جامعة الملك سعود

كلية طب الأسنان

برنامج البكالوريوس في طب الأسنان

١٤٣٤-١٤٣٥ هـ
٢٠١٣-٢٠١٤ م

من إصدار:

كلية طب الأسنان
جامعة الملك سعود
الرياض، المملكة العربية السعودية

فهرس المحتوى

برنامج البكالوريوس في طب الأسنان

متطلبات القبول

يشترط للقبول في برنامج البكالوريوس في طب الأسنان توفر المعايير التالية:

١. ملائمة المتقدم لشروط القبول العامة للطلبة المستجدين في جامعة الملك سعود.

٢. أن يكون المتقدم سعودي الجنسية.

٣. اجتياز اختبار القدرات العامة والاختبار التحصيلي لدى المركز الوطني للقياس والتقويم في التعليم العالي.

٤. اجتياز المقابلة الشخصية واختبار القبول إن وجد.

بعد التقديم على الجامعة وإبداء الرغبة المبدئية في الالتحاق بإحدى الكليات الصحية تتم المفاضلة بين الطلبة المتقدمين على ضوء نسبة مركبة تأخذ في الاعتبار نسبة الثانوية العامة والدرجة المتحصل عليها في اختباري القدارات والتحصيلي ثم يتم عقد المقابلات الشخصية الموحدة للكليات الصحية. بعد ذلك يتم قبول أفضل المتقدمين في برنامج السنة التخضيرية للكليات الصحية بإشراف عمادة السنة التحضيرية بالجامعة. وبعد اجتياز متطلبات السنة التحضيرية بنجاح يتم تخصيص الطلبة إلى الكليات الصحية ومنها كلية طب الأسنان بحسب الرغبة والمعدل التراكمي وعدد المقاعد المتاحة.

متطلبات التحويل

تخضع عملية القبول في تحويل الطلبة إلى كلية طب الأسنان من كليات أخرى داخل الجامعة أو خارجها إلى معايير وشروط التحويل العامة في جامعة الملك سعود. بعد ملائمة الشروط العامة للتحويل في الجامعة يتم دراسة كل طلب على حده ويخضع القبول في الكلية إلى توفر المقاعد ومنافسة المتقدم وموافقة عميد الكلية على التحويل.

متطلبات التخرج العامة

يتطلب التخرج من برنامج البكالوريوس في طب الأسنان إنهاء ما مجموعه ١٩٨ ساعة دراسية موزعة على النحو التالي:

٨ ساعات	مقررات الثقافة الإسلامية
٤ ساعات	مقررات اللغة العربية
٣٣ ساعة	مقررات السنة التحضيرية
١٥٣ ساعة	مقررات برنامج البكالوريوس في طب الأسنان

نظام التقادير والرموز

الدرجة النهائية	وزن التقدير (من ٥.٠٠)	رمز التقدير	التقدير
٩٥ إلى ١٠٠	5.00	أ+	ممتاز مرتفع
٩٠ إلى أقل من ٩٥	4.75	أ	ممتاز
٨٥ إلى أقل من ٩٠	4.50	ب+	جيد جداً مرتفع
٨٠ إلى أقل من ٨٥	4.00	ب	جيد جداً
٧٥ إلى أقل من ٨٠	3.50	ج+	جيد مرتفع
٧٠ إلى أقل من ٧٥	3.00	ج	جيد
٦٥ إلى أقل من ٧٠	2.50	د+	مقبول مرتفع
٦٠ إلى أقل من ٦٥	2.00	د	مقبول
أقل من ٦٠	1.00	هـ	راسب
		ل	غير مكتمل
		ح	محروم
		ع	معتذر

دليل معدلات التخرج

المعدل التراكمي (من ٥)	التقدير العام
٤.٥٠ إلى ٥.٠٠	ممتاز*
٣.٧٥ إلى أقل من ٤.٥٠	جيد جداً*
٢.٧٥ إلى أقل من ٣.٧٥	جيد
٢.٠٠ إلى أقل من ٢.٧٥	مقبول
يشترط للتخرج من الجامعة الحصول على معدل تراكمي لا يقل عن ٢.٠٠ من ٥.٠٠	

* تمنح مرتبة الشرف الأولى للطالب الحاصل على معدل تراكمي من (٤.٧٥) إلى (٥.٠٠) عند التخرج، وتمنح مرتبة الشرف الثانية للطالب الحاصل على معدل تراكمي من (٤.٢٥) إلى أقل من (٤.٧٥) عند التخرج. ويشترط للحصول على مرتبة الشرف الأولى أو الثانية مايلي:

- ألا يكون الطالب قد رسب في أي مقرر درسه في الجامعة أو في جامعة أخرى.
- أن يكون الطالب قد أكمل متطلبات التخرج في مدة أقصاها متوسط المدة بين الحد الأدنى والحد الأقصى للبقاء في كليته.
- أن يكون الطالب قد درس في الجامعة التي سيتخرج منها ما لا يقل عن (٦٠%) من متطلبات التخرج.

الخطة الدراسية لبرنامج البكالوريوس في طب الأسنان

السنة التحضيرية للكليات الصحية (٣٣ ساعة)

Course Code	Course Title	Credit Hours
FIRST SEMESTER		
140 ENG	English Language Skills (1)	8
140 MATH	Math (1) Pre-calculus	2
140 TCH	Computer and IT Skills	3
140 COM	Communication Skills	2
TOTAL		**15**
SECOND SEMESTER		
145 ENGL	English for Medical Purposes	8
145 CHEM	Organic Chemistry for Health Sciences	2
145 PHYS	General Physics	3
145 ZOOL	General Zoology	3
145 STAT	Biostatistics	2
TOTAL		**18**
GRAND TOTAL		**33**

السنة الأولى (٢٩ ساعة)

Course No. & Code	Course Title	First Semester			Second Semester			Total
		Lecture	Clinical Simulation	Clinic	Lecture	Clinical Simulation	Clinic	
110 RDS	Dental Anatomy and Morphology	1	1	0	0	0	0	**2**
112 RDS	Introduction to Operative Dentistry	0	0	0	1	1	0	**2**
132 RDS	Basic Dental Materials	0	0	0	1	0	0	**1**
181 PCS	Introduction to Dentistry	1	0	0	0	0	0	**1**
182 PCS	Introduction to Behavioral and Preventive Dentistry	0	0	0	1	0	0	**1**
183 DEN	The Concept of Health Informatics	0	0	0	2	0	0	**2**
113 ANAT	Anatomy, Embryology & Histology	2	2	0	1	2	0	**7**
163 PHL	Biochemistry	2	0	0	2	0	0	**4**
113 PSL	General Physiology	2	1	0	1	1	0	**5**
100 IC	Studies in the Biography of Prophet	2	0	0	0	0	0	**2**
105 IC	Human Rights	0	0	0	2	0	0	**2**
TOTAL		**10**	**4**	**0**	**11**	**4**	**0**	**29**

السنة الثانية (٣٦ ساعة)

Course No. & Code	Course Title	First Semester			Second Semester			Total
		Lecture	Clinical Simulation	Clinic	Lecture	Clinical Simulation	Clinic	
211 MFS	Introduction to Local Anesthesia	1	0	0	0	0	0	**1**
212 MFS	Introduction to Exodontia	0	0	0	1	0	0	**1**
253 DDS	Oral Biology and Histology	1	0	0	1	1	0	**3**
212 DDS	Oral Pathology 1	0	0	0	1	1	0	**2**
242 DDS	Oral Diagnosis 1	0	0	0	1	0	1	**2**
243 DDS	Clinical Oral & Maxillofacial Radiology 1	1	1	0	1	1	0	**4**
213 RDS	Pre-Clinical Operative Dentistry	1	2	0	1	2	0	**6**
233 RDS	Dental Materials Sciences	1	0	0	1	1	0	**3**
222 PCS	Preventive Dentistry	0	0	0	1	0	0	**1**
212 SDS	Introduction to Pre-Clinical Prosthodontics & Occlusion	0	0	0	1	1	0	**2**
281 DEN	Ethics in Dentistry	1	0	0	0	0	0	**1**
210 PHL	Dental Pharmacology 1	1	0	0	1	0	0	**2**
221 MIC	General Microbiology & Immunology	2	1	0	0	0	0	**3**
231 PATH	General Pathology	2	1	0	0	0	0	**3**
101 ARAB	Language Skills	2	0	0	0	0	0	**2**
TOTAL		**13**	**5**	**0**	**10**	**7**	**1**	**36**

السنة الثالثة (٣٥ ساعة)

Course No. & Code	Course Title	First Semester			Second Semester			Total
		Lecture	Clinical Simulation	Clinic	Lecture	Clinical Simulation	Clinic	
311 MFS	Clinical Oral Surgery 1	1	0	1	0	0	0	**2**
312 MFS	Clinical Oral Surgery 2	0	0	0	1	0	1	**2**
331 DDS	Oral Pathology 2	1	1	0	0	0	0	**2**
341 DDS	Oral Diagnosis 2	1	0	1	0	0	0	**2**
343 DDS	Clinical Oral & Maxillofacial Radiology 2	1	0	0	0	0	1	**2**
313 RDS	Clinical Operative Dentistry 1	1	0	1	0	0	1	**3**
323 RDS	Pre-Clinical Endodontics	1	1	0	0	1	0	**3**
313 PCS	Clinical Periodontology 1	1	0	1	1	0	1	**4**
312 POS	Pre-Clinical Pediatric Dentistry	0	0	0	1	1	0	**2**
323 SDS	Pre-Clinical Removable Prosthodontics	1	1	0	1	1	0	**4**
333 SDS	Pre-Clinical Fixed Prosthodontics	1	2	0	1	2	0	**6**
381 DEN	Cardiopulmonary Resuscitation	1	0	0	0	0	0	**1**
107 IC	Professional Ethics	0	0	0	2	0	0	**2**
TOTAL		**10**	**5**	**4**	**7**	**5**	**4**	**35**

السنة الرابعة (٣٤ ساعة)

Course No. & Code	Course Title	First Semester			Second Semester			Total
		Lecture	Clinical Simulation	Clinic	Lecture	Clinical Simulation	Clinic	
411 MFS	Medical Emergencies in Dental Practice	1	0	0	0	0	0	**1**
413 MFS	Hospital Oral Surgery	0	0	1	0	0	1	**2**
422 DDS	Oral Medicine 1	0	0	0	1	0	1	**2**
413 RDS	Clinical Operative Dentistry 2	1	0	1	0	0	1	**3**
423 RDS	Clinical Endodontics	1	0	1	0	0	1	**3**
413 PCS	Clinical Periodontology 2	1	0	1	1	0	1	**4**
413 POS	Clinical Pediatric Dentistry 1	1	0	1	1	0	1	**4**
423 POS	Pre-Clinical Orthodontics	1	1	0	1	1	0	**4**
423 SDS	Clinical Removable Prosthodontics	1	0	1	0	0	1	**3**
433 SDS	Clinical Fixed Prosthodontics	1	0	1	0	0	1	**3**
411 MED	General Internal Medicine	1	0	0	1	0	0	**2**
411 SURG	General Surgery	1	0	0	0	0	0	**1**
411 ORL	Ear, Nose & Throat Surgery	0	0	0	1	0	0	**1**
421 MIC	Applied Microbiology	0	0	0	1	0	0	**1**
TOTAL		**10**	**1**	**7**	**7**	**1**	**8**	**34**

السنة الخامسة (٣١ ساعة)

Course No. & Code	Course Title	First Semester			Second Semester			Total
		Lecture	Clinical Simulation	Clinic	Lecture	Clinical Simulation	Clinic	
491 DDS	Oral Medicine 2	1	0	1	0	0	0	**2**
491 POS	Orthodontic Diagnosis and Treatment Planning	1	0	0	0	0	0	**1**
493 POS	Clinical Pediatric Dentistry 2	0	0	1	0	0	1	**2**
491 PCS	Biostatistics in Dentistry	1	0	0	0	0	0	**1**
492 PCS	Dental Practice Management	0	0	0	1	0	0	**1**
493 PCS	Dental Public Health & Community Dentistry	1	1	0	1	1	0	**4**
493 SDS	Advanced Prosthodontics and Implantology	1	0	1	1	0	1	**4**
492 DEN	Geriatric Dentistry	0	0	0	1	0	0	**1**
493 DEN	Comprehensive Clinical Dentistry	1	0	4	1	0	4	**10**
491 PHL	Dental Pharmacology 2	1	0	0	0	0	0	**1**
103 ARAB	Expository Writing	0	0	0	2	0	0	**2**
106 IC	Medical Jurisprudence	2	0	0	0	0	0	**2**
TOTAL		**9**	**1**	**7**	**7**	**1**	**6**	**31**

الخطة الدراسية لبرنامج البكالوريوس

السنة	عدد الساعات
السنة التحضيرية	33
السنة الأولى	29
السنة الثانية	36
السنة الثالثة	35
السنة الرابعة	34
السنة الخامسة	31
المجمـــــــــــــوع	198

السنة الأولى (٢٩ ساعة)

COURSE NO.	**:**	**110 RDS**
COURSE TITLE	**:**	**Dental Anatomy and Morphology**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation**
LEVEL	**:**	**First Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **1 Clinical Simulation = Three Hours** **Total ---------- = Four Hours**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

This course is designed to provide the student with the basic elements of tooth morphology as an essential pre-requisite for other dental courses. The course comprises lectures and clinical simulation sessions. Using wax, students restore the missing coronal surfaces of complete tooth models by a wax carving technique. This is designed to reinforce the theoretical knowledge gained in the lectures, as well as contribute towards the development of manual dexterity, a skill which is essential in the practice of dentistry. Identification of natural tooth specimens forms a significant part of the practical component of the course.

COURSE OBJECTIVES:

By the end of this course, the students should be able to:

1. Apply the terms and expressions used in dental anatomy and morphology with proficiency.
2. Record teeth, using different notations, but with particular emphasis on the method recommended by the International Dental Federation (FDI).
3. Understand the relationship of teeth to one another as well as the relation between the adjacent and opposing teeth.
4. Understand the teeth alignments, articulation and the self-protective feature of the dentition.
5. Distinguish the morphological characteristics of different classifications of teeth.
6. Develop the required manual skills by carving in wax the different surfaces of all teeth.
7. Restore in casting wax the missing dental surfaces in normal anatomical and morphological features.
8. Drawing to scale in two dimensions all teeth following the lectures outline and using the table of measurements provided.

COURSE NO.	**:**	**112 RDS**		
COURSE TITLE	**:**	**Introduction to Operative Dentistry**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation**		
LEVEL	**:**	**First Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

This course comprises clinical simulation exercises and lectures. It introduces the student to the field of operative dentistry by describing various techniques of diagnosing carious lesions and giving a wide overview of the instruments and procedures used in the operative dentistry clinical settings The assessment in this course is mostly in the form of objective structured practical examinations (OSPE).

COURSE OBJECTIVES:

At the end of the semester, students should be able to:

1. Diagnose lesions of hard tooth tissues and in particular dental caries, excavate carious lesions, and cleave unsupported enamel of mounted extracted teeth using suitable hand instruments.
2. Classify carious lesions and recognize proximal caries on a bitewing radiograph.
3. Identify the various hand and rotary instruments used in operative dentistry.
4. Know and practice the methods of isolation of the operative field.
5. Name the parts of prepared simple and compound restorative cavities.
6. Prepare shapes resemble class I and V for amalgam and manipulate rotary and hand instruments.

COURSE NO.	**:**	**132 RDS**
COURSE TITLE	**:**	**Basic Dental Materials**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**First Year (Second Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

This course is meant to teach the student of dentistry aspects of materials science necessary to enable him/her to understand the basic physical, chemical and mechanical properties of dental materials as they relate to the clinical applications. In addition, students will be able to develop an appropriate understanding of the required criteria for the selection of materials for specific dental procedures.

COURSE OBJECTIVES:

The students are expected to demonstrate the following abilities upon completion of this course:

1. Describe the nature, structure and properties of metals, polymers and ceramics as they apply to dental practice.
2. Understand the crystalline structure of materials and the relationship between the mechanical properties and the changes in the crystalline structure.
3. Explain the significance of the phase diagram and how phase transformation can affect the physical/mechanical properties of different alloys.
4. Justify the selection of most dental materials based on their physical properties that are suitable for a particular functional situation.
5. Understand the underlying principles for strengthening of materials and the need for specific laboratory and clinical manipulations.
6. understand of how materials can fail in the oral cavity.
7. Know how to assess new dental materials as they continue to emerge during the professional life.

COURSE NO.	**:**	**181 PCS**
COURSE TITLE	**:**	**Introduction to Dentistry**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**First Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

This course is designed to provide the first year dental student with an overview of the basic concepts, principles and procedures of various specialties in dentistry. Special emphasis is given to the preventive aspects in each dental discipline. Orientation to the curriculum and regulations in pre-clinical and clinical areas are also provided.

COURSE OBJECTIVES:

Upon successful completion of this course, the student should be able to:

1. Define various disciplines in dentistry and describe objectives of each discipline.
2. Be familiar with characteristics of each target population served by a particular discipline.
3. Discuss preventive aspects of each discipline in dentistry.
4. Explain the role of health provider in patient management related to the discipline.
5. Discuss major procedures in the discipline with emphasis on comprehensive treatment.

COURSE NO.	**:**	**182 PCS**		
COURSE TITLE	**:**	**Introduction to Behavioral and Preventive Dentistry**		
CREDIT HOURS	**:**	**One (1)**		
CREDIT UNITS	**:**	**1 Lecture**		
LEVEL	**:**	**First Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		Total	**=**	**One Hour**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

This course addresses the preventive and behavioral aspects in dentistry, with particular emphasis on understanding the human behavior towards prevention, patient management and the ethical responsibilities inherent to the dental profession. Also, communication skills as they relate to the clinical settings in dentistry are discussed in this course.

COURSE OBJECTIVES:

Upon completion of this course, the student should:

1. Have sufficient knowledge on professionalism and professional ethics.
2. Understand how behavioral concepts can be applied to the diagnosis and treatment of dental patients.
3. Know the role of behavior in the dynamics of the doctor/patient relationship.
4. Understand basic interpersonal communication skills and be able to handle special problems in communication.
5. Know how to use the techniques of behavior modification to promote patient compliance with oral therapeutic measures.
6. Know the behavioral view of the provider.
7. Understand the fundamentals of problem solving and conflict resolution.
8. Know different techniques of managing the fearful and apprehensive patient.
9. Understand basic levels of prevention of oral diseases.

COURSE NO.	**:**	**182 DEN**
COURSE TITLE	**:**	**The Concept of Health Informatics**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**2 Lectures**
LEVEL	**:**	**First Year (Second Semester)**
CONTACT HOURS	**:**	**2 Lectures = Two Hours** **Total = Two Hours**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

This course is a broad introduction to the health informatics to deal with creativity, communications and organizing information. A deeper understanding of health informatics can help the students to recognize how informatics can effectively contribute to their various learning efforts and how its methods can be exploited to elevate the state of the art in education, research, and patient care. The course presents a global view of health informatics and its sub-disciplines in order to allow the students to appreciate the context in which health informatics functions. Special emphasis will be directed toward electronic health records and the use of computer and technology in dentistry.

COURSE OBJECTIVES:

At the end of the course, the students should have the following:

1. Knowledge of basic health informatics concepts.
2. Understanding of informatics, information technology (IT), dental informatics and biomedical informatics in general.
3. Knowledge of the international standards and classifications in health informatics.
4. Understanding of the primarily scientific methods in informatics.
5. Knowledge of goal setting and design of electronic health records.
6. Ability to use the computer for Internet access, electronic communication, and conduction of database searches to obtain information and resources.

COURSE NO.	**:**	**113 ANAT**
COURSE TITLE	**:**	**Anatomy, Embryology & Histology**
CREDIT HOURS	**:**	**Seven (7)**
CREDIT UNITS	**:**	**2 Lectures + 2 Practical (First Semester)** **1 Lecture + 2 Practical (Second Semester)**
LEVEL	**:**	**First Year (First and Second Semester)**

CONTACT HOURS	**:**			
First Semester		**2 Lectures**	**=**	**Two Hours**
		2 Practical	**=**	**Four Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		2 Practical	**=**	**Four Hours**
Total……			**=**	**Eleven Hours**

PRE-REQUISITE COURSE: **None**

COURSE DESCRIPTION:

This course aims at enhancing study of the basic knowledge of macroscopic anatomy (morphology), general embryology and development of the face, neck and skull; and the microscopic anatomy (histology) for students of the college of dentistry. It is taught by the Department of Anatomy at the College of Medicine.

COURSE OBJECTIVES:

At the end of this course, the student should be able to:

1. Describe the cell structure and functions of its components.
2. Describe the structure of the basic body tissues.
3. Describe the macroscopic and microscopic structure of the organ system of the human body.
4. Describe various terms of human anatomy and biology.
5. Describe the detailed anatomy of the head and neck.
6. Describe the human general embryology and development of the face, mouth, palate, neck and skull.

COURSE NO.	**:**	**163 PHL**
COURSE TITLE	**:**	**Biochemistry**

CREDIT HOURS	**:**	**Four (4)**

CREDIT UNITS	**:**	**1 Lecture + 1 Practical / Semester**

LEVEL	**:**	**First Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Two Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Two Hours**
Total ……..			**=**	**Six Hours**

PRE-REQUISITE COURSE:	**None**

COURSE DESCRIPTION:

This course is designed to provide the dental students with an overview of the basic principles of biochemistry, with special attention to the biological structures in the oral cavity. Protein and blood biochemical properties are among the major topics discussed in this course.

COURSE OBJECTIVES:

After successful completion of this course, the student should demonstrate knowledge of the following topics:

1. Structure and function of biological buffers.
2. Structure, properties and function of amino acid peptides and proteins.
3. Enzymes, coenzymes and cofactors.
4. Structure and metabolism of carbohydrates.
5. Structure and metabolism of lipids and steroids.
6. TCA cycle and oxidative phosphorylation (Electron Transport System).
7. Amino acid metabolism, transmination, and the urea cycle.
8. Protein biosynthesis and the role of DNA and the genetic code.
9. Blood biochemistry, hemoglobin, plasma proteins and immunoglobulins.
10. Control and integration of metabolism (homeostasis).
11. Connective tissue: collagen and keratin.
12. Metabolism of calcium and phosphorus.
13. Biochemistry of bone, cementum and enamel.
14. Biochemical aspects of dental diseases.

COURSE NO.	**:**	**113 PSL**
COURSE TITLE	**:**	**General Physiology**
CREDIT HOURS	**:**	**Five (5)**
CREDIT UNITS	**:**	**2 Lectures + 1 Practical (First Semester)** **1 Lecture + 1 Practical (Second Semester)**
LEVEL	**:**	**First Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**2 Lectures**	**=**	**Two Hours**
	1 Practical	**=**	**Two Hours**
Second Semester	**1 Lecture**	**=**	**One Hour**
	1 Practical	**=**	**Two Hours**
Total ----------		**=**	**Seven Hours**

PRE-REQUISITE COURSE: **None**

COURSE DESCRIPTION:

This course aims to provide students with the essential facts and concepts of Medical Physiology. The students are oriented on the normal functions of various parts of the body and their interrelation to maintain a homeostatic environment and how this will aid in the understanding of clinical practice. Students will also be trained to think independently and will be encouraged to integrate their knowledge in a clinical setting. This course is taught by the Department of Physiology at the College of Medicine.

COURSE OBJECTIVES:

After successful completion of this course, the student should be able to demonstrate sufficient knowledge on the following topics:

1. Cell membrane, structure, and functions.
2. Body fluid composition and transport across the cell membrane.
3. Blood physiology.
4. Basic physics of membrane potentials and resting membrane potential.
5. Physiological anatomy of skeletal muscles.
6. Autonomic nervous system.
7. Physiology of the cardiovascular system.
8. Physiology of the respiratory system.
9. Gastrointestinal physiology.
10. Renal system physiology.
11. Endocrinology.
12. Central nervous system.

السنة الثانية (٣٦ ساعة)

COURSE NO.	**:**	**211 MFS**
COURSE TITLE	**:**	**Introduction to Local Anesthesia**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Second Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total = One Hour**
PRE-REQUISITE COURSE:		**113 ANAT (Anatomy, Embryology & Histology)**

COURSE DESCRIPTION:

This course is a series of weekly lectures extending for one semester to cover the assessment of patients and their suitability for local anesthesia and surgery, pain control, neuro-anatomy of the oral cavity and peri-oral tissue, neuro-physiology, pharmacokinetics of the drugs used in local anesthesia, possible local and systematic complications of local anesthesia, and how to avoid and manage such complications. Also, the course includes description of the injection techniques of different types of local anesthesia and all required tools and materials.

COURSE OBJECTIVES:

By the end of this course, the students are expected to:

1. Understand the applied surgical anatomy and the neuro-anatomy of the head and neck.
2. Know the physiology of pain and pain conduction in order to understand the mechanism of action of anesthetic agents.
3. Know the pharmacokinetics and the mode of action of various local anesthetic agents, the techniques employed to block nerve conduction and produce anaesthesia.
4. Understand the possible complications, their etiology, signs and symptoms, prevention and their management.
5. Know the methods and techniques employed to institute infection control measures, sterilization, asepsis and disinfection.
6. Recognise and manage the different possible complications that may be encountered during or after administration of local anesthesia.

COURSE NO.	**:**	**212 MFS**		
COURSE TITLE	**:**	**Introduction to Exodontia**		
CREDIT HOURS	**:**	**One (1)**		
CREDIT UNITS	**:**	**1 Lecture**		
LEVEL	**:**	**Second Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		Total	**=**	**One Hour**
PRE-REQUISITE COURSE:		**113 ANAT (Anatomy, Embryology and Histology)**		

COURSE DESCRIPTION:

This course of exodontia [teeth extraction] covers sterilization, control of infection, the different methods for extraction [intra-alveolar and trans-alveolar], the required instruments [forceps and elevators], and different suture types and materials. It also covers the indications and contraindications of teeth extraction, post-operative instructions and follow-up, and possible complications which may occur during or after extraction and how to recognize and manage such complications.

COURSE OBJECTIVES:

By completing this course, the student should be able to:

1. Assess patients for suitability to all minor surgical procedures by taking systematic history, detailed medical history, thorough physical examination and proper use of investigation tools.
2. Describe the methods and techniques employed to institute infection control measures, sterilization, asepsis and disinfection.
3. Describe the indications and contraindications of teeth extraction, and the different techniques and methods used to perform teeth removal.
4. Describe the intra-alveolar technique and the principles of forceps and elevators use.
5. Describe the indications for trans-alveolar technique, different designs of surgical flap, the methods employed for bone removal, and the different types of suture material.
6. Give post-operative instructions and medications when necessary.
7. Recognise and manage the different complications that may be encountered during or after extraction of teeth.

COURSE NO.	**:**	**253 DDS**		
COURSE TITLE	**:**	**Oral Biology and Histology**		
CREDIT HOURS	**:**	**Three (3)**		
CREDIT UNITS	**:**	**1 Lecture**	**- First Semester**	
		1 Lecture + 1 Practical	**- Second Semester**	
LEVEL	**:**	**Second Year (First and Second Semesters)**		
CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Three Hours**
Total ----------			**=**	**Five Hours**
PRE-REQUISITE COURSE:		**113 ANAT (Anatomy, Embryology and Histology)**		

COURSE DESCRIPTION:

153 DDS is a one-year course. It is given as a one hour lecture in the first semester and one lecture and one practical session in the second semester of the same year. Oral Biology course comprises instructions in the principles of oral anatomy and embryology, oral histology, and oral physiology.

COURSE OBJECTIVES:

At the end of the course the student should be able to:

1. Understand fairly well the principles of the formation and development of normal orofacial tissues.
2. Describe satisfactorily the interrelationship between macroscopic, microscopic structures and functions of the oral tissues.
3. Know correctly the chemical composition of enamel, dentin, cementum, bone and the major similarities/differences among them.
4. Have a fair knowledge of the roles of some minerals and factors which affect the metabolism of mineralized tissues (bone, teeth).
5. Have a clear understanding of the biology of the periodontium.
6. Describe satisfactorily the anatomy of salivary glands and the physiology of salivary secretion.
7. Understand well the principles of occlusal function and articulation as determined by craniomandibular relationship.

COURSE NO.	**:**	**212 DDS**		
COURSE TITLE	**:**	**Oral Pathology 1**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Practical**		
LEVEL	**:**	**Second Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

The course provides students with sufficient knowledge to help them distinguish between oral tissues in health and disease, identify diseases of the teeth, periodontium, maxilla and mandible, oral mucous membranes and associated soft tissues, and orofacial manifestations of systemic diseases. The causes of the various diseases with the underlying basic pathological principles and the microscopic appearance of the developed lesions are emphasized. In addition, the clinical appearance of lesions to be studied will provide the student with introductory basis for clinical differential diagnosis of different lesions.

COURSE OBJECTIVES:

The main purpose of this course is to allow the students to know and understand how to apply the following principles for each specific disease to be studied:

- Etiology (cause).
- Pathogenesis (how lesions are developed).
- Clinical characteristics, such as age, sex, site and prominence.
- Clinical, microscopic and radiographic appearance of lesions and their differentiation from normal tissues.
- Principles of treatment and prognosis.

Upon successful completion of this course, the students should be able to:

1. Make a clinical differential diagnosis of lesions.
2. Make a microscopic differential diagnosis of lesions.
3. Correlate the clinical and the microscopic features of lesions.
4. Reach to a definitive diagnosis of lesions.

COURSE NO.	**:**	**242 DDS**		
COURSE TITLE	**:**	**Oral Diagnosis 1**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**		
LEVEL	**:**	**Second Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Clinic	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

The course is designed to expose the dental student to basic knowledge and skills that are involved in the diagnostic process and treatment planning in dental practice. The training would enable the student to effectively communicate with the patients, interview them and carry out a general appraisal and a detailed and systematic examination of the extra-oral and intra-oral structures. The course is offered through a series lectures and clinical sessions. Lectures will provide adequate information on the various steps involved in the interviewing process, clinical methods and on relevant aspects of the diagnostic tools employed and treatment planning. Clinical sessions will closely follow the lecture schedule. Students in pairs will practice on each other all the steps involved.

COURSE OBJECTIVES:

By the end of this course, the students should be able to:

1. Communicate with the patient effectively.
2. Take general and oral health history and ask appropriate questions based on the signs and symptoms.
3. Perform extra-oral and intra-oral examination thoroughly and systematically.
4. Order or do the diagnostic procedures as required.
5. Recognize any abnormality in oral and peri-oral tissues and describe them.
6. Recognize the need for medical and/or dental referral or consultation.
7. Develop a proper treatment plan for the patient.

COURSE NO.	**:**	**243 DDS**
COURSE TITLE	**:**	**Clinical Oral & Maxillofacial Radiology 1**
CREDIT HOURS	**:**	**Four (4)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation / Semester**
LEVEL	**:**	**Second Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
Total ----------			**=**	**Eight Hours**

PRE-REQUISITE COURSE: **None**

COURSE DESCRIPTION:

This course is an introduction to the dental radiology as a branch of dentistry for diagnostic treatment planning and follow-up purposes. This course studies the basic physics and equipment behind the production of x-rays, their properties and interaction which results in the formation of the radiographic image. In addition, the radiographic techniques involved in producing various radiographic images and the x-ray films and other requirements for film processing are covered in this course. Radiation protection of patients and dental staff from the harmful effects of x-rays and interpretation of simple lesions as caries, periodontal and periapical diseases are also among the topics to be studied in this course.

COURSE OBJECTIVES:

At the end of this course, the students will be able to:

1. Know how x-rays are produced, identify the component parts of the x-ray machine and its accessories and list and describe the possible interactions of x-rays with matter.
2. List and describe the different types of intra-oral and extra-oral x-ray films used in dentistry including their sizes, speeds as well as how to store them properly.
3. Know what is required to produce an ideal radiographic image and identify the quality of x-ray image regarding the radiographic density, contrast, sharpness, magnification and distortion.
4. Understand and practice the step-by-step procedures for both manual and automatic film processing.
5. Identify the anatomical landmarks as seen in radiographs, distinguish between abnormalities and normal variations.
6. Discuss the harmful effects of radiation, both the short and long-term effects, whether they are somatic or genetic.
7. Discuss the types and properties of digital radiography as a recent modality and the future of dental radiography.

COURSE NO.	**:**	**213 RDS**
COURSE TITLE	**:**	**Pre-Clinical Operative Dentistry**
CREDIT HOURS	**:**	**Six (6)**
CREDIT UNITS	**:**	**1 Lecture + 2 Clinical Simulation / Semester**
LEVEL	**:**	**Second Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		2 Clinical Simulation	**=**	**Six Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		2 Clinical Simulation	**=**	**Six Hours**
Total ----------			**=**	**Fourteen Hours**

PRE-REQUISITE COURSE:	**110 RDS (Dental Anatomy & Morphology)**
	112 RDS (Introduction to Operative Dentistry)

COURSE DESCRIPTION:

This course focuses on two main elements; the principles of cavity preparation for the currently available restorative materials and the physical manipulative characteristics of restorative materials and cavity restoration. This course of study is critically important to the student's future as a dental practitioner. It prepares students to provide the major portion of dental care to their patients. It will be a combination of lectures and clinical simulation exercises, representing different restorative procedures in operative dentistry. All lectures, instructional procedures and materials that students will receive have been designed to help them to develop the knowledge, the skills and judgment necessary to achieve the goals of operative dentistry. The development and exercise of integrity is as essential as the development of knowledge and skills to the student's competency in dental care.

COURSE OBJECTIVES:

The objectives that shall be achieved after successfully passing this course are:

1. Understanding of the basic principles, techniques and rational of operative procedures and their applications.
2. Application of a step-by-step procedure for each cavity preparation and cavity restoration.
3. Simulation of the clinical settings of cavity preparation and restoration by performing standardized exercises on typodont models mounted on mannequins.
4. Recognition of different faults in cavity preparation and restoration and how to manage and correct them.
5. The student must be ready and prepared to start the next clinical course in operative dentistry.

COURSE NO.	**:**	**233 RDS**		
COURSE TITLE	**:**	**Dental Materials Sciences**		
CREDIT HOURS	**:**	**Three (3)**		
CREDIT UNITS	**:**	**1 Lecture**	**-**	**First Semester**
		1 Lecture + 1 Practical	**-**	**Second Semester**
LEVEL	**:**	**Second Year (First and Second Semester)**		
CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Three Hours**
Total ----------			**=**	**Five Hours**

PRE-REQUISITE COURSE: 132 RDS (Basic Dental Materials)

COURSE DESCRIPTION:

This course continues where RDS 132 left off and logically progresses from direct restorations through indirect restorations. It provides basic information about direct and indirect restorative materials, bonding agents, and the new field of “Adhesive Dentistry”. It provides information about impression materials and gypsum materials. It provides step-by-step information about the casting procedure and the required dental materials. It augments the casting procedure with ceramo-metallic and ceramic materials. The indirect restorations section is completed with a presentation of temporary and permanent dental cements, including the most recent developments with resin cements. The course is completed with information about basic prosthodontic, endodontic, periodontic, and orthodontic materials and with a presentation on dental implant materials, designs, and special considerations.

COURSE OBJECTIVES:

Upon successful completion of this course, the dental student should be able to:

1. Use basic knowledge to describe fundamental strengths and weaknesses of each dental material.
2. Characterize each dental material as to its proper selection and intended use.
3. Describe each dental material’s correct manipulation and technical considerations.
4. List the advantages and disadvantages for each dental material.

COURSE NO.	**:**	**222 PCS**		
COURSE TITLE	**:**	**Preventive Dentistry**		
CREDIT HOURS	**:**	**One (1)**		
CREDIT UNITS	**:**	**1 Lecture**		
LEVEL	**:**	**Second Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		Total	**=**	**One Hour**
PRE-REQUISITE COURSE:		**182 PCS (Introduction to Behavioral and Preventive Dentistry)**		

COURSE DESCRIPTION:

This course provides the dental students with an understanding of concepts, principles and methods of prevention of various dental diseases with emphasis on primary preventive measures.

COURSE OBJECTIVES:

At the end of the course, the students should understand the following:

1. Basic concepts and principles of preventing dental diseases.
2. Factors involved in the causation of dental caries and periodontal diseases.
3. Different measures for primary prevention of the common dental diseases (dental caries and periodontal diseases).

COURSE NO.	**:**	**212 SDS**		
COURSE TITLE	**:**	**Introduction to Pre-Clinical Prosthodontics and Occlusion**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation**		
LEVEL	**:**	**Second Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

This is the first course in prosthodontics. It consists of didactic and clinical simulation components. The course is designed to provide the students with a basic knowledge concerning the static and dynamic aspects of occlusion and the importance of occlusion to all facets of dentistry. The clinical simulation phase of this course helps the students to understand and develop some basic technical skills in prosthodontics and occlusion.

COURSE OBJECTIVES:

After completing this course, the student should:

1. Be familiar with the biological and technical aspects of prosthodontics in general, and dental anatomy and occlusion in particular.
2. Demonstrate abilities of understanding and using different prosthodontic terminologies.
3. Demonstrate the abilities and skills to do all the assigned clinical simulation procedures.
4. Illustrate the basic knowledge and skills of how to examine and analyze occlusion.

COURSE NO.	**:**	**281 DEN**
COURSE TITLE	**:**	**Ethics in Dentistry**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Second Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total = One Hour**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

The course is designed to cover the main aspects of ethics in the health profession, particularly dentistry. In addition, the course covers the legislation for practicing health care in Saudi Arabia with special attention to the ethical content of it.

COURSE OBJECTIVES:

This course will enable the student to:

1. Comprehend the principles of ethics and the code of professional conduct for dentists.
2. Distinguish between ethical and legal obligations of the dentist.
3. Understand the legislative principles for practicing the profession of dentistry in Saudi Arabia.

COURSE NO.	**:**	**210 PHL**
COURSE TITLE	**:**	**Dental Pharmacology 1**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Second Year (First and Second Semesters)**

CONTACT HOURS :

First Semester	**1 Lecture**	**=**	**One Hour**
Second Semester	**1 Lecture**	**=**	**One Hour**
Total ----------		**=**	**Two Hours**

PRE-REQUISITE COURSE: None

COURSE DESCRIPTION:

This course is concerned with the general principles in pharmacology including pharmacokinetics and pharmacodynamics and their significance in dental practice. The course gives emphasis on pharmacological actions and therapeutic applications of drugs used or implicated in dentistry. Topics include drugs affecting the autonomic nervous system, antimicrobial agents, and analgesics. A special focus is given for drugs used locally to treat hard and soft tissue ailments and for preparations used locally in the dental practice.

COURSE OBJECTIVES:

By successful completion of this course, the students are expected to:

1. Understand the importance of pharmacokinetics and pharmacodynamics and their significance in dental practice.
2. Understand the actions and appropriate therapeutic use of local anaesthetics and vasoconstrictor containing preparations, sedatives and analgesic medications.
3. Understand the rational of using anti-infective agents in dentistry, both in terms of the management of existing orofacial infections and for prophylaxis against the development of bacterial endocarditis or other post-treatment infections.
4. Have a basic knowledge of commonly prescribed drugs in particular the drugs used locally to treat hard and soft tissue ailments and for preparations used locally for hygienic purposes.

COURSE NO.	**:**	**221 MIC**
COURSE TITLE	**:**	**General Microbiology and Immunology**
CREDIT HOURS	**:**	**Three (3)**
CREDIT UNITS	**:**	**2 Lectures + 1 Practical**
LEVEL	**:**	**Second Year (First Semester)**
CONTACT HOURS	**:**	**2 Lectures = Two Hours** **1 Practical = Two Hours** **Total ---------- = Four Hours**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

This course is designed to provide the dental student with the required knowledge to make acquaintance, both in theoretical and practical context, with microorganisms as agents of human disease with relevance to dentistry. The major topics covered in this course include fundamentals of immunology and host-parasite relationship, bacteria and human diseases, viruses and human diseases, fungi and human diseases, and introduction to the oral microbiology.

COURSE OBJECTIVES:

By the end of the course, the dental students should:

1. Have a basic understanding of the major pathogenic organisms, related disease-syndromes and their modes of spread with particular reference to dentistry.
2. Have a basic understanding of the host-parasite relationship and the immune system.
3. Have a basic understanding of the oral microbial ecology and pathogenesis of dental caries and periodontal disease.
4. Be aware of the major clinical and biological factors to be taken into consideration for the appropriate use of anti-microbial therapy.
5. Be familiar with some of the laboratory procedures including specimen collection and handling, requesting appropriate tests, and interpretation of laboratory reports.

COURSE NO.	**:**	**231 PATH**		
COURSE TITLE	**:**	**General Pathology**		
CREDIT HOURS	**:**	**Three (3)**		
CREDIT UNITS	**:**	**2 Lectures + 1 Practical**		
LEVEL	**:**	**Second Year (First Semester)**		
CONTACT HOURS	**:**	**2 Lectures**	**=**	**Two Hours**
		1 Practical	**=**	**Two Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

This course deals with the basic concepts of various disease processes relevant to the medical and dental students.

COURSE OBJECTIVES:

By the end of the course, the dental student is expected to:

1. Learn the basic principles of disease processes (General Pathology) and to apply these principles to the study of particular diseases in various tissues, organs and systems of the body (Systemic Pathology).
2. Correlate the pathological changes with the clinical picture.
3. Observe and analyze pathology at clinical and microscopic levels.
4. Appreciate the role of pathology (applied or experimental) in the medical research.

السنة الثالثة (٣٥ ساعة)

COURSE NO.	**:**	**311 MFS**
COURSE TITLE	**:**	**Clinical Oral Surgery 1**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**
LEVEL	**:**	**Third Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **1 Clinic = Three Hours** **Total --------- = Four Hours**
PRE-REQUISITE COURSE:		**211 MFS (Introduction to Local Anesthesia)** **212 MFS (Introduction to Exodontia)**

COURSE DESCRIPTION:

This course is an introduction to minor oral surgery, diagnosis, and treatment plan for oral surgical procedures that are essential to the general practitioner. The application of local anesthesia and the performance of simple extractions are both demonstrated and practiced in this clinical course. The management of severe oral infections including osteomyelitis and osteoradionecrosis are also demonstrated. The possible complications of tooth extraction and the management of bleeding, dry socket, and infection are all learned in this course.

COURSE OBJECTIVES:

By the end of this course, the student should be able to:

1. Assess the patient, draw out a treatment plan and execute it by the help of their instructors.
2. Give local anesthesia: inferior dental block and infiltration anesthesia.
3. Perform simple extraction procedures.
4. Identify the forceps and elevators used in extraction and know how to hold them and apply them in practice.
5. Know the different types of medical emergency and how to manage them.
6. Understand and treat dental infections, e.g. pericoronitis, periapical abscess, and periodontal abscess.
7. Know haemorrhage and dry socket types and their etiology and outline of management.
8. Apply the knowledge gained in the previous related courses.

COURSE NO.	**:**	**312 MFS**
COURSE TITLE	**:**	**Clinical Oral Surgery 2**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**
LEVEL	**:**	**Third Year (Second Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **1 Clinic = Three hours** **Total --------- = Four Hours**
PRE-REQUISITE COURSE:		**211 MFS (Introduction to Local Anesthesia)** **212 MFS (Introduction to Exodontia)**

COURSE DESCRIPTION:

This course teaches more in-depth advanced oral surgery, diagnosis, and treatment plan for oral surgical procedures. The principles of diagnosis and treatment of facial trauma, which includes fractures of the mandible and the middle third of the facial skeleton, are also learned in this course. In addition, this course provides an overview of the dental implications of the maxillary sinus, surgical aids to pathology with special reference to biopsy, and an introduction to tumors and their diagnosis and principles of management.

COURSE OBJECTIVES:

After completing this course, the student should be able to:

1. Apply what he had been instructed in the previous course [311 MFS].
2. Assess impacted and unerupted teeth and how to design a muco-periosteal flap and to remove bone.
3. Recognize and assess the different types of cysts and know how to differentiate between them and their management.
4. Know antibiotics; types, dose, mode of action, and antibiotics use in oral surgery.
5. Diagnose and treat infections in and around the oral cavity including incision and drainage of dental abscesses.
6. Diagnose different facial fractures and know how to treat them including first aid procedures.
7. Understand the conservative and surgical management of antral disease of odontogenic origin including recent and long-standing oro-antral fistulae.
8. Assist in the early diagnosis of oral malignancy by performing a biopsy from suspected oral lesions. The student should also be able to liaise with the oral pathologist to reach to the correct diagnosis.

COURSE NO.	**:**	**331 DDS**		
COURSE TITLE	**:**	**Oral Pathology 2**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Practical**		
LEVEL	**:**	**Third Year (First Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**253 DDS (Oral Biology and Histology)**		
		212 DDS (Oral Pathology 1)		

COURSE DESCRIPTION:

This course is offered during the second half of the second year as a continuation of 231 DDS, which is taught during the first half of the second year. The course is offered as lectures, practical [microscopic] sessions and clinicopathologic conferences [CPC] arranged in such a way that the practical and the CPC sessions are correlated with the subject matter [topics] covered in the didactic lectures. Selected oral and maxillofacial diseases will be studied from the following perspectives: etiology, pathogenesis, clinical profiles, light microscopic appearance, differential diagnoses, prognosis and principles of management.

COURSE OBJECTIVES:

After successful completion of the course, the student should:

1. Appreciate the spectrum of diseases which manifest in the oral cavity and that may be seen in clinical dental practice.
2. Be able to discuss, compare, contrast, delineate and diagnose oral diseases/conditions, especially those usually seen in dental practice using information on etiology, clinical, radiographic and histological manifestations of the diseases and conditions.
3. Be able to use the knowledge gained in this course to improve clinical diagnosis and management or treatment of these oral diseases in the clinical settings.

COURSE NO.	**:**	**341 DDS**
COURSE TITLE	**:**	**Oral Diagnosis 2**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**
LEVEL	**:**	**Third Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **1 Clinic = Three Hours** **Total ---------- = Four Hours**
PRE-REQUISITE COURSE:		**242 DDS (Oral Diagnosis 1)**

COURSE DESCRIPTION:

This course is aimed to improve the clinical skills of students in taking dental and medical history and performing a thorough clinical examination of the oral and paraoral structures. The didactic part is offered with the primary emphasis on diagnosis and differential diagnosis of diseases involving the mouth and the paraoral region.

COURSE OBJECTIVES:

After completion of this course, the students should:

1. Know how to establish a record for a dental patient and to differentiate between different types of records used in the College.
2. Know and be able to behave in a professional way in the clinic.
3. Understand the appropriate way of patient handling in the dental clinic.
4. Apply previous information from course Oral Diagnosis I regarding taking history, examination, and treatment planning.
5. Be able to analyze the information obtained and to predict its significance.
6. Be able to record the vital signs and understand their significance.
7. Recognize lesions and differentiate normal from abnormal structures and tissues.
8. Be able to perform and record general dental and periodontal charting.
9. Be able to conform a list of the dental problems diagnosed in the patient.
10. Be able to provisionally diagnose oral non-dental diseases.
11. Know how to refer a dental patient for dental or medical consultation.
12. Know how to request the appropriate laboratory or radiographic investigations.
13. Be able to interpret the results of laboratory and radiographic investigations.
14. Know the etiology, clinical picture, provisional diagnosis, and management of white lesions, red lesions and pigmented lesions of the oral cavity.
15. Know the etiology, clinical picture, differential diagnosis and treatment of extra- and intra-oral soft tissue swellings, vesiculo-bullous and ulcerative lesions and polypoid swellings.

COURSE NO.	**:**	**343 DDS**
COURSE TITLE	**:**	**Clinical Oral & Maxillofacial Radiology 2**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture - First Semester** **1 Clinic - Second Semester**
LEVEL	**:**	**Third Year (First and Second Semesters)**

CONTACT HOURS :

First Semester	**1 Lecture**	**=**	**One Hour**
Second Semester	**1 Clinic**	**=**	**Three Hours**
Total	**----------**	**=**	**Four Hours**

PRE-REQUISITE COURSE: 243 DDS (Clinical Oral & Maxillofacial Radiology 1)

COURSE DESCRIPTION:

This is the second course of oral radiology which is comprehensive in radiographic interpretation and differential diagnosis of developmental, pathological lesions and fractures of the jaws and associated structures. The course is covered by the lectures in the first half of the year and clinic in the second half. The lectures in the first half will prepare the students to engage in the clinical application in the second half.

COURSE OBJECTIVES:

By the end of this course, students should be able to:

1. Identify all skull and maxillofacial radiographic projections, describe the basic principles of how these views are taken, make a critical assessment of their quality, be aware of their indications and limitations, and know when to request them clinically.
2. Describe the advanced imaging modalities, their uses in the head and neck region including CT, MRI, US and nuclear medicine.
3. Know different types of infections and their clinical and radiographic features.
4. Know different types of odontogenic and non-odontogenic cysts and to describe their radiographic appearance.
5. Know the most common benign and malignant lesions and their characteristic radiographic features. Also, be able to request the advanced imaging to complete the differential diagnosis
6. Identify and diagnose fractures of the jaws and facial bones, their clinical features and different imaging technique used for diagnosis.
7. Know TMJ anatomy, different radiographic technique used to examine TMJ.
8. Know maxillary sinus anatomy and the different radiographic technique used to examine it.
9. Know the anatomy of salivary glands and the different radiographic techniques used to examine them.

COURSE NO.	**:**	**313 RDS**
COURSE TITLE	**:**	**Clinical Operative Dentistry 1**
CREDIT HOURS	**:**	**Three (3)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic - First Semester** **1 Clinic - Second Semester**
LEVEL	**:**	**Third Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Second Semester	**1 Clinic**	**=**	**Three Hours**
Total ----------		**=**	**Seven Hours**

PRE-REQUISITE COURSE:	**213 RDS (Pre-Clinical Operative Dentistry)** **211 MFS (Introduction to Local Anesthesia)**

COURSE DESCRIPTION:

This is the first clinical operative dentistry course that builds on the preceding principles and techniques presented in the clinical simulation courses with an expansion on the area of diagnosis and treatment planning. Attention is given to efficient utilization of the clinical facilities and the need for proper patient record and clinical record systems. The students are expected to carry out simple restorative procedures under supervision.

COURSE OBJECTIVES:

Upon completion of this course, the students should be able to:

1. Diagnose dental caries lesions and identify patients at high risk.
2. Diagnose dental pain and make a differential diagnosis.
3. Perform pulp vitality test using different clinical methods.
4. Formulate a proper treatment plan and educate patient on the dental needs.
5. Perform oral hygiene motivation and patient education.
6. Select proper instruments (hand cutting instruments, burs, etc.) for cavity preparation.
7. Perform proper management of carious lesions of simple and moderate depths.
8. Design and restore cavities for amalgam and composite restorations to a biologically and mechanically acceptable level.
9. Manipulate and place glass ionomer and RMGI materials.
10. Properly select and use cavity bases and liners.
11. Correctly use matrices and wedges.
12. Perform proper finishing and polishing of amalgam, composite resin, G.I., and RMGI restorations.
13. Properly restore non-carious lesions, e.g. abrasion, erosion and other defects.

COURSE NO.	**:**	**323 RDS**
COURSE TITLE	**:**	**Pre-Clinical Endodontics**
CREDIT HOURS	**:**	**Three (3)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation - First Semester** **1 Clinical Simulation - Second Semester**
LEVEL	**:**	**Third Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
Second Semester		**1 Clinical Simulation**	**=**	**Three Hours**
T o t a l ----------			**=**	**Seven Hours**

PRE-REQUISITE COURSE: 213 RDS (Pre-Clinical Operative Dentistry)

COURSE DESCRIPTION:

The scope of this course includes preparing the third year students to understand, recognize, diagnose and successfully treat pulpally involved or potentially involved teeth. Important fundamentals are stressed with emphasis on the correlation between basic clinical and biological principles. The course comprises of two main components: lecture series, which correlates clinical with biological principles of endodontics, and clinical simulation exercises to perform endodontic treatment on mounted extracted human teeth.

COURSE OBJECTIVES:

This course is expected to prepare the students to:

1. Demonstrate clear understanding of the morphology of the dental pulpal spaces.
2. Demonstrate the ability to state the theoretical and biological principles of each endodontic clinical procedure.
3. Demonstrate competency in performing fundamental operative procedures in the field of endodontics.
4. Demonstrate adequate knowledge of the dental materials and instruments used in endodontics.
5. Demonstrate the ability to recognize the different levels and complexity of endodontic cases.
6. Perform self-evaluation of their own clinical competency; diagnosis, treatment planning, and operative capabilities.

COURSE NO.	**:**	**313 PCS**
COURSE TITLE	**:**	**Clinical Periodontology 1**

CREDIT HOURS	**:**	**Four (4)**

CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**

LEVEL	**:**	**Third Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinic	**=**	**Three Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinic	**=**	**Three Hours**
Total ----------			**=**	**Eight Hours**

PRE-REQUISITE COURSE:	**None**

COURSE DESCRIPTION:

This course studies the topics related to the periodontium in health and diseases. The etiology, pathogenesis, and the diagnosis of periodontal disease are explained in this course. Also, the examination, diagnosis, treatment planning and treatment of patients with periodontal diseases are covered. The knowledge and practice of instrumentation in periodontics are also learned and practiced in this course. The principles and techniques of disease prevention therapy are also emphasized.

COURSE OBJECTIVES:

At the end of this course, the students should be able to:

1. Present record of history, examination, diagnosis, treatment plan, and expected prognosis of their periodontal patients to be discussed with their clinical supervisors.
2. Motivate and instruct patients in oral prophylaxis.
3. Distinguish between healthy and diseased periodontium.
4. Identify plaque and calculus (supra- and sub-gingival) and know how to remove it.
5. Use and manipulate periodontal instruments with care and rationale.

COURSE NO.	**:**	**312 POS**		
COURSE TITLE	**:**	**Pre-Clinical Pediatric Dentistry**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation**		
LEVEL	**:**	**Third Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**213 RDS (Pre-Clinical Operative Dentistry)**		

COURSE DESCRIPTION:

This course introduces the field of pediatric dentistry to the dental students. It focuses on the diagnosis and prevention of disease, the preservation of the natural dentition and the restoration of health, function and esthetics of stomatognathic system in children. The goal of the clinical simulation sessions is the development of psychomotor skills of the students to provide quality dental care to their pediatric patients. The clinical simulation is the place where mistakes can be managed without damage to the patient and where the skills can be developed to a higher level of proficiency. In order to maximize the benefits of each clinical simulation, students are expected to study the clinical simulation manual preparation for each project.

COURSE OBJECTIVES:

Upon successful completion of this course, the students should be able to:

1. Understand the basic morphologic applications of cavity preparation in primary teeth.
2. Know how to apply matrix systems, amalgam and composite resin restorations, and stainless steel crown restorations, as related to primary teeth.
3. Understand the technique and indications for pulpotomy.
4. Utilize the sealant system as a preventive measure against caries.
5. Predict possible crowding problems and to utilize the space maintainer as a preventive measure against malocclusion.
6. Acquire enough psychomotor skills to be able to treat children in the clinic without any reservations.

COURSE NO.	**:**	**323 SDS**
COURSE TITLE	**:**	**Pre-Clinical Removable Prosthodontics**
CREDIT HOURS	**:**	**Six (6)**
CREDIT UNITS	**:**	**1 Lecture + 2 Clinical Simulation**
LEVEL	**:**	**Third Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	2 Clinical Simulation	**=**	**Six Hours**
Second Semester	**1 Lecture**	**=**	**One Hour**
	2 Clinical Simulation	**=**	**Six Hours**
Total ----------		**=**	**Fourteen Hours**

PRE-REQUISITE COURSE:	**SDS 212 (Introduction to Pre-Clinical Prosthodontics and Occlusion)**

COURSE DESCRIPTION:

This course is the first course in removable prosthodontics. It consists of didactic and clinical simulation components that cover both complete dentures and removable partial dentures. The first half of the year is devoted for complete dentures, while the second half is devoted for removable partial dentures. The clinical simulation component covers the technical aspect of complete denture construction from the start to finish in the first half of the year and the technical aspect of removable partial dentures construction in the second half of the year. During this course, various exercises that simulate the clinical treatment of patients are employed. The course in general is designed to prepare the students to understand the biological, mechanical, as well as the esthetic aspect of complete and partial denture treatment.

COURSE OBJECTIVE:

By the end of this course, the students are expected to:

1. Demonstrate the abilities and skills to perform the clinical simulation procedures related to the construction of complete dentures.
2. Identify and describe the various components of a removable partial denture.
3. Illustrate the basic knowledge of how to design a removable partial denture framework.
4. Demonstrate the basic knowledge and fundamentals of the various clinical simulation procedures related to the construction of the removable partial denture.
5. Identify the different materials, instruments and devices involved in the construction of removable complete and partial dentures and their uses.

COURSE NO.	**:**	**333 SDS**
COURSE TITLE	**:**	**Pre-Clinical Fixed Prosthodontics**
CREDIT HOURS	**:**	**Six (6)**
CREDIT UNITS	**:**	**1 Lecture + 2 Clinical Simulation**
LEVEL	**:**	**Third Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	2 Clinical Simulation	**=**	**Six Hour**
Second Semester:	**1 Lecture**	**=**	**One Hour**
	2 Clinical Simulation	**=**	**Six Hours**
Total ----------		**=**	**Fourteen Hours**

PRE-REQUISITE COURSE: 213 RDS (Pre-Clinical Operative Dentistry)

COURSE DESCRIPTION:

This course represents the orientation phase to the discipline of fixed prosthodontics. It provides the students with a framework to learn the scientific basis and the fundamental principles of fixed prosthodontics. It prepares the students for the practice of sound clinical fixed prosthodontics through a clinical simulation phase of mechanical and technical procedures.

COURSE OBJECTIVES:

By successful completion of this course, the students are expected to have gained an adequate knowledge and practice in the following areas:

1. Principles, indications, and contraindications applicable to the preparation of complete veneer crowns, partial veneer crowns, and fixed partial dentures.
2. Basic concepts of retention and resistance form when preparing extracoronal restorations.
3. Biomechanics and how it applies to the different fixed prosthodontic designs.
4. Physical properties and manipulation of elastomeric impression materials.
5. Techniques of fabrication of working casts and dies.
6. Waxing techniques for anterior fixed partial denture and mandibular fixed partial denture with cast and soldered connectors.
7. Investing and casting technique.
8. Cast and soldered posterior fixed partial denture connector design.
9. Utilization of gypsum products for the fabrication of working cast and dies.
10. Properties and selection of dental casting alloys and solders.
11. Techniques of fabricating provisional restorations.
12. Dental ceramics and the procedures involved in the fabrication of metal-ceramic restorations.
13. Finishing and polishing procedures for cast restorations.
14. Prosthodontic management of endodontically treated teeth.

COURSE NO.	**:**	**381 DEN**
COURSE TITLE	**:**	**Cardio-Pulmonary Resuscitation**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Third Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total = One Hour**
PRE-REQUISITE COURSE:		**None**

COURSE DESCRIPTION:

This course teaches the basic anatomy of cardiovascular respiratory system with emphasis on vital signs and common medical emergencies and their first aid procedures. The course is composed of lectures and practical demonstrations of the cardiopulmonary resuscitation procedure and techniques.

COURSE OBJECTIVE:

After completing this course successfully, the students will be certified in Basic Life Support and First Aid. They will give practical demonstration in basic life support and they should be able to handle medical emergencies.

السنة الرابعة (٣٤ ساعة)

COURSE NO.	**:**	**411 MFS**
COURSE TITLE	**:**	**Medical Emergencies in Dental Practice**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fourth Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**311 MFS (Clinic Oral Surgery 1)** **312 MFS (Clinic Oral Surgery 2)**

COURSE DESCRIPTION:

This course will introduce the student to the medical management of medically compromised patients and how to deal with emergencies in the dental chair. This course is given as a series of lectures.

COURSE OBJECTIVES:

Students who complete this course successfully should be familiar with the following:

1. Clinical setup of emergency materials, tools and drugs.
2. Dental management of patients with cardiac disease, hypertension, diabetes, renal disease, liver disease, and thyroid disease.
3. Dental management of female patients during pregnancy.
4. Recognition and management of allergic reactions.
5. Dental management of patients with bleeding disorders and patients under anticoagulant medications.
6. Dental management of patients with neurological disorders.
7. Dental management of patients with organ transplant.
8. Use of antibiotics as premedication.

COURSE NO.	**:**	**413 MFS**
COURSE TITLE	**:**	**Hospital Oral Surgery**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Clinic**
LEVEL	**:**	**Fourth Year (First and Second Semester)**

CONTACT HOURS :

First Semester	**1 Clinic**	**=**	**Three Hours**
Second Semester	**1 Clinic**	**=**	**Three Hours**
Total ----------		**=**	**Six Hours**

PRE-REQUISITE COURSE: **312 MFS (Clinic Oral Surgery 1)**
311 MFS (Clinic Oral Surgery 2)

COURSE DESCRIPTION:

This is a clinical course in advanced oral surgery which is designed to get the dental students to carry out more complicated minor oral surgical procedures under local anesthesia. Cases such as retained roots, impacted teeth, alveoloplasty, and management of orofacial infections are assigned to the students to treat under faculty supervision. Also, students are introduced to the surgical implant dentistry. Students are also introduced to hospital rules and protocol, which include medical records, doctor's orders, progress notes, laboratory and radiographic reports, temperature/pressure/respiration graphics, operation notes and discharge summary. Also, students are introduced to the operating room and to major maxillofacial surgeries.

COURSE OBJECTIVES:

By the end of this course, the Students should be able to:

1. Do patient assessment and examination with scientific identification of the surgical problems and appropriate sequence of the surgical treatment plan.
2. Recognize the appropriate timing to refer patients to a specialist.
3. Interpret the results of the physical evaluation and understand the findings.
4. Discuss findings, diagnosis, and treatment plan options with the patient and obtain informed consent to carry the treatment.
5. Control patient's pain and anxiety through the use of local anesthesia and other procedures.
6. Develop confidence, respect, and trust with the patient.
7. Perform minor surgical procedures such as uncomplicated extraction of single or multi-rooted teeth, removal of fractured or residual root tips, pre-prosthetic surgery, uncomplicated biopsy of soft tissues
8. Write prescriptions and understand the use of prescription drugs in the practice of minor oral surgery.
9. Diagnose and manage complications resulting from minor surgical procedures with appropriate follow-up of the patient.

COURSE NO.	**:**	**422 DDS**		
COURSE TITLE	**:**	**Oral Medicine 1**		
CREDIT HOURS	**:**	**Two (2)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**		
LEVEL	**:**	**Fourth Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		1 Clinic	**=**	**Three Hours**
		Total ----------	**=**	**Four Hours**
PRE-REQUISITE COURSE:		**341 DDS (Oral Diagnosis 2)**		

COURSE DESCRIPTION:

This course covers topics of general oral medicine that are important to the general dental practitioner. This is supported by clinical sessions in which students will see and manage patients with different oral lesions. Some of these clinical sessions will be undertaken at the Riyadh Central Hospital.

COURSE OBJECTIVES:

By the end of this course, students should have learned and practiced several aspects of oral medicine, including:

1. Ability to recognize systemic conditions that may affect dental patients.
2. Recognition and diagnosis of oral soft and hard tissue changes.
3. Request proper investigative procedures based on the oral and systemic findings.
4. Management and treatment of patients with oral soft and hard tissue changes.
5. Patient referral procedures and dental report writing.

COURSE NO.	**:**	**413 RDS**		
COURSE TITLE	**:**	**Clinical Operative Dentistry 2**		
CREDIT HOURS	**:**	**Three (3)**		
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**	**-**	**First Semester**
		1 Clinic	**-**	**Second Semester**
LEVEL	**:**	**Fourth Year (First and Second Semesters)**		
CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinic	**=**	**Three Hours**
Second Semester		**1 Clinic**	**=**	**Three Hours**
Total ----------			**=**	**Seven Hours**
PRE-REQUISITE COURSE:		**313 RDS (Clinical Operative Dentistry 1)**		

COURSE DESCRIPTION:

This course is the final operative course. It aims at reinforcement of the previous knowledge gained in the early operative dentistry courses and update of the students with newly developed restorative materials. The clinical sessions are directed towards the clinical application of the principles of operative dentistry by performing different kinds of cavity preparation and restoration. In addition, the students will be introduced to various treatment modalities in the area of esthetic dentistry in the anterior and posterior teeth.

COURSE OBJECTIVES:

By the end of this course, students should have learned and practiced the following:

1. Principles and applications of comprehensive operative dentistry care.
2. Minimum required types of amalgam, composite and glass ionomer restorations.
3. Finishing and polishing of all performed restorations.

COURSE NO.	**:**	**423 RDS**
COURSE TITLE	**:**	**Clinical Endodontics**
CREDIT HOURS	**:**	**Three (3)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic - First Semester** **1 Clinic - Second Semester**
LEVEL	**:**	**Fourth Year (First and Second Semesters)**

CONTACT HOURS :

First Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Second Semester	**1 Clinic**	**=**	**Three Hours**
Total ----------		**=**	**Seven Hours**

PRE-REQUISITE COURSE: **323 RDS (Pre-Clinical Endodontics)**
313 RDS (Clinical Operative Dentistry 1)

COURSE DESCRIPTION:

This course trains the students to perform clinical aspects of endodontic therapy with emphasis on integrating clinical and biological principles. Major pulpal and periradicular pathologies and their signs and symptoms are discussed. The students learn and practice how to treat endodontically involved anterior and posterior teeth and how to manage endodontic emergencies.

COURSE OBJECTIVES:

By completion of this course, students should be able to:

1. Properly utilize all endodontic forms used in the clinic.
2. Develop a systematic approach to the diagnosis of endodontic pain.
3. Organize clinical findings, symptoms and pain history to reach into proper diagnosis.
4. Develop a differential diagnosis between endodontic and non-endodontic conditions.
5. Properly perform required tests to determine pulp vitality (cold test, cavity test, etc.).
6. Plan and deliver routine non-surgical endodontic treatment.
7. Order and interpret radiographs to study osseous changes related to pulpal and periradicular pathology.
8. Recognize the types of cases need to be referred to the specialist based on knowledge, experience and difficulty.
9. Determine the prognosis of endodontic treatment and the possibility of endodontic surgery.
10. Identify the need for appropriate adjunctive procedures subsequent to endodontic therapy.
11. Appreciate the value of post-operative follow-up and the possibility of performing endodontic re-treatment.
12. Recognize some new technology in endodontics, e.g. apex locators.

COURSE NO.	**:**	**413 PCS**
COURSE TITLE	**:**	**Clinical Periodontology 2**

CREDIT HOURS	**:**	**Four (4)**

CREDIT UNITS	**:**	**1 Lecture + 1 Clinic / Semester**

LEVEL	**:**	**Fourth Year (First and Second Semester)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Second Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Total ----------		**=**	**Eight Hours**

PRE-REQUISITE COURSE:	**313 PCS (Clinical Periodontology 1)**

COURSE DESCRIPTION:

This course covers the treatment of different types of periodontal diseases, the interrelationship between periodontics and other related dental disciplines, the surgical approaches in the management of moderate to advanced periodontal diseases, the role of occlusion in periodontal diseases, and the surgical aspect of implant dentistry and management of tissues around implants in health and disease.

COURSE OBJECTIVES:

At the end of this course, the students should be able to:

1. Perform comprehensive periodontal diagnosis, discuss prognosis and make treatment plan which includes the necessary surgical approaches.
2. Master the motivation and oral hygiene instructions to patients, in addition to the required subgingival scaling and root planing.
3. Describe the indications and procedures of specific periodontal surgical techniques.
4. Understand the objectives and different techniques of crown lengthening procedure.
5. Understand the importance of post-surgical follow-up and wound healing.
6. Asses and evaluate the performed periodontal therapy and project the long term result.
7. Understand the role of trauma from occlusion in the etiology of periodontal disease.
8. Understand the principles of the surgical phase of implant dentistry.
9. Understand the peri-implant structure and develop the skills for implant maintenance.

COURSE NO.	**:**	**413 POS**
COURSE TITLE	**:**	**Clinical Pediatric Dentistry 1**
CREDIT HOURS	**:**	**Four (4)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**
LEVEL	**:**	**Fourth Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Second Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Total ----------		**=**	**Eight Hours**

PRE-REQUISITE COURSE:	**312 POS (Pre-Clinical Pediatric Dentistry)**
	313 RDS (Clinical Operative Dentistry 1)

COURSE DESCRIPTION:

The didactic component of this course addresses the different aspects of diagnosing, managing and treating the dental problems of pre-school and school age children. The clinical component is the first exposure of the students to the clinical pediatric dentistry. The clinical setting helps the students to acquire the necessary clinical skills to render dental care for children. The students will have the opportunity to perform the clinical procedures commonly associated with children's dentistry. The concept of comprehensive dental care will be adopted in this course so the students can develop full awareness for the child as a patient. Patients with age ranging from 8 to 14 years will be seen by the students according to the course requirement.

COURSE OBJECTIVES:

Upon completion of this course, the students should be able to:

1. Perform the clinical procedures commonly rendered to the children.
2. Provide dental care for children in the clinic with confidence and professionalism.
3. Discuss and reinforce preventive approaches with children and parents.
4. Formulate a proper dental treatment plan for this specific age group.
5. Manage to give local anesthesia to children.
6. Restore primary teeth using the different restorative materials.
7. Properly use the rubber dam for isolation during the dental procedure.
8. Perform different clinical procedures available for pulp therapy.

COURSE NO.	**:**	**423 POS**
COURSE TITLE	**:**	**Pre-Clinical Orthodontics**

CREDIT HOURS	**:**	**Four (4)**

CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation**

LEVEL	**:**	**Fourth Year (First and Second Semester)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
Total		**----------**	**=**	**Eight Hours**

PRE-REQUISITE COURSE:	**None**

COURSE DESCRIPTION:

This course provides the students with a background on normal occlusion, malocclusion, growth and development of dentofacial structures, etiology and diagnosis of malocclusion, and the treatment of different dentofacial discrepancies.

COURSE OBJECTIVES:

By the end of this course, the students are expected to have learned the following:

1. Basic concepts of facial growth and development of the dentition.
2. Etiology of malocclusion.
3. Different classifications of malocclusion and their treatment modalities.
4. Cephalometric radiography and its application in orthodontics.
5. Study model analysis and prediction of malocclusion.
6. Indications and procedures of preventive and interceptive orthodontics.
7. Different types of removable and fixed orthodontic appliances.
8. Orthodontic treatment in adults.
9. Overview of combined orthodontics and orthognathic surgical therapy.
10. Orthodontics for cleft lip and palate patients.
11. Stability and retention of orthodontic treatment result.
12. Adverse effects of orthodontic treatment.
13. Orthodontic emergencies.

COURSE NO.	**:**	**423 SDS**
COURSE TITLE	**:**	**Clinical Removable Prosthodontics**
CREDIT HOURS	**:**	**Three (3)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic (First Semester)** **1 Clinic (Second Semester)**
LEVEL	**:**	**Fourth Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Second Semester	**1 Clinic**	**=**	**Three Hours**
Total ----------		**=**	**Seven Hours**

PRE-REQUISITE COURSE: **323 SDS (Pre-Clinical Removable Prosthodontics)**

COURSE DESCRIPTION:

This course is the first clinical course in removable prosthodontics. It consists of didactic and clinical components. The course is limited to the teaching of conventional complete and removable partial dentures. The didactic component covers the theoretical background for different phases of treatment in removable partial and complete dentures. Syllabus includes diagnosis, treatment planning, treatment procedures, and follow-up of treatment outcome. Lectures focus on the basic concepts, principles, indications, and limitations of these clinical procedures. The clinical component is utilized to practice common clinical procedures for patient examination, motivation, and treatment with complete and removable partial dentures.

COURSE OBJECTIVES:

At the completion of this course, the students should be:

1. Familiar with the clinical management of edentulous and partially edentulous patients.
2. Competent in the basic scientific knowledge pertaining to the treatment of edentulous and partially edentulous patients.
3. Proficient in the clinical management of uncomplicated cases requiring treatment with complete and removable partial dentures.

COURSE NO.	**:**	**433 SDS**
COURSE TITLE	**:**	**Clinical Fixed Prosthodontics**
CREDIT HOURS	**:**	**Four (4)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinical Simulation +** **1 Clinic (First Semester)** **1 Clinic (Second Semester)**
LEVEL	**:**	**Fourth Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Clinical Simulation	**=**	**Three Hours**
		1 Clinic	**=**	**Three Hours**
Second Semester		**1 Clinic**	**=**	**Three Hour**
Total		**----------**	**=**	**Ten Hours**

PRE-REQUISITE COURSE:	**333 SDS (Pre-Clinical Fixed Prosthodontics)** **313 RDS (Clinical Operative Dentistry 1)**

COURSE DESCRIPTION:

The course serves as the transitional phase from the clinical simulation to the clinical environment in fixed prosthodontics. It provides a framework for the students to transfer the clinical simulation exercises into clinical applications, reinforcing the concepts learned in course 333 SDS. The clinical phase seeks to equip the students with the fundamental skills for sound clinical fixed prosthodontic practice through the comprehensive management of a minimum number of cases. The concurrent clinical simulation session in the first semester facilitates the understanding of the various clinical simulation procedures and the mutual interdependence between technical and clinical quality.

COURSE OBJECTIVES:

Being the intermediate fixed prosthodontic course, the following principles will be built in the students upon completion of this course:

1. The required knowledge and skills for successful introduction to the clinical fixed prosthodontic practice.
2. Technical and clinical psychomotor skills to a defined level prior to the actual clinical care of patients.
3. Reinforcement of the mutual interdependence of high-quality clinical and technical activities for the attainment of precise and predictable clinical outcomes.
4. Development of the didactic and clinical knowledge of the students with a view to refine their clinical approach towards patient's care.
5. Awareness of the cost-benefit equation in fixed prosthodontic therapy and the patient's right to make an informed choice.

COURSE NO.	**:**	**411 MED**
COURSE TITLE	**:**	**General Internal Medicine**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture (First Semester)** **1 Lecture (Second Semester)**
LEVEL	**:**	**Fourth Year (First and Second Semester)**

CONTACT HOURS :

First Semester	**1 Lecture**	**=**	**One Hour**
Second Semester	**1 Lecture**	**=**	**One Hour**
Total ----------		**=**	**Two Hours**

PRE-REQUISITE COURSE: None

COURSE DESCRIPTION:

This course is designed purposely for the dental students to give an overview of the different specialties of internal medicine which will be beneficial for their dental practice. The teaching, which consists of a series of lectures, will cover the diagnosis, approach, management and complications of cases which are most likely to be encountered in the dental profession.

COURSE OBJECTIVE:

At the end of this course, students should acquire the following:

1. Adequate working knowledge of the general internal medicine.
2. Specific knowledge on the following areas of internal medicine: Gastroenterology, Cardiology, Oncology/Hematology, Endocrinology, Dermatology, Neurology, Rheumatology, Pulmonology, Pharmacology and Psychiatry.
3. Knowledge of common diseases related to internal medicine in term of diagnosis, basic investigations and management.
4. Proficiency in basic theoretical skills, such as history taking and recognition of diseases in general and specifically medical emergencies which might be encountered in the dental clinic.
5. Attitudes that foster patient centered care and support the highest standards of the medical profession.

COURSE NO.	**:**	**411 SURG**		
COURSE TITLE	**:**	**General Surgery**		
CREDIT HOURS	**:**	**One (1)**		
CREDIT UNITS	**:**	**1 Lecture**		
LEVEL	**:**	**Fourth Year (First Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		Total	**=**	**One Hour**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

This course focuses on the identification and management of the various surgical problems related to the head and neck region in particular. It is directed towards building the confidence in the dental students to refer patients with pathological conditions in the head and neck region to the appropriate specialization upon their recognition during routine dental visits.

COURSE OBJECTIVES:

At the end of this course, student will be able to:

1. Know the anatomy of head and neck region.
2. Demonstrate knowledge of signs and symptoms of surgical diseases of the head and neck.
3. Demonstrate a basic knowledge of common and urgent surgical problems.
4. Formulate a reasonable differential diagnosis of surgical problems.
5. Diagnose and manage common urgent surgical problems and surgical diseases of the head and neck.
6. Know the complications of the common surgical procedures and the required precautions to be undertaken during the dental visits.

COURSE NO.	**:**	**411 ORL**		
COURSE TITLE	**:**	**Ear, Nose and Throat Surgery**		
CREDIT HOURS	**:**	**One (1)**		
CREDIT UNITS	**:**	**1 Lecture**		
LEVEL	**:**	**Fourth Year (Second Semester)**		
CONTACT HOURS	**:**	**1 Lecture**	**=**	**One Hour**
		Total	**=**	**One Hour**
PRE-REQUISITE COURSE:		**None**		

COURSE DESCRIPTION:

This course is directed to the dental students to familiarize them with the common ENT conditions related to the dental and maxillofacial surgery profession. The course is theoretical in the form of lectures and it delivers the basic knowledge concerning the anatomy of the ear, nose and throat region. It also gives an overview of the diagnosis and management of common ENT problems.

COURSE OBJECTIVE:

By the end of this course, the students should be familiar with:

1. The anatomy of the ear, nose and throat region.
2. The signs and symptoms of common ENT problems.
3. The basic knowledge of urgent ENT problems that need referral to a specialist.
4. Diagnosis and management of common ENT diseases.
5. Referral procedure and proper communication with the ENT specialist..
6. Possible complications of ENT surgeries and their recognition and management.

COURSE NO.	**:**	**421 MIC**
COURSE TITLE	**:**	**Applied Microbiology**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fourth Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**221 MIC (General Microbiology and Immunology)**

COURSE DESCRIPTION:

This course updates the students on the constantly evolving flora of human infection, the recent researches in the etiology of dental diseases, the advent of opportunistic and nosocomial infections, the newly developed and advanced diagnostic techniques, and the varieties of currently available antibiotics. The course will augment and reinforce the basic knowledge gained earlier in course 222 MAC and correlate this knowledge with the other related clinical science disciplines. Some of the topics covered in this course include primary oral infections including dental caries and periodontal disease, systemic infections with oral manifestations, infective diseases of occupational and personal concern, and diagnosis, treatment and preventive aspect of these diseases.

COURSE OBJECTIVES:

By the end of this course, the students should have:

1. Broad overview of the current research and methods used in studying problems in dental caries and periodontal disease.
2. Understanding of the broad range of infection diseases affecting the oral cavity.
3. Understanding of the clinical and biological factors to be considered during the intended use of antimicrobial drugs.
4. Understanding of hospital acquired infections and infections in the compromised host.

السنة الخامسة (٣١ ساعة)

COURSE NO.	**:**	**491 DDS**
COURSE TITLE	**:**	**Oral Medicine 2**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic**
LEVEL	**:**	**Fifth Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **1 Clinic = Three Hours** **Total ----------= Four Hours**
PRE-REQUISITE COURSE:		**422 DDS (Oral Medicine 1)**

COURSE DESCRIPTION:

This course is offered to the 5th year students to address some aspects of proper management of medically compromised patients, infection control in the office, and the proper use and pitfalls of prescription drugs. Pertinent laboratory tests and interpretation of the results are also discussed. Students will examine patients with systemic diseases for evaluation and treatment planning and will present one patient with complete investigation results and treatment plan. Clinical session at Riyadh Central Hospital will also be arranged on a rotational basis. In addition, students will write reports on selected medical and dental conditions and present the findings to their colleagues under the supervision of assigned faculty member. This will provide the students with training on methods of collection of data, review of literature, presentation techniques and conduction of seminars.

COURSE OBJECTIVES:

By the end of this course, students should be capable of:

1. Reviewing the principles of patient management in relation to specific dental and medical needs, especially for medically compromised patients.
2. Discussing various systemic diseases, especially in relation to the dental patient and the impact of such conditions on the patient management.
3. Clinical evaluation of medically compromised patients and designs of proper treatment plan.
4. Searching for essential information related to some selected topics and organizing the collected data a form of report according to the provided guidelines.
5. Presenting their findings to their classmates and faculty members in a scientific and organized manner and to be able to answer related questions.
6. Listing principles of medical treatment of common oral diseases and understanding possible interaction of various drugs used.

COURSE NO.	**:**	**491 POS**
COURSE TITLE	**:**	**Orthodontic Diagnosis and Treatment Planning**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fifth Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**423 POS (Pre-Clinical Orthodontics)**

COURSE DESCRIPTION:

This course is given in a problem-based learning approach. It consists of tutorial sessions to analyze and discuss some orthodontic cases chosen to cover the following topics: orthodontic diagnosis and treatment planning, early orthodontic treatment, orthodontic management of skeletal problems, assessment of patients for orthognathic surgery, adjunctive orthodontic treatment for adults, and iatrogenic effects of orthodontic therapy. This method of learning involves an active participation of the students in the teaching process through generation of hypotheses to explain the problems under discussion, contributing resources and knowledge to the group, and demonstrating the ability to understand and apply the available evidence to analyze the case.

COURSE OBJECTIVES:

By the end of this course, the students are expected to have:

1. Increased knowledge in the theoretical background of selected orthodontic topics.
2. General knowledge of orthodontic diagnosis and treatment planning of certain cases.
3. Understanding of selected orthodontic procedures.
4. Critical thinking of resolving common orthodontic problems that are commonly encountered in the clinical practice.
5. Ability to recognize and classify the different types of malocclusion and define the cases suitable for orthodontic treatment.
6. Clear understanding of the type of cases and orthodontic problems that need urgent care and referral to an orthodontic specialist.

COURSE NO.	**:**	**493 POS**
COURSE TITLE	**:**	**Clinical Pediatric Dentistry 2**
CREDIT HOURS	**:**	**Two (2)**
CREDIT UNITS	**:**	**1 Clinic / Semester**
LEVEL	**:**	**Fifth Year (First and Second Semester)**

CONTACT HOURS :

First Semester	**1 Clinic**	**=**	**Three Hours**
Second Semester	**1 Clinic**	**=**	**Three Hours**
Total ----------		**=**	**Six Hours**

PRE-REQUISITE COURSE: 413 POS (Clinical Pediatric Dentistry 1)

COURSE DESCRIPTION:

This is the final clinical course in pediatric dentistry. During the clinical sessions, the students are required to provide comprehensive dental treatment for children age 3 to 8 years presenting with a wide range of dental problems. Emphasis of the course will be on patient education and management, treatment planning, prevention of dental disease, restorative procedures, pulp therapy, and dental space management.

COURSE OBJECTIVES:

After completing this clinical course, the students should be able to:

1. Evaluate the patient's need for behavior modification.
2. Apply different behavior modification techniques.
3. Formulate a treatment plan for this age group.
4. Discuss with parents different approaches for the prevention of dental diseases.
5. Teach and motivate parents in proper brushing technique according to their children's age.
6. Administer local anesthesia.
7. Use rubber dam properly.
8. Restore primary teeth using different restorative materials available.
9. Use several clinical procedures available for pulp therapy.
10. Effectively manage cases of premature primary tooth/teeth loss.
11. Manage dental trauma in children.
12. Recognize and manage/refer disabled individuals.

COURSE NO.	**:**	**491 PCS**
COURSE TITLE	**:**	**Biostatistics in Dentistry**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fifth Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**182 DEN (The Concept of Health Informatics)** **222 PCS (Preventive Dentistry)**

COURSE DESCRIPTION:

This course aims at providing dental students with an understanding of concepts, principles and methods of biostatistics for dental research with emphasis on using software packages for data analysis. Class activities will be in the form of lectures and discussions which will mostly focus on the concepts of statistical methods. Tutorial sections follow each class for solving biostatistics practical problem using Excel and SPSS or Minitab computer software. Library readings will also be assigned on certain topics.

COURSE OBJECTIVES:

At the end of this course, the students should be able (using computer) to do the following:

1. Organize and display dental data by tables, graphs and numerical summery measures.
2. Describe and explain inferential statistics and hypothesis testing results.
3. Identify situations in which the use of parametric or nonparametric techniques is appropriate.
4. Interpret computer print outs containing specified statistical analysis.
5. Apply basic concepts and principles of statistical methods for dental research.

COURSE NO.	**:**	**492 PCS**
COURSE TITLE	**:**	**Dental Practice Management**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fifth Year (Second Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total ---------- = One Hour**
PRE-REQUISITE COURSE:		**222 PCS (Preventive Dentistry)**

COURSE DESCRIPTION:

The need for this course emerged after the recognized dynamic changes have occurred in the health care market in the Kingdom of Saudi Arabia, especially after the wide spread of private health institutes and the establishment of health insurance principles and regulations. This course will provide the 5th year dental students with the basic tools to understand the general principles of health care industry in our country, which will enable them to make better managerial decisions in their future dental practices. The first part of this course is designed to encourage awareness to the principles of Health Care Management. The second half of the course will explore the principles of Dental Practice Management in the light of current market needs and regulations with real life examples from the field. Highly respected guest speakers from the private sector of dental practice will be invited to participate in the course.

COURSE OBJECTIVES:

By the end of this course, the following objectives will be achieved:

1. Students will be familiar with the basic knowledge and skills of administration.
2. Capability of students for directing and managing the dental practice is strengthened.
3. Knowledge gained will enable the students to conceptualize different aspects of health care business.
4. Graduating students will be at a competitive position in the private health care market.

COURSE NO.	**:**	**493 PCS**
COURSE TITLE	**:**	**Dental Public Health & Community Dentistry**
CREDIT HOURS	**:**	**Four (4)**
CREDIT UNITS	**:**	**1 Lecture + 1 Practical / Semester**
LEVEL	**:**	**Fifth Year (First and Second Semesters)**

CONTACT HOURS	**:**			
First Semester		**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Three Hours**
Second Semester		**1 Lecture**	**=**	**One Hour**
		1 Practical	**=**	**Three Hours**
Total ----------			**=**	**Eight Hours**

PRE-REQUISITE COURSE: 222 PCS (Preventive Dentistry)

COURSE DESCRIPTION:

The first part of this course is designed to build awareness to the principles and activities of dental public health. In addition, knowledge on the application of sciences of epidemiology and biostatistics in dental public health will be explained. The second part of the course will explore the concepts of the dental public health in the light of the oral health problems in the Kingdom of Saudi Arabia.

COURSE OBJECTIVES:

By the end of this course, the students will be able to:

1. Recognize the significance and sensitivity of the public health problems.
2. Perform the appropriate awareness campaigns concerning the dental public health.
3. Discuss the relation of dental public health to private dental practice.
4. Understand the basic concepts, principles and methods of health education that will be useful for their clinical practice.
5. Apply the principles of epidemiology and biostatistics in dental public health.
6. Critically evaluate scientific articles addressing the issue of dental public health.

COURSE NO.	**:**	**493 SDS**
COURSE TITLE	**:**	**Advanced Prosthodontics and Implantology**
CREDIT HOURS	**:**	**Four (4)**
CREDIT UNITS	**:**	**1 Lecture + 1 Clinic / Semester**
LEVEL	**:**	**Fifth Year (First and Second Semesters)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Second Semester	**1 Lecture**	**=**	**One Hour**
	1 Clinic	**=**	**Three Hours**
Total ----------		**=**	**Eight Hours**

PRE-REQUISITE COURSE:	**423 SDS (Clinical Removable Prosthodontics)**
	433 SDS (Clinical Fixed Prosthodontics)

COURSE DESCRIPTION:

This final prosthodontic course is designed to give the student both didactic and clinical experience in the comprehensive management of variety of cases in fixed, removable partial and complete dentures, as well as dental implants. Emphasis will be placed on dental implants, overdentures, single denture, attachments, and surveyed crowns. The didactic component will cover advanced prosthodontic topics such as attachments, occlusion, dental implants, esthetics, and maxillofacial prosthetics.

COURSE OBJECTIVES:

By the end of this course, the students are expected to:

1. Understand the concepts and principles of comprehensive prosthodontic dental care.
2. Be able to select cases, perform proper diagnosis, treatment plan, and perform treatment procedures for variety of prosthodontic cases that include fixed, removable and implant prostheses.
3. Be able to bring together the concepts of fixed and removable prosthodontics for the purpose of providing an integrated prosthodontic patient care.

COURSE NO.	**:**	**492 DEN**
COURSE TITLE	**:**	**Geriatric Dentistry**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fifth Year (Second Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total = One Hour**
PRE-REQUISITE COURSE:		**411 MFS (Medical Emergencies in Dental Practice)** **423 SDS (Clinical Removable Prosthodontics)**

COURSE DESCRIPTION:

This course is designed to introduce the students to the biology of the aging process and how it affects oral health. In addition, the management of age related changes of the elderly population, including soft tissue and hard tissue changes will be discussed. Furthermore, psychological aspects of aging and age related systemic changes related to the elderly population will be covered. Students will be introduced to the proper management of older adults including restorative, periodontal, surgical, endodontic and other treatment modalities, as well as preventive dentistry.

COURSE OBJECTIVES:

Upon completion of this course, the students should gain awareness for:

1. The biology of the aging process and the age-related changes and their dental implications.
2. Daily activities and nutrition of the elderly individuals.
3. Psychological aspects of aging including dementia, depression, etc.
4. Medical conditions and related medications in geriatric patients.
5. Various dental treatment modalities; applications and limitations.
6. Treatment planning and treatment modality options for elderly patients including restorative, periodontal, surgical, and endodontic managements.
7. Surgery for geriatric patients.
8. Prosthodontic consideration in geriatric patients
9. Implants in geriatric patients.
10. Preventive dental care in geriatric patients.

COURSE NO.	**:**	**493 DEN**
COURSE TITLE	**:**	**Comprehensive Clinical Dentistry**
CREDIT HOURS	**:**	**Ten (10)**
CREDIT UNITS	**:**	**1 Lecture + 4 Clinics / Semester**
LEVEL	**:**	**Fifth Year (First and Second Semester)**

CONTACT HOURS	**:**		
First Semester	**1 Lecture**	**=**	**One Hour**
	4 Clinic Sessions	**=**	**Twelve Hours**
Second Semester	**1 Lecture**	**=**	**One Hour**
	4 Clinic Sessions	**=**	**Twelve Hours**
Total ----------			**Twenty Six Hours**

PRE-REQUISITE COURSE:	**433 SDS (Clinical Fixed Prosthodontics)**
	423 SDS (Clinical Removable Prosthodontics)
	423 RDS (Clinical Endodontics)
	413 PCS (Clinical Periodontology 2)
	413 RDS (Clinical Operative Dentistry 2)

COURSE DESCRIPTION:

This course is designed to cover all clinical disciplines in dentistry. This is a conjoint course by all dental departments where contributors from all dental disciplines participate in both the lectures and clinical sessions. Lectures are designed to cover a wide aspect of advanced dental topics related to comprehensive dental care. Clinical sessions are conducted to amalgamate the clinical experience gained by the students in previous clinical courses and provide them with an excellent foundation for comprehensive patient care.

COURSE OBJECTIVES:

By the end of this course, the students should be able to:

1. Diagnose conditions of the oral cavity and its related structures using proper diagnostic tools.
2. Develop a comprehensive treatment plan for the prevention and treatment of oral conditions so that each patient can be maintained at, or restored to, a healthy and functioning aesthetic condition.
3. Perform competently all preventive and therapeutic procedures which are expected to be performed by a general dentist.

COURSE NO.	**:**	**491 PHL**
COURSE TITLE	**:**	**Dental Pharmacology 2**
CREDIT HOURS	**:**	**One (1)**
CREDIT UNITS	**:**	**1 Lecture**
LEVEL	**:**	**Fifth Year (First Semester)**
CONTACT HOURS	**:**	**1 Lecture = One Hour** **Total = One Hour**
PRE-REQUISITE COURSE:		**210 PHL (Dental Pharmacology 1)**

COURSE DESCRIPTION:

This course deals with the most important principles of clinical pharmacology and drug therapy, in addition to the clinical aspects of drugs implicated in dentistry. Drug therapy principles such as patient compliance, significance of taking drug history and proper writing of prescriptions are considered. Emphasis is given on drug-drug and food-drug interactions encountered clinically, particularly in dental practice. Hazards of drug use during pregnancy and lactations are also considered. Among other topics, clinical pharmacology and therapeutics of hypnotics, anti-anxiety agents, coagulants, anticoagulants, antihypertensives and antidiabetics are included.

COURSE OBJECTIVE:

By the end of this course, the students are expected to:

1. Understand the general principles of clinical pharmacology and drug therapy.
2. Understand the clinical aspects of drugs implicated in dentistry.
3. Know how to maximize patient compliance to medications, take drug history, and properly write a prescription.
4. Have a basic knowledge on drug-drug and food-drug interactions encountered clinically in the dental practice.
5. Understand the hazards of drugs used during pregnancy and lactation.
6. Have a basic knowledge of pharmacotherapy of hypnotics, anti-anxiety agents, coagulants, anticoagulants, antihypertensives and antidiabetics drugs.