatment plan.

Title	Periodontology 3, Dent 472
Course Credit hours	2 (1 Theory, 1 Clinical)
Course Description	<p>This is a continuation of Periodontology 2. Review of the structure and function of periodontium, microbiological consideration and structure treatment plan with periodontal instrumentation. Diagnosis, treatment plan & prognosis of most common forms of periodontal diseases and emergencies, the local and systemic predisposing factors, relation of traumatic occlusion and periodontium. The rationale of periodontal therapy and how recent research considered periodontitis as risk factor for some systemic diseases.</p> <p>Guidance, experience of different periodontal problems and the associated skills, knowledge which is necessary to practice clinical periodontology. Also understand the periodontal therapy as a part of comprehensive dental care and design a complete treatment plan.</p>

Title **Oral Surgery 1, Dent 483**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description Detailed theoretical and practical aspects of Minor Oral Surgery executed under local anesthesia. The broad topic will include the preoperative management of patients with medical problems of relevance to minor oral surgery, basic surgical principles, the surgical extraction of teeth, the management of difficult extraction, the management of impacted teeth and surgical aids to orthodontics. The clinical part of this course will allow the students to utilize the knowledge obtained from the theoretical part.

Title **Oral Surgery 2, Dent 484**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description This course is a continuation of Oral Surgery 1. The broad topic will include cysts of the jaws and surrounding soft tissues, the dental aspects of maxillary antrum, oro-facial infections, surgical aids to prosthetic dentistry, surgical aspects of implant dentistry, surgical aids to endodontics and surgery-pathology interrelationship

Title **Orthodontics 1, Dent 491**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description Rationale of orthodontic treatment, facial growth, development of normal occlusion, classification of malocclusion, aetiology of malocclusion, cephalometric analysis, extra and intra oral examination, histology and physiology of tooth movement, and interceptive orthodontics. Wire bending laboratory work to provide sufficient orthodontic technical experience to make retentive and active components of removable orthodontic appliances.

Title **Orthodontics 2, Dent 492**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description Introduction to the orthodontic clinic. Diagnosis and treatment planning of the different types of malocclusion as well as the clinical management of removable orthodontic appliances.

Title **Research Project, Dent 513**

Course Credit hours 2 (1 Theory, 1 Practical)

Course Description Application for the knowledge and skills in Research methods and Biostatistics. The students are required to choose a hypothesis and test it through a small pilot research project. The students are required to present their term paper then submit it for evaluation. The term paper should include all elements of research paper (Abstract, literature review, material and methods, result, discussion and conclusion). Students will also have seminars on different aspects of research methodology and be introduced to Evidence based dentistry and practice the utilization of search engines, critically review articles and write abstracts.

Title **Dental Practice Management, Dent 516**

Course Credit hours 1 (1 Theory, 0 Clinical)

Course Description Principles of dental Practice administration. Information about the organization of dental health, the practice of management, the managerial functions, and the structure of dental practice, quality assurance and financing the dental care.

Title **Oral Implantology, Dent 518**

Course Credit hours 1 (1 Theory, 0 Clinical)

Course Description Knowledge of the variable aspects of modern dental implantology including the rationale of dental implantology, history and development, bone biology, histology and physiology, osseointegration, biomaterials, surface modification of dental implants, biomechanics and variable designs of implants and implant

components, surgical anatomy in relation to dental implants, and case selection for implant treatment.

Title	Comprehensive Dental Care 2, Dent 521
Course Credit hours	2 (0 Theory, 2 Clinical)
Course Description	This course is a continuation of Comprehensive Dental Care I. Students are assigned patients to provide comprehensive dental care in a general dentistry practice clinical setting. The philosophy of this model is to provide quality comprehensive dental care without fragmentation into separate specialties or Disciplines. Students learn to focus on the patient's total dental needs rather than a single clinical procedure.
Title	Comprehensive Dental Care 3, Dent 522
Course Credit hours	2 (0 Theory, 2 Clinical)
Course Description	This course is a continuation of semester 1. Students are assigned patients to provide comprehensive dental care in a general dentistry practice clinical setting. The philosophy of This model is to provide quality comprehensive dental care without fragmentation into separate specialties or Disciplines. Students learn to focus on the patient's total dental needs rather than a single clinical procedure.
Title	Community Dentistry, Dent 524
Course Credit hours	3 (1 Theory, 2 Clinical)
Course Description	Seminars in this course expand students' foundation knowledge in health promotion and disease prevention activities with patients. The practical component will offer experiences in selected community settings provide students with the opportunity to develop and expand their skills in community oral health promotion. Students are scheduled in local elementary and middle schools to participate in the oral health education, screening, and a referral program under the direct supervision of faculty members. In addition, students complete activities from a selected list of programs at local community agencies and/or schools. Students attend small group seminars to discuss their experiences and theoretical underpinnings of community oral

health

Title	Paediatric Dentistry 4, Dent 533
Course Credit hours	2 (1 Theory, 1 Clinical)
Course Description	Advanced topics in pediatric dentistry including space management and space analysis, relative analgesia and advances in local anesthesia, advances in caries diagnosis and pre-eruptive lesions, dental erosion in children and adolescents, dental attrition and bruxism in children and adolescents, common oral medical problems, management of medical emergencies in the dental clinic, drug use and prescription in pediatric dentistry.
Title	Paediatric Dentistry 5, Dent 534
Course Credit hours	1 (0 Theory, 1 Clinical)
Course Description	The course offered in the second semester of fifth year are entirely a practical course in the form of dental management of children in the clinics with emphasis on full comprehensive care for children including dental trauma cases.
Title	Aesthetic Dentistry, Dent 540
Course Credit hours	1 (1 Theory, 0 Clinical)
Course Description	This course is designed to give dental students a firm foundation to build the aesthetic restorative side of their career. It gives students sufficient information regarding the basic of smile design, digital photography, and tooth whitening procedures, anterior restorative treatments and veneers.
Title	Conservative Dentistry 3, Dent 547
Course Credit hours	3 (1 Theory, 2 Clinical)
Course Description	Most updated knowledge in conservative dentistry. Recent concept in operative dentistry, endodontics, and crown work, including treating advance operative dentistry, root canal treatment for multi rooted teeth, post-crowns, and crown.

Title **Conservative Dentistry 4, Dent 548**

Course Credit hours 3 (0 Theory, 2 Clinical)

Course Description The course is a continuation of previous courses and is designed to provide the final year dental students with the advanced knowledge in various disciplines of restorative dentistry including conservative dentistry, endodontics and fixed prosthodontics. Advanced clinical requirements in all disciplines over the academic year, and to manage different clinical cases.

Title **Oral Medicine 2, Dent 555**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description All types of diseases and abnormalities that affect the oral lesion including oral pigmentation, carcinogenesis and precancerous lesions, oral carcinoma and management of oral cancer, teeth and bone disorders, diseases of lip and tongue, taste disturbances and halitosis, blood disorders and nutritional deficiencies, endocrine disturbances and renal diseases, facial pain and neurological disturbances, temporomandibular joint disorders, and psychogenic orofacial problems. Training to achieve diagnosis of the diseases through a systematic approach including full examination and special tests, discussing all treatment options for each disease and etiology of these diseases. The manifestation of systemic diseases in the oral cavity will be also included.

Title **Oral Medicine 3, Dent 556**

Course Credit hours 1 (0 Theory, 1 Clinical)

Course Description This course is a continuation of Dent Oral Medicine 1 and 2 in which they should discuss more advanced cases than the previous course.

Title **Prosthodontics 1, Dent 567**

Course Credit hours 3 (1 Theory, 2 Clinical)

Course Description This course concludes the last sequence of fixed and removable prosthodontic courses leading to a professional degree in dentistry. The theoretical component will allow the students to make decisions, plan treatments and choose the proper treatment options for the edentulous and partially edentulous patients. It will also cover a review of important aspects in both fixed and removable prosthodontics. Furthermore, this course will cover advanced topics about esthetic dentistry, fixed-removable prosthodontics and full mouth rehabilitation cases. It will also cover the laboratory procedures involved in fabrication of dental restorations.

Clinically, the students should be able to provide sound judgments independent of the instructor and should be able to treat patients in a multidisciplinary approach.

Title **Prosthodontics 2, Dent 568**

Course Credit hours 2 (0 Theory, 2 Clinical)

Course Description This course is a continuation of Prosthodontics 1. Make decisions, plan treatments and choose the proper treatment options for the edentulous and partially edentulous patients. Review of important aspects in both fixed and removable prosthodontics. Advanced topics about esthetic dentistry, fixed-removable prosthodontics and full mouth rehabilitation cases. Laboratory procedures involved in fabrication of dental restorations.

To provide sound judgments independent of the instructor and should be able to treat patients in a multidisciplinary approach.

Title **Periodontology 4, Dent 573**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description Advanced methods of periodontal treatment modalities and techniques. Genetic factors associated with periodontal diseases, guided tissue regeneration, smoking and periodontics, and patients' education and support. Treatment of various forms of periodontal diseases by conventional methods, some applications of more advanced techniques and surgical procedures.

Title **Periodontology 5, Dent 474**

Course Credit hours 1 (0 Theory, 1 Clinical)

Course Description This course offered in the second semester of the fifth is a clinical course where graduating students practice the clinical skills they have learned with emphasis on interdisciplinary treatment, it also represents a review of all the subjects covered previously

Title **Oral and Maxillofacial Surgery 1, Dent 585**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description This course is designed to provide students with current theoretical knowledge in the fundamentals and basic principles of maxillofacial surgery including surgical management of facial fractures, maxillofacial deformities, and cleft lip and palate. The clinical part provides hands-on of exodontia and simple oral surgery.

Title **Oral and Maxillofacial Surgery 2, Dent 586**

Course Credit hours 2 (1 Theory, 1 Clinical)

Course Description Basic knowledge about surgical management of TMJ, salivary glands and oral tumors. The importance of evaluating oral pathological lesions, especially those of potentially sinister outcome, and determination if a biopsy is needed. The clinical part provides hands-on of exodontia and simple oral surgery.

Title **Orthodontics 3, Dent 593**

Course Credit hours 1 (0 Theory, 1 Clinical)

Course Description To do extra and intra oral examination from orthodontic point of view, collect and analyze orthodontic records including dental casts and radiographs, to build a problem list and proper diagnosis for orthodontic patients and finally come up with treatment planning for orthodontic problems. During this course the students will also execute orthodontic treatment for simple problems using removable, growth functional, and partial fixed orthodontic appliances.

Title	Orthodontics 4, Dent 594
Course Credit hours	1 (0 Theory, 1 Clinical)
Course Description	Utilization of the theoretical knowledge to do extra and intra oral examination from orthodontic point of view, collect and analyze orthodontic records including dental casts and radiographs, to build a problem list and proper diagnosis for orthodontic patients and finally come up with treatment planning for orthodontic problems. During this course the students will also execute orthodontic treatment for simple problems using removable, growth functional, and partial fixed orthodontic appliances.