



**اللائحة الداخلية**  
**لكلية طب الأسنان**  
**جامعة ٦ أكتوبر**  
**نظام الساعات المعتمدة**  
**( ١٨٤ ساعة )**

## مادة 1:

تتكون إدارة كلية طب الأسنان من:

### 1. عميد الكلية:

يقوم العميد بتصريف أمور الكلية وإدارة شئونها العلمية والإدارية والمالية في حدود القوانين واللوائح المنظمة للعمل بالجامعات الخاصة، وكذلك تنفيذ قرارات مجلس الكلية ومجلس الجامعة في حدود هذه القوانين واللوائح كما يرأس عميد الكلية لجان الامتحان وبشكل تحت إشرافه لجنة لمراقبة الامتحانات وإعداد النتيجة.

### 2. وكيل الكلية لشؤون التعليم والطلاب:

يقوم بمعاونة العميد في إدارة شؤون الكلية ويختص بالشؤون الخاصة بالدراسة والتعليم بمرحلة البكالوريوس وشؤون الطلاب الثقافية والرياضية والاجتماعية.

### 3. وكيل الكلية لشؤون الدراسات العليا والبحوث:

يقوم بمعاونة العميد في إدارة شؤون الكلية ويختص بشؤون الدراسات العليا والبحوث وتوثيق الروابط مع الكليات والمراكز والهيئات المعنية بالبحث العلمي.

### 4. مجلس الكلية:

يؤلف مجلس الكلية برئاسة عميد الكلية وعضوية وكيل الكلية ورؤساء الأقسام وأستاذ من كل قسم على أن يتناوب العضوية أساتذة القسم دوريا كل سنة بترتيب أقدميتهم في الأستاذية وعضو عن الأساتذة المساعدين وآخر عن المدرسين ويجرى تناوب العضوية دوريا كل سنة بترتيب الأقدمية وخمسة أعضاء من الخارج على الأكثر وذلك بعد موافقة رئيس الجامعة. ويختص مجلس الكلية بالنظر في مسائل التخطيط والتنسيق والمتابعة لكل شؤون الكلية وعلى الأخص النظر في نظام الامتحانات وتحديد مواعيده وتحديد مواعيده والنظر في نتائج الامتحانات وفقا للقانون واللوائح الخاصة بالجامعة.

## مادة 2:

وتتكون كلية طب وجراحة الفم والأسنان جامعة 6 أكتوبر من الأقسام التالية:

### 1. التهنسيوباثولوجى ويشمل:

1. التشريح الوصفى للأسنان.
2. بيولوجيا الفم والأسنان.
3. أمراض الفم والأسنان.

### 2. الاستعاضة الصناعية وتشمل:

1. التركيبات المتحركة للأسنان.
2. الأطباق.
3. غرس الأسنان.

### 3. علاج الأسنان التحفظى ويشمل:

1. الجراحة التحفظية للأسنان.
2. التركيبات الثابتة.
3. علاج الجذور.
4. خواص المواد المستعملة فى طب الأسنان.

### 4. جراحة الفم والتخدير وتشمل:

1. جراحة الفم ويشمل جراحة الوجه والفك
2. التخدير الموضعى.
3. التخدير العام.

### 5. طب أسنان الأطفال ويشمل:

1. طب أسنان الأطفال ويشمل طب الأسنان الوقائى ومحة الفم والأسنان.
2. تقويم الأسنان.

### 6. علاج أمراض الفم ويشمل:

1. طب الفم.
2. أمراض اللثة.
3. التشخيص والأشعة.

### **مادة 3:**

تمنح جامعة 6 أكتوبر بناء على طلب مجلس كلية طب الأسنان درجة البكالوريوس فى طب وجراحة الفم والأسنان (B.D.S.) .

### **مادة 4:**

مدة الدراسة لنيل درجة البكالوريوس فى طب وجراحة الفم والأسنان خمس سنوات جامعية، حيث تنقسم كل سنة دراسية إلى فصلين دراسيين.

### **مادة 5:**

### **شروط القبول:**

1. أن يكون المتقدم مستوفى لكل شروط القبول والتي أقرها مجلس الجامعة طبقا لقانون تنظيم الجامعات الخاصة واللوائح المعمول بها فى هذا الشأن.
2. أن يجتاز المتقدم بنجاح لاختبار القدرات الخاص والذي تحدده الكلية.
3. يجوز للكلية أن تقبل الطلاب الحاصلين على البكالوريوس فى الطب والجراحة ويتم إعفاء هؤلاء الطلبة من المقررات التى درسوها فى كلية الطب ويخصص لهم جداول خاصة لاستكمال المواد الخاصة بطب الأسنان والتي لم يدرسوها ويمكن لهم إتمام ذلك فى ثلاث سنوات دراسية متتالية، كما يجوز للكلية أن تقبل بالسنة الثانية الحاصلين على درجة البكالوريوس فى العلوم الطبية البيطرية أو بكالوريوس العلوم مجال تخصص الحيوان أو التشريخ والفسولوجيا أو الحاصلين على بكالوريوس فى العلوم الصيدلية.
4. يجوز للكلية قبول تحويل الطلاب المقيدين فى إحدى كليات طب الأسنان فى الجامعات المصرية أو الجامعات الأجنبية بها بالشروط الآتية:
  1. أن يكون الطالب حاصلًا على مجموعات الدرجات فى الثانوية العامة أو ما يعادلها لا تقل عن الحد الأدنى المنصوص عليه بقرار رئيس الجمهورية بشأن إنشاء الجامعة وعن الحد الأدنى الذى يقرره مجلس الجامعات الخاصة كل عام.
  2. أن يكون حاصلًا على جميع المواد المؤهلة للالتحاق بكلية طب الأسنان.
  3. أن يجتاز بنجاح اختبارات القدرات والقبول التى يحددها مجلس الكلية.
  4. يشترط أن يدرس الطالب أربعة فصول دراسية على الأقل قبل تخرجه من الكلية.

## مادة 6:

### المواد التى تدرس لنيل درجة البكالوريوس فى طب وجراحة الفم والأسنان هى:

- 1 - الفيزياء الحيوية
- 2 - مبادئ الإحصاء
- 3 - الكيمياء.
- 4 - علم النبات والوراثة.
- 5 - علم الحيوان.
- 6 - اللغة الإنجليزية والمصطلحات الطبية (متطلبات الجامعة).
- 7 - الحاسب الالى (متطلبات الجامعة).
- 8 - التشريخ العام.
- 9 - الهستولوجيا العامة.
- 10 - الفسيولوجيا العامة.
- 11 - الكيمياء الحيوية.

- 12 - التشريح الوصفي للأسنان
- 13 - الأقربازين والمادة الطبية.
- 14 - الباثولوجيا العامة.
- 15 - الميكروبيولوجيا العام.
- 16 - خواص المواد المستخدمة فى طب الأسنان.
- 17 - بيولوجيا الفم والأسنان.
- 18 - تكنولوجيا العلاج التحفظى.
- 19 - تكنولوجيا التركيبات المتحركة للأسنان.
- 20 - تكنولوجيا التركيبات الثابتة للأسنان.
- 21 - أمراض الفم والأسنان.
- 22 - الأمراض الباطنة والجلدية والتناسلية.
- 23 - الجراحة العامة والأنف والأذن والحنجرة والرمد.
- 24 - التشخيص والأشعة.
- 25 - تكنولوجيا علاج الجذور.
- 26 - طب الفم وأمراض اللثة.
- 27 - جراحة الفم والتخدير.
- 28 - التركيبات المتحركة للأسنان.
- 29 - التركيبات الثابتة للأسنان.
- 30 - العلاج التحفظى.
- 31 - علاج الجذور.
- 32 - طب أسنان الأطفال والصحة العامة للفم والأسنان ويشمل: (طب أسنان وقائى، طب أسنان مجتمع، آداب وقوانين المهنة، الطب الشرعى للفم والأسنان).
- 33 - تقويم الأسنان.

كما يتم دراسة مجموعة من المواد الاختيارية بحد أدنى 7 ساعات معتمدة طبقا لتوجيه المشرف الأكاديمى.

## مادة 7:

على الطالب متابعة المحاضرات والدروس العملية فى كل فصل دراسى ولمجلس الكلية بناء على طلب مجالس الأقسام المختصة أن يحرم الطالب من التقدم لامتحان كله أو بعضه إذا رأى أن مواظبته على حضور الدروس والتمرينات العملية غير مرضية (إذا زادت نسبة غياب الطالب عن 30%) وفى هذه الحالة يعتبر الطالب راسباً فى المقررات التى حرم من التقدم لامتحان فيها إلا إذا قدم عذراً يقبله مجلس الكلية فيعتبر غائباً بعذر مقبول فى المقرر الذى حرم منه فقط على أن يستوفى شروط الحضور والمتطلبات فى المقررات التى قدم عنها عذراً فى الفصل الدراسى التالى. هذا مع العلم بأن حرمان الطالب الغائب بدون عذر مقبول من التقدم لامتحان لا يتم إلا بعد أن تكون الكلية قد قامت بإنذار الطالب مرتين .

## مادة 8:

تبين الجداول الملحقه توزيع المقررات الدراسية على سنوات الدراسة ومجموع عدد الساعات المخصصة للدروس النظرية والعملية أسبوعياً.

## مادة 9:

شروط الحصول على درجة بكالوريوس طب وجراحة الفم والأسنان من كلية طب الأسنان – جامعة 6 أكتوبر.

- أن يكون الطالب قد اجتاز بنجاح 167 ساعة معتمدة فى المواد المقررة الاجباريه بالإضافة الى متطلبات الجامعة بواقع (10 ساعات) و دراسة مواد اختيارية للكلية بواقع (7 ساعات).
- أن يكون الطالب قد استوفى نسب الحضور المقررة للدروس النظرية والعملية وأن يكون قد قام بعمل المتطلبات العملية أو الإكلينيكية لكل مقرر من المقررات الدراسية .
- الأيقل المعدل التراكمى العام للطالب ( CGPA ) عند التخرج عن 2.0

## مادة 10:

يسمى للطلاب بالتسجيل فى ما لا يقل عن 12 ساعة معتمدة وما لا يزيد عن 20 ساعة معتمدة فى الفصل الدراسى وطبقاً لمتطلبات المقررات الدراسية لكل مستوى وبموافقة المشرف الأكاديمى للطالب وحسب المعدل التراكمى للطلاب GBA الذى يقرره مجلس الكلية .

## مادة 11:

يسجل الطالب فى الفصل الدراسى الصيفى بما لا يزيد عن 9 ساعات معتمده .

## مادة 12 :

يشترط لنجاح الطالب في المقرر أن يحصل على تقدير D على الأقل على أن لا تقل الدرجة التي يحصل عليها في الامتحان التحريري عن 30% من الدرجة المخصصة لهذا الامتحان شريطة تاديه الطالب لامتحان العملي والشفوي وتكون تقديرات النجاح والرسوب كما يلي:

عدد النقاط	النسبة المئوية للدرجات	الدرجة	
Weight	Mark %	Grade	التقدير
4	$\geq 90\%$	A	ممتاز
3.7	$< 90\% \geq 85\%$	A-	
3.3	$< 85\% \geq 80\%$	B+	جيد جدا
3.0	$< 80\% \geq 75\%$	B	
2.7	$< 75\% \geq 70\%$	B-	جيد
2.3	$< 70\% \geq 65\%$	C+	
2.0	$< 65\% \geq 62\%$	C	مقبول
1.7	$< 62\% - \geq 60\%$	D	
0.0	لاقل من 60 %	F	راسب

## مادة 13:

يبدأ العمل بهذه اللائحة اعتباراً من بدا العام الجامعي الذي يلي تاريخ اعتمادها من المجلس الاعلى للجامعات

	Percentage range	points
A	اكتر من 90٪	4.00
A-	من 85٪ الى اقل من 90٪	3.70
B+	من 80٪ الى اقل من 85٪	3.30
B	من 78٪ الى اقل من 80٪	3.00
B-	من 75٪ الى اقل من 78٪	2.70
C+	من 72٪ الى اقل من 75٪	2.30
C	من 69٪ الى اقل من 72٪	2.00
C-	من 65٪ الى اقل من 69٪	1.70
D+	من 62٪ الى اقل من 65٪	1.30
D	من 60٪ الى اقل من 62٪	1.00
F	اقل من 60٪	صفر



# Key for Course Code

<b>Anatomy</b>	<b>GAN</b>	
<b>Biochemistry</b>	<b>BCH</b>	
<b>Biology</b>	<b>BIO</b>	
<b>Chemistry</b>	<b>GCH</b>	<b>General Chemistry</b>
	<b>OCH</b>	<b>Organic Chemistry</b>
<b>Conservative Dentistry</b>	<b>FPD</b>	<b>Fixed Prosthodontics</b>
	<b>END</b>	<b>Endodontics</b>
	<b>COD</b>	<b>Conservative Dentistry</b>
<b>Dental Materials</b>	<b>DMT</b>	
<b>English</b>	<b>ENG</b>	
<b>Genetics</b>	<b>GEN</b>	
<b>General Medicine</b>	<b>GMD</b>	
<b>General Pathology</b>	<b>GPT</b>	
<b>General Surgery</b>	<b>GSG</b>	
<b>Histology</b>	<b>HST</b>	
<b>Oral Histopathology</b>	<b>DAN</b>	<b>Dental Anatomy</b>
	<b>OBI</b>	<b>Oral Biology</b>
	<b>OPT</b>	<b>Oral Pathology</b>
<b>Microbiology</b>	<b>MIC</b>	
<b>Pharmacology</b>	<b>PHR</b>	
<b>Biophysics</b>	<b>BPH</b>	
<b>Physiology</b>	<b>PHS</b>	

*Continued*

<b>Oral Medicine</b>	<b>OMD</b>	
<b>Radiology</b>	<b>RAD</b>	
<b>Pedodontics</b>	<b>ORT</b>	<b>Orthodontics</b>
	<b>PED</b>	<b>Pedodontics</b>
<b>Oral Surgery</b>	<b>OSG</b>	
<b>Removable Prosthodontics</b>	<b>RPD</b>	
<b>Statistics</b>	<b>STA</b>	

## Academic Plan for Dental Students

*Distribution of courses in an ideal plan of enrollment*

*The student has to fulfill 184 credit hours for graduation*

**First year:**

**First semester**

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
None	GCH 111	General Chemistry	2	2	3
None	BPH 111	Biophysics	2	2	3
None	BIO 111	Biology	2	2	3
None	GEN 111	Genetics	1	-	1
None	DAN 111	Dental Anatomy I	1	2	2
University requirements I			2	2	3
University requirements II			1	2	2
<b>Total</b>			<b>11</b>	<b>12</b>	<b>17</b>

**Second semester**

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
None	OCH 121	Organic Chemistry	2	-	2
BPH 111*	DMT 121	Dental Materials I	2	2	3
BIO 111*	HST 121	General Histology	2	2	3
BIO 111*	MIC 121	Microbiology	2	2	3
GEN 111*					
DAN 111*	DAN 122	Dental anatomy II	1	2	2
University requirements III			2	2	3
University requirements IV			1	2	2
<b>Total</b>			<b>12</b>	<b>12</b>	<b>18</b>

## Second year

### First semester

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
DMT 121*	DMT 212	Dental Materials II	2	2	3
HST 121	OBI 211	Oral Biology I	2	2	3
BIO 111	GAN 211	General Anatomy I	2	2	3
BIO 111	PHS 211	Physiology I	2	2	3
OCH 122	BCH 211	Biochemistry	2	2	3
Elective course/ Faculty requirements V			1	-	1
Elective course/ Faculty requirements VI			1	-	1
<b>Total</b>			<b>12</b>	<b>10</b>	<b>17</b>

### Second semester

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
DMT 212*	DMT 223	Dental Materials III	2	2	3
OBI 211*	OBI 222	Oral Biology II	2	2	3
GAN 211*	GAN 222	General Anatomy II	2	2	3
PHS 211*	PHS 222	Physiology II	2	2	3
HST 121*	GPT 221	General Pathology	2	2	3
NONE	STA 221	Statistics	1	-	1
Elective course/ Faculty requirements VII			1	-	1
<b>Total</b>			<b>12</b>	<b>10</b>	<b>17</b>

### *Third year:*

#### **First semester**

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
DMT 212, DMT 223	COD 311	Conservative Dentistry I	1	4	3
DMT 212, DMT 223	FPD 311	Fixed Prosthodontics I	1	4	3
DMT 212, DMT 223	RPD 311	Removable Prosthodontics I	1	4	3
DAN 111, DAN 122	END 311	Endodontics I	1	2	2
GPT 221 OBI 211, 222	OPT 311	Oral Pathology I	2	2	3
PHS 211, 222	PHR 311	Pharmacology	2	2	3
Elective course/Faculty requirements VIII			1	-	1
Elective course/Faculty requirements IX			1	-	1
<b>Total</b>			<b>10</b>	<b>18</b>	<b>19</b>

#### *Second semester*

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
COD 311*	COD 322	Conservative Dentistry II	1	4	3
FPD 311*	FPD 322	Fixed Prosthodontics II	1	4	3
RPD 311*	RPD 322	Removable Prosthodontics II	1	4	3
END 311*	END 322	Endodontics II	1	2	2
OPT 311*	OPT 322	Oral Pathology II	2	2	3
BPH 111*	RAD 321	Dental Radiology	2	2	3
Elective course/Faculty requirements X			1	-	1
<b>Total</b>			<b>9</b>	<b>18</b>	<b>18</b>

### Fourth year:

### First semester

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
All preclinical courses	COD 413	Conservative Dentistry III	1	2	2
All preclinical courses	FP D 413	Fixed Prosthodontics III	1	2	2
All preclinical courses	RPD 413	Removable Prosthodontics III	1	2	2
All preclinical courses	END 413	Endodontics III	1	2	2
All preclinical courses	ORT 411	Orthodontics I	1	2	2
All preclinical courses	OMD 411	OralMedicine, Diagnosis Periodontology I	2	2	3
All preclinical courses	OSG 411	Oral Surgery & Anesthesia I	2	2	3
All preclinical courses	GSG 411	General Surgery	2	2	3
<b>Total</b>			<b>11</b>	<b>16</b>	<b>19</b>

### Second semester

Pre4-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
Allpreclinical courses	COD 424	Conservative Dentistry IV	1	2	2
Allpreclinical courses	FPD 424	Fixed Prosthodontics IV	1	2	2
Allpreclinical courses	RPD 424	Removable Prosthodontics IV	1	2	2
Allpreclinical courses	END 424	Endodontics IV	1	2	2
Allpreclinical courses	OMD 422	OralMedicine, & Periodontology Diagnosis II	2	2	3
Allpreclinical courses	OSG 422	Oral Surgery & Anesthesia II	2	2	3
All preclinical	ORT 422	Orthodontics II	1	2	2
Allpreclinical courses	GMD 421	General Medicine	2	-	2
Elective course/Faculty requirements XI			1	-	1
<b>Total</b>			<b>12</b>	<b>14</b>	<b>19</b>

## Fifth year:

### First semester

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
COD 413	COD 515	Conservative Dentistry V	1	4	3
CFP 413	FP D 515	Fixed Prosthodontics V	1	4	3
CRP 413	RPD 515	Removable Prosthodontics V	1	4	3
CEN 413	END 515	Endodontics V	1	2	2
Allpreclinical Courses	PED 511	Pedodontics I	2	2	3
OMD 411 OPT 311*	OMD 513	Oral Medicine & Periodontology and radiology III	2	2	3
OSG 411.OPT 311*	OSG 513	Oral Surgery & Anesthesia III	2	2	3
<b>Total</b>			<b>10</b>	<b>20</b>	<b>20</b>

### Second semester

Pre-requisite	Code	Course Title	Credit hours		
			Lectures	Practical	Total
DCD 424	COD 526	Conservative Dentistry VI	1	4	3
DFP 424	FPD 526	fixed Prosthodontics VI	1	4	3
DRP 424	RPD 526	Removable Prosthodontics VI	1	4	3
DEN 424	END 526	Endodontics VI	1	2	2
PED 511*	PED 522	Pedodontics II	2	2	3
OMD 531*	OMD 524	Oral Medicine & Periodontology IV	2	2	3
OSG 422	OSG 524	Oral Surgery & Anesthesia IV	2	2	3
<b>Total</b>			<b>10</b>	<b>20</b>	<b>20</b>

*Prerequisites marked with an asterisk have to be attended and not necessarily passed before the corresponding following courses.*

### Courses Required by the Faculty of Dentistry:

Course Code	Course title	Credit hours		
		Lectures	Practical	Total
ENG 111	English Language I	2	2	3
ENG 122	English Language II	2	2	3
COS 111	Computer science I	1	2	2
COS 122	Computer science II	1	2	2

### Elective courses:

Course Code	Course title	Credit hours		
		Lectures	Practical	Total
ITD 211	Introduction to Dentistry	1	-	1
BUD 221	Total Quality Management	1	-	1
ETH 211	Medical ethics and law	1	-	1
BAD 321	Financial Planning	1	-	1
ART 311	Color and Appearance	1	-	1
ART 421	Model Construction	1	-	1
FOD 321	Forensic Dentistry	1	-	1
PSY 421	Psychology and Sociology	1	-	1
DPM 421	Dental Practice Management	1	-	1
RES 311	Research Methodology	1	-	1
OSG 421	Instructor CPR	-	-	1



**First year:**

**First semester**

Code	Course Title	CW	Practical	Oral	Written	Total
GCH 111	General chemistry	20	20	20	40	100
BPH 111	Biophysics	20	20	20	40	100
BIO 111	Biology	20	20	20	40	100
GEN 111	Genetics	20	-	20	60	100
DAN 111	Dental anatomy I	20	20	20	40	100
University requirement I		20	-	20	60	100
University requirement II		20	20	-	60	100
Total		140	100	120	340	700

**First year:**

**Second semester**

Code	Course Title	CW	Practical	Oral	Written	Total
OCH 121	Organic Chemistry	40	-	-	60	100
DMT 121	Dental Materials I	20	20	20	40	100
HST 121	General Histology I	20	20	-	60	100
MIC 121	Microbiology	20	20	-	60	100
DAN 122	Dental Anatomy II	20	20	20	40	100
University requirements III		20	-	20	60	100
University requirements IV		20	20	-	60	100
Total		160	100	60	380	700

## Second year:

### First semester

Code	Course Title	CW	Practical	Oral	Written	Total
DMT 212	Dental materials II	20	20	20	40	100
OBI 211	Oral Biology I	20	20	20	40	100
GAN 211	General Anatomy I	20	20	20	40	100
PHS 211	Physiology I	20	20	20	40	100
BCH 211	Biochemistry	20	20	20	40	100
Elective course/Faculty requirements V		40	-	-	60	100
Elective course/Faculty requirements VI		40	-	-	60	100
Total		180	100	100	320	700

### Second semester

Code	Course Title	CW	Practical	Oral	Written	Total
DMT 223	Dental Materials III	20	20	20	40	100
OBI 222	Oral Biology II	20	20	20	40	100
GAN 222	General Anatomy II	20	20	20	40	100
PHS 222	Physiology II	20	20	20	40	100
GPT 221	General Pathology II	20	20	-	60	100
STA 221	Statistics	40	-	-	60	100
Elective course/Faculty requirements VII		40	-	-	60	100
Total		180	100	80	340	700

**Third year:**

**First semester**

Code	Course Title	CW	Practical	Oral	Written	Total
COD 311	Conservative Dentistry I	20	20	20	40	100
FPD 311	Fixed Prosthodontics I	20	20	20	40	100
RPD 311	Removable Prosthodontics II	20	20	20	40	100
END 311	Endodontics I	20	20	20	40	100
OPT 311	Oral Pathology I	20	20	20	40	100
PHR 311	Pharmacology	20	20	20	40	100
Elective course/Faculty requirement VIII		40	-	-	60	100
Elective course/Faculty requirement IX		40	-	-	60	100
Total		200	120	120	360	800

**Third year:**

**Second semester**

Code	Course Title	CW	Practical	Oral	Written	Total
COD 322	Conservative Dentistry II	20	20	20	40	100
FPD 322	Fixed Prosthodontics II	20	20	20	40	100
RPD 322	Removable Prosthodontics II	20	20	20	40	100
END 322	Endodontics II	20	20	20	40	100
OPT 322	Oral Pathology II	20	20	20	40	100
RAD 321	Dental Radiology	20	20	20	40	100
Elective course/Faculty requirement X		40	-	-	60	100
Total		160	120	120	300	700

**Fourth year:**

**First semester**

Code	Course Title	CW	Practical	Oral	Written	Total
COD 413	Conservative Dentistry III	20	20	20	40	100
FPD 413	Fixed Prosthodontics III	20	20	20	40	100
RPD 413	Removable Prosthodontics III	20	20	20	40	100
END 413	Endodontics III	20	20	20	40	100
ORT 411	Orthodontics I	20	20	20	40	100
OMD 411	Oral Medicine, Diagnosis & Radiology I	20	20	20	40	100
OSG 411	Oral Surgery & Anesthesia I	20	20	20	40	100
GSG 411	General Surgery	20	20	20	40	100
Total		160	160	160	320	800

**Fourth year:**

**Second semester**

Code	Course Title	CW	Practical	Oral	Written	Total
COD 424	Conservative Dentistry IV	20	20	20	40	100
FPD 424	Fixed Prosthodontics IV	20	20	20	40	100
RPD 424	Removable Prosthodontics IV	20	20	20	40	100
END 424	Endodontics IV	20	20	20	40	100
OMD 422	Oral Medicine, Diagnosis & Radiology II	20	20	20	40	100
OSG 422	Oral Surgery & Anesthesia II	20	20	20	40	100
GMD 421	General Medicine	20	-	20	60	100
ORT 422	Orthodontics II	20	20	20	40	100
Elective course/Faculty requirement XI		40	-	-	60	100
Total		200	140	160	400	900

***Fifth year:***

**First semester**

Code	Course Title	CW	Practical	Oral	Written	Total
COD 515	Conservative Dentistry V	20	20	20	40	100
FPD 515	Fixed Prosthodontics V	20	20	20	40	100
RPD 515	Removable Prosthodontics V	20	20	20	40	100
END 515	Endodontics V	20	20	20	40	100
PED 511	Pedodontics I	20	20	20	40	100
OMD 513	Oral Medicine, Diagnosis & Radiology III	20	20	20	40	100
OSG 513	Oral Surgery & Anesthesia III	20	20	20	40	100
Total		140	140	140	280	700

***Fifth year:***

**Second semester**

Code	Course Title	CW	Practical	Oral	Written	Total
COD 526	Conservative Dentistry VI	20	20	20	40	100
FPD 526	Fixed Prosthodontics VI	20	20	20	40	100
RPD 526	Removable Prosthodontics VI	20	20	20	40	100
END 526	Endodontics VI	20	20	20	40	100
PED 522	Pedodontics II	20	20	20	40	100
OMD 524	Oral Medicine & Periodontology IV	20	20	20	40	100
OSG 524	Oral Surgery & Anesthesia IV	20	20	20	40	100
Total		140	140	140	280	700

***CW: Course work that involves periodic quizzes, midterm and assignments.***

## Course Outline

### **General CHEMISTRY (GCH 111)**

The course deals with the basic principles of chemistry and the application of chemistry in order to provide the student with a clear and logical presentation of these concepts. The student should be able to use the knowledge of atomic and molecular structure to predict chemical bonding and reactivity, explain observed chemical behavior and demonstrate an understanding of the changes involved in equilibrium and thermo chemical systems.

The course of general chemistry comprises two-hour lecture and two hours of practical sessions weekly.

#### **SYLLABUS**

##### . Measurement

- SI units, uncertainty in measurement, significant figures in calculations, extensive and intensive properties, atomic masses, formula masses.

##### . Stoichiometry

- Law of conservation of mass, balancing chemical equations, mass relationship and limiting reagents, theoretical, actual and percent yield, molecular and structural formulas.

##### . Atomic structure

- Electrons, protons, and neutrons, Bohr model of hydrogen atom, Quantum numbers, pictures of orbitals.

##### . Electronic structure and periodic table

- Electron configuration, the periodic table, atomic and ionic radii, ionization energy, electron affinity, chemical properties and the periodic table.

##### . Chemical bonds

- Ionic bonds, Lewis structure of molecules, covalent bonds and polarity, electro negativity, formula charges, resonance structures and exceptions to it.

##### . Molecular shape and chemical bonding

- VSEPR model, polar and non-polar molecules, molecular shapes.

##### . Acid-base chemistry

- $\text{pH}$ ,  $\text{pOH}$ ,  $\text{pK}$ , Bronsted lowry definitions, buffer solutions, polyprotic acids, Lewis acids and bases

##### . Some fundamental concepts of physical chemistry

- Gases
- Liquids and solids
- Solutions

- . Thermochemistry
- . Chemical equilibrium
- . Chemical Kinetics
- . Ionic equilibrium

### **BIOPHYSICS (BPH111)**

This course provides the students with a presentation of the basic concepts of physics and strengthens an understanding of the concepts and principles through a broad range of interesting application to the real world.

The course consists of two-hour lecture and two hours of practical sessions weekly.

#### **SYLLABUS**

- . Electricity and magnetism
  - Coulomb's law, the electric field, potential, capacitance and properties of dielectrics, current, resistance and electromotive force, Direct current circuits and instruments, magnetic field, membrane potential, electrocardiogram, electromyogram, electroencephalogram, electroretinogram and electrooculogram.
- . Heat and properties of matter
  - Units and dimensions, equilibrium of a particle, frictional force, gravitational force, elasticity, harmonic motion, surface tension, viscosity and hydrodynamics.
- . Heat and thermodynamics
  - Temperature and expansion, heat measurement, transfer of heat, thermal properties of matter, the laws of thermodynamics
- . Sound waves
  - Intensity of sound waves, intensity level and loudness, frequency of strings, ultrasonic, medical applications of ultrasonic.
- . Light waves
  - Lenses and optical instruments, electron microscope, interference and light diffraction, polarization, medical application of light, laser, medical application of laser.
- . Radiation
  - X-rays, medical application of x-rays, nuclear medicine.

## **BIOLOGY (BIO 111)**

The aim of this course is to provide dental students with a background of biology, an understanding and appreciation of the vast diversity of living organisms, and their evolutionary and ecological relationships. This course includes microscopic structure of animal cell and function of various integral parts. The course includes the structure of plant cell, the properties and constituents of enzyme systems and the metabolic adaptations by which living systems obtain and utilize energy by photosynthesis and cellular respiration. The practical course emphasizes light microscopic slides to help the student with the challenging task of mastering the principles of biology.

The course consists of two-hour lecture and two hours of practical sessions weekly.

### **SYLLABUS**

#### **ZOOLOGY**

##### Cell biology

- Introduction and microscopy
- Cellular organization
- The animal cell
- The cytoplasmic matrix
- The nucleus
- Cell division

##### Embryology

- Introduction and embryogenesis of chordates
- Fertilization
- Embryonic development

##### Physiology

- Introduction, cells, nutrition, digestion and metabolism
- Circulatory system
- Excretory system
- Nervous system
- Muscular system
- Endocrine system
- Hormones and reproduction

#### **BOTANY**

##### Plant structure

- The plant cell:  
Light and electron microscope, cell wall, plasma membrane, cytosol, endoplasmic reticulum, chloroplasts, mitochondria, golgi apparatus, ribosomes, vacuole, nucleus.
- Plant tissue:  
Meristematic tissues, permanent tissues, vascular tissues.

##### Plant physiology



- Plant-water relationships
- Plant-mineral nutrition
- Enzymes
- Energy and life. I Energy capturing reactions
- Energy and life. II Energy releasing reactions

### **GENETICS (GEN 111)**

The course includes information on population genetics that helps the student better understand how genetic variation is maintained through generations

The course consists of a two-hour lecture

Cell cycle and molecular genetics

- Cell division
- Inheritance

Monohybrid crosses, mutations, maternal inheritance, lethal alleles, Recombinant DNA technology and transgenic plants

### **ORGANIC CHEMISTRY (OCH 121)**

This course provides dental students with background knowledge of organic chemistry relevant to medical fields, to develop an understanding of the numerous applications of organic chemical principles and reactions in different biochemical systems. The laboratory sessions will illustrate some of the principles and reactions discussed in lectures and provide practical experience in the techniques involved in synthesizing, isolating, purifying and characterizing organic compounds.

The course consists of two-hour lecture weekly.

### **SYLLABUS**

- . Organic compounds and review of chemical bonding saturated hydrocarbons and unsaturated hydrocarbons
- . Aromatic compounds
- . Hydroxy compounds and halides
- . Introduction to isomerism and molecular geometry
- . Ethers and epoxides in living systems
- . Carbonyl compounds: aldehydes and ketones
- . Carbonyl compounds: carboxylic acids and derivatives
- . Amines and related compounds
- . Enantiomerism
- . Carbohydrates
- . Amino acids and Proteins
- . Terpenes and steroids
- . Medicinal chemistry

## **DENTAL ANATOMY (DAN 111. 121)**

The basic course of dental anatomy consists of a thorough study of the nomenclature or the system of names used to describe different surfaces of tooth as well as a full description of the morphology of crown and root for each tooth in both deciduous and permanent dentition. The curriculum is designed to correlate the physiologic tooth form of the teeth with the health of the periodontium.

The course comprises one-hour lecture and two hours practical sessions weekly.

### **SYLLABUS**

#### **DENTAL ANATOMY (DAN 111)**

- . Introduction and nomenclature
  - Classification of human dentition
  - Numbering system & dental formula
- . Macro and micro anatomy of teeth
  - Function of teeth
  - Anatomical feature of crown
- . Division of crown and roots into thirds
- . Life history of deciduous and permanent teeth
- . Surface anatomy of maxillary central incisor
- . Surface anatomy of maxillary lateral incisor
- . Surface anatomy of mandibular central incisor
- . Surface anatomy of mandibular lateral incisor
- . Surface anatomy of maxillary canine
- . Surface anatomy of mandibular canine
- . Surface anatomy of maxillary first premolar
- . Surface anatomy of maxillary second premolar
- . Surface anatomy of mandibular first and second premolar
- . Surface anatomy of maxillary first molar

#### **DENTAL ANATOMY (DAN122)**

- . Surface anatomy of maxillary 7 & 8
- . Surface anatomy of mandibular first molar
- . Surface anatomy of mandibular 7 & 8
- . Surface anatomy of deciduous anterior teeth
- . The deciduous molars
- . Anatomical variations between deciduous and permanent teeth
- . The mandible at different ages
- . The teeth at different ages
- . Physiological significance of crown outline
- . Physiological tooth form protecting the periodontium
- . Occlusion of permanent and deciduous teeth

## **DENTAL MATERIALS (DMT 121,212, 223)**

This is a lecture and practical course dealing with the physical properties of dental material and test methods employed in their development and evaluation. Emphasis is placed on the clinical significance of the properties and evaluation of test procedures.

The course consists of two-hour lecture and two hours of practical sessions weekly. The practical course includes seminars on topics that are assigned to each student who conducts an assay discussing this topic.

### **SYLLABUS**

#### **DENTAL MATERIALS (DMT121)**

- . Structure of matter
  - Interatomic bonding, crystallography, dental applications
- . Physical properties
  - Mass related properties
  - Thermal properties
  - Optical properties
  - Miscellaneous
- . Mechanical properties of dental materials
  - Stress-strain curve
  - Other mechanical properties and tests
  - Hardness
  - Rheology
- . Adhesion and bonding
- . Polymers
- . Metallurgy
  - Metals
  - Alloys
  - Phase diagram
  - Heat treatment
- . Tarnish and corrosion

#### **DENTAL MATERIALS (DMT212)**

- . Impression materials
- . Model and die materials
- . Dental amalgam
- . Introduction to composites
- . Direct esthetic restorative materials
- . Denture base resins
- . Biocompatibility

### **DENTAL MATERIALS (DMT223)**

- . Casting technology
- . Investment material
- . Dental casting alloys
- . Wrought base metal alloys
- . Joining of metal
- . Waxes
- . Dental cements
- . Endodontic materials
- . Introduction to ceramics
- . Dental ceramics
- . Alloys for porcelain metal restorations

### **GENERAL HISTOLOGY (HST 121)**

The basic course in human histology consists of a thorough study of the cells, tissues, organs and organ systems of the body under the microscope. Correlation is made with other courses in the basic science and clinical disciplines of the dental curriculum.

The course comprises two-hour lecture and two hours of practical sessions weekly.

### **SYLLABUS**

- . The cell
  - Cytoplasm: Cytoplasmic organelles, Cytoplasmic inclusions
  - Nucleus
- . Tissues of the body
  - Epithelial tissue
  - Connective tissue proper
  - Cartilage
  - Bone
  - Blood
- . Muscular tissue: skeletal, cardiac, smooth muscles
- . Nervous tissue: neuron, ganglia, neuroglia, degeneration and regeneration
- . Cytogenic: Cell cycle, division, chromosomes, karyotyping, Barr body
- . Digestive system: oral cavity, tongue, salivary glands, teeth, lip, digestive tube

## **MICROBIOLOGY (MIC 121)**

The course emphasizes on knowledge about an understanding of the microbiology and immunology of the human oral cavity. Recent advances in microbiology are included in order to achieve more rapid and more effective means in diagnosis, treatment and prevention of dental caries, periodontal disease and other oral infections. In addition, hepatitis, acquired immune deficiency syndrome and other medical diseases, which have been assumed to be pivotal, are discussed.

The course comprises two-hour lecture and two hours of practical session weekly.

### **SYLLABUS**

- . Taxonomic position of Microorganism  
(Classification, comparison between prokaryotic & eukaryotic, diversity of microorganism)
- . Cell structure and function  
(Cell wall, cell membrane, mesosomes, capsule, Pili, flagellae, spores)
- . Bacterial growth & physiology  
(Bacterial reproduction, physical conditions for growth)
- . Media for bacterial growth: (basal, enriched, selective, indicator media)
- . Bacterial genetics  
(Chromosome, gene expression & regulation, plasmids, bacterial variation transduction & conjugation, genetic recombination)
- . Antimicrobial chemotherapy
- . General virology (replication, cultivation, pathogenesis, lab diagnosis, treatment)
- . Sterilization & disinfection (by heat, irradiation, filtration, gases)
- . Methods of disinfection (Chemicals, gases, examples)
- . Host parasites interactions  
(Stages of infection, microbial virulence, toxin production)
- . Immunity (Innate immunity, acquired immunity, cells involved in immunity humoral & cellular immunity, hypersensitivity, transplantation)
- . Systemic microbiology (bacterial, viral and mucocutaneous infection)
- . Oral microbiology (Oral flora, dental caries, periodontal diseases, dentistry microbiology laboratory)

## **ORAL BIOLOGY (OBI 211, 222)**

This course provides students with an introduction to orofacial histology and embryology from a microscopic and developmental aspect. Principles of cell structure and function are studied with particular emphasis on those concerned with head, facial region and oral cavity supplemented with slides. The aim is to provide the student with morphological basis for their future in clinical dentistry.

The practical course includes the preparation of ground and decalcified sections and identification of different oral and dental hard and soft structures under the microscope.

The course comprises two-hour lecture and two hours of practical sessions weekly.

### **SYLLABUS**

#### **ORAL BIOLOGY (OBI 211)**

- . Development and growth of dental and paradental tissue
- . Enamel (development, composition and structure)
- . Dentin (development, composition and structure)
- . Pulp
- . Cementum
- . Periodontal ligaments
- . The alveolar bone and jaws (structure, changes during tooth eruption)

#### **ORAL BIOLOGY (OBI 222)**

- . Oral mucosa
  - Masticatory, lining, specialized mucosa, functions, structure and subdivision of oral mucosa.
- . Dentogingival junction
  - Structure, development of junctional epithelium, shift of dentogingival junction and mode of attachment.
- . Salivary glands
  - Classification, development and growth, structure, arrangement of cells, secretory units, duct systems, major and minor salivary glands, saliva.
- . Tooth eruption
  - Stages of physiologic movement, pattern of movement, theories, shedding of deciduous teeth, pattern of shedding, histology of shedding, mechanism of resorption and shedding, abnormal behavior of primary teeth.
- . Maxillary sinus
  - Development, anatomy, histology, function, clinical consideration
- . Head and neck

Pharyngeal apparatus, derivatives of pharyngeal pouches, clefts and arches, floor of pharynx, development of tongue, face, palate, mandible, maxilla, methods of skull growth, growth of mandible and maxilla.

### **PHYSIOLOGY (PHS 211, 222)**

This course deals with human physiology that dental students can apply in clinical work. Emphasis has been placed on physiology in relation to disease. In the interest of clarity, each system is reviewed with reference to function and balanced mechanism that control body homeostasis. Experimental physiology is directed to provide students with background on various investigations to assess proper organ function.

The course comprises two-hour lecture and two hours of practical sessions weekly.

### **SYLLABUS**

#### **PHYSIOLOGY (PHS 211)**

##### . Blood

- Types & sites of synthesis & functions of plasma proteins
- Hematocrite value
- Factors affecting erythropoiesis
- B12 absorption and deficiency
- Anemia
- White blood cells
- Mechanism of phagocytosis
- Innate and acquired immunity
- Types of T lymphocytes
- Humoral immunity & structure of antibodies
- Hemostasis and platelet functions
- Intrinsic & extrinsic pathways of blood coagulation
- Blood groups and importance of Rh factor
- Complications of incompatible blood transfusion
- Abnormalities of blood coagulation
- Anticoagulants

##### . Respiration

- Mechanism of inspiration and expiration
- Respiratory pressures
- Surfactant; composition, function and deficiency
- Dead space; types, function and factors affecting
- Pulmonary and alveolar ventilation
- Lung volumes and capacities
- Diffusion of gases

- Hypoxia
- Carbon monoxide poisoning
- Dyspnea
- . Nerves and Muscles
  - Types of nerve fibers
  - Causes of resting membrane potential
  - Action potential, causes & ionic basis

### *PHYSIOLOGY (PHS 222)*

- . Nerves & muscles
  - Excitability changes during action potential
  - Conduction of nerve impulses
  - Mechanism of muscle contraction
  - Mechanism and properties of neuromuscular transmission
- . Autonomic
  - Somatic and autonomic nervous system
  - Types and functions of autonomic ganglia
  - Functions of sympathetic nervous system
  - Functions of parasympathetic nervous system
  - Adrenergic receptors
  - Cholinergic receptors
  - Chemical transmitters
  - Drugs acting on the autonomic nervous system
- . Circulation
  - Action potential of cardiac muscles
  - Cardiac properties
  - Rhythmicity and pacemaker of the heart
  - Factors affecting contractility of cardiac muscles
  - Excitation contraction coupling in cardiac muscle
  - Cardiac output, extrinsic & intrinsic regulation & heart sounds
  - Arterial blood pressure
- . CNS
  - Structure of synapse and mechanism of transmission
  - Excitatory & inhibitory post synaptic potentials
  - Properties of synaptic transmission
  - Somatic sensations
  - Types of cutaneous pain
  - Mechanism and examples of referred pain
  - Pain control analgesic system
  - Types of thermoreceptors & range of stimulation
  - Headache: types and causes



- Tactile discrimination
- Adaptation of receptors

### **GENERAL ANATOMY (GAN 211, 222)**

This course deals with general anatomy of human body where basic knowledge helps to clarify and is of importance to an understanding of the clinical disorders that may arise. As a preliminary to the dissection of the head and neck, the student is provided with information about the skull and cervical vertebrae and their relation with many body points which can be felt. In addition, the course includes sound knowledge of the structures which pass through or are attached to them.

The course consists of two-hour lecture and two-hour practical sessions weekly.

### **SYLLABUS**

#### **GENERAL ANATOMY (GAN 211)**

- . Introduction
- . Anatomical terms
- . Movements of joints
- . General arrangement of the body
- . Skin
- . Digestive system
- . Respiratory system
- . Circulatory system
- . Lymphatic system
- . Urinary system
- . Genital system
- . Endocrine system
- . Nervous system
- . Articular system
- . Muscular system
- . Skeletal system
- . Blood supply of the bones
- . Bones of the upper limb
- . Bones of the lower limb
- . Vertebral column
- . Thoracic cage
- . Skull
- . Mandible
- . Eye and ear
- . Growth and aging

### **GENERAL ANATOMY (GAN222)**

- . Norma verticalis and norma frontalis
- . Maxillary air sinus
- . Norma occipitalis and norma lateralis
- . Ptrygo-palatine fossa
- . Norma basalis
- . The skull bones
- . Muscles and ligaments attached to the skull
- . Mandible
- . Hyoid bone
- . Scalp, the face
- . Parotid gland
- . Cranial cavity, emissary veins
- . Pituitary gland, temporal and infratemporal fossae
- . Back of the neck, suboccipital, posterior, anterior triangle of the neck
- . Submandibular triangle of the neck
- . Submandibular, sublingual glands
- . Muscles of the side of the neck, deep fascia of the neck, thyroid gland
- . Arteries of the neck, veins of the neck, Nerves of the head and neck
- . Sympathetic trunk
- . Parasympathetic ganglia
- . Cervical plexus
- . Lymph drainage of the head and neck
- . Tongue
- . Soft palate, pharynx, palatine tonsil
- . Larynx
- . The orbit, lacrymal glands
- . Eye ball
- . Nasal cavity
- . Paranasal air sinuses
- . The ear

### **BIOCHEMISTRY (BCH 211)**

This course deals with the different life's processes in terms of molecular structure of food substances and body constituents. The student is familiar with different ways of expression of substances, familiar with different terms and is able to understand the biological significance of different phenomena. The student is also acquainted with the chemical changes that occur in the body to produce energy of form biologically active from food materials.

The course consists of one-hour lecture and two hours of practical sessions weekly.

## **SYLLABUS**

- . Physio-chemical principles
- . Carbohydrates
- . Lipids of physiological importance
- . Proteins
- . Immunoglobulins
- . Hemoglobin
- . Enzymes
- . Vitamins
- . Purines, Pyrimidines and nucleotides
- . Introduction to metabolism
- . Biological oxidation and respiratory chain
- . Metabolism of carbohydrates
- . Metabolism of lipids
- . Metabolism of proteins
- . Plasma proteins
- . Metabolism of hemoglobin
- . Metabolism of nucleoproteins
- . Metabolism of minerals

## **GENERAL PATHOLOGY (GPT 221)**

This course deals with the development, gross, microscopic alterations, history and the cause of the disease. It forms the basis for correct diagnosis and therapy. The study of pathology is concerned with the nature of the disease including its different aspects that may be influenced by the genetic, cytological and biochemical changes.

The course comprises two-hour lecture and two hours of practical session weekly.

## **SYLLABUS**

- . Cell injury and adaptation
- . Inflammation: acute and chronic inflammation
- . Healing and repair  
(Regeneration, organization, healing by fibrosis, healing of bones and peripheral nerves)
- . Circulatory disturbances  
(Hyperemia, general venous congestion, local venous congestion, thrombosis, embolism, ischemia, infarction, gangrene, hemorrhage, edema, shock).
- . Genetic disorders
- . The Immune response  
(Immunity, hypersensitivity reactions, auto immune diseases)
- . Infectious diseases  
Viral infections

- Mycotic diseases
- Bacterial infections
- Parasitic diseases
- . Vitamin deficiency
  - (Rickets, osteomalacia, Vitamin K deficiency, Vitamin C deficiency, Scurvy, Vitamin B complex deficiency, Beri-Beri and Pellagra)
- . Disturbances of growth
  - (Atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia)
- . Neoplasia
  - (Etiology & predisposing factors, Co-Carcinogens, general characters of benign tumors, benign epithelial tumors, malignant epithelial tumors, benign mesenchymal tumors, malignant mesenchymal tumors, pigmented tumors, general characters of benign tumors, general characters of malignant tumors, spread of malignant tumors, prognosis of tumors).
- . Effect of ionizing radiation
  - (Sources of radiation, effect of radiation on different tissues of the body, effect of radiation on different tumors, effect of total body irradiation).

## **STATISTICS (STA221)**

This course includes statistical bases that aid in data analysis. The student should be able to present, interpret and analyze the collected data. Probability and analysis of variance will be clarified. The course consists of one-hour lecture weekly.

### **SYLLABUS**

- .Definite integrals and substitution
- .Probability, conditional probability and independent events
- .Variability and mathematical expectation
- .Basics and application of functional analysis

## **PHARMACOLOGY (PHR 311)**

Pharmacology is divided into two phases. The first phase includes a thorough study of basic concepts and principles in pharmacology using mainly prototype drugs. Emphasis is placed on the mechanism of action of drugs, their absorption, distribution, excretion, toxicity, and drug interaction.

The second phase deals with clinical aspects of therapeutics, control of pain and anxiety. Attention is given to useful drugs and their indications and contraindications. The course consists of a one-hour lecture and two-hours practical session weekly.

## SYLLABUS

- General introduction: Absorption, routes of administration, biotransformation of drugs, excretion of drugs.
- Factors affecting drug action and doses, drug receptors
- Autonomic nervous system: general introduction
  - Parasympathomimetic drugs
  - Muscarinic blockers
  - Sympathomimetic drugs
- Sympathetic blocking drugs
  - $\alpha$  Blockers
  - $\beta$  Blockers
- Adrenergic neurone blockers
- Ganglion blockers
- Skeletal muscle relaxants
- Drugs used in bleeding disorders
- (Vitamin K, anticoagulants, general anesthetics, anti-inflammatory drugs, narcotic analgesics, local anesthetics).
- Antimicrobial chemotherapy
- Inhibitors of protein synthesis
- (Erythromycin, Clindamycin, Tetracycline, Aminoglycosides, Chloramphenicol)
- Antimicrobial drugs that interfere with bacterial nucleic acid
- (Metronidazole, Quinolones)
- Antimicrobials that act as antimetabolites
- Antifungal drugs
- Antiviral drugs
- Antiseptics and disinfectants
- Drug for dental caries and periodontal disease
- Emergency treatment in dental practice
- Drug-Drug Interactions
- Use of drug during pregnancy and lactation

## **CONSERVATIVE DENTISTRY (COD 311)**

This is a preclinical course to introduce the science of operative dentistry to the student as well as to familiarize him with the basic definitions, nomenclature, instruments used and principles of cavity preparation and cutting in tooth tissues. The course comprises one –hour lecture and two two-hour practical sessions.

### **SYLLABUS**

- . Definition, scope and objectives
- . Lesions involved in tooth destruction and discoloration  
(Caries, attrition and abrasion, erosion, tooth fracture, endodontically treated teeth, developmental anomalies).
- . Instruments and instrumentation  
(Hand and rotary instruments, classification, design, types, uses, cutting efficiency, heat generation).
- . Nomenclature and classification of cavities
- . General principles of cavity preparation  
(Biologic and mechanical principles).

## **CONSERVATIVE DENTISTRY (COD 322)**

The second semester deals with the properties; characteristics and handling of amalgam and cast gold restorative materials. as well as it emphasizes on the composition and properties of composite resins with special reference to their indications and handling. The practical sessions include cavity preparation (classes 1 and 2) for amalgam and cast gold restoration on molars and premolars. Practical sessions cover amalgam manipulation and restoration of cavities for cast restorations and class 3 and class 5 for composite restorations

The course comprises one-hour lecture and two two-hour practical sessions weekly

### **SYLLABUS**

- . The amalgam restorations  
(Advantages, indications, composition, types, reactions, manipulation, cavity preparation).
- . The cast gold restorations  
(Advantages, indications, composition, types, cavity preparation).
- . An introduction to adhesion  
(Definition, types, adhesive systems, dental applications)
- . Composite resins  
(Composition, properties, indications, handling, cavity preparation).
- . Glass ionomer cements  
(Composition, properties, indications, handling).
- . Insulating and base materials  
(Requirements, indications, types, manipulation).

## ***Removable Prosthodontics (RPD 311, 322)***

Removable prosthodontics concerns the art and science involved in replacing lost dental and associated structures by means of artificial appliances. This course is concerned with the laboratory procedures involved in the construction of complete dentures.

The complete denture course is introduced to the student to learn the basic clinical concepts and practices that are included to coordinate laboratory procedures with clinical practice and to be able to employ the skills to accomplish selected procedures in complete denture construction.

In the practical sessions the students will be trained to perform all laboratory steps involved in complete denture construction starting with the construction of special trays, occlusion blocks, mounting on articulators, setting-up of artificial teeth. Then he will process the dentures; and then finish and polish them.

The course comprises one-hour lecture and two-two hours practical sessions weekly.

## **SYLLABUS**

### ***Removable Prosthodontics (RPD 311)***

- Introduction and orientation to the course
- Anatomy and physiology in relation to complete dentures
- Impressions trays (stock and special trays and materials used)
- Edentulous casts (Boxing of impressions and preparation of the casts)
- Posterior palatal seal and denture relief
- Basic mandibular movements
- Articulators and face bows
- Trial denture bases and occlusion blocks
- Selection and setting of artificial teeth and waxing-up
- Processing of dentures
- Repair of fractured dentures

### ***Removable Prosthodontics (RPD 322)***

This course is concerned with the laboratory procedures involved in the construction of removable partial dentures.

The partial denture course acquaints the student with the principles, components of removable partial dentures and sequence of technical procedures involved in fabrication of removable partial dentures.

In the practical sessions the students will be trained to perform the different procedures involved in the fabrication of removable partial dentures starting with planning the design of different components and ending with casting the framework.

The course comprises a one-hour lecture and two-two hour practical sessions weekly.

- Introduction and orientation to the course
- Classifications in removable partial dentures
- Component parts of removable partial dentures
- Removable partial denture bases
- Occlusal rests and similar components
- Direct retainers ( Precision attachments and clasps)
- Indirect retainers
- Major and minor connectors
- Stress breakers
- Dental surveyor and cast surveying
- Laboratory steps in removable partial denture construction
- Temporary removable partial dentures.

### ***FIXED PROSTHODONTICS (FPD311, 322)***

This scope of instruction in Fixed Prosthodontics involves the art and science of replacing missing teeth and lost or diseased tooth structure with fixed restorations. The first semester deals with the basic definitions, nomenclature, instruments used and principles of tooth reduction and impression materials. In the practical course the student is introduced to instruments. The preparation for full metal coverage is given in the laboratory along with the wax pattern.

The course comprises one-hour lecture and two two-hours of practical sessions weekly.

### ***SYLLABUS***

#### ***FIXED PROSTHODONTICS (FPD311)***

- . Terminology
- . Instruments
- . Principles of tooth reduction
- . Full metal crown
- . Wax pattern
- . Gingival tissue displacement
- . Impression materials and techniques

#### ***FIXED PROSTHODONTICS (FPD322)***

This semester deals with tooth preparation for different restorations, and on alloys and casting technology. The practical course involves jacket crown preparation and veneered crown preparation in the laboratory.

The course comprises one-hour lecture and two two-hours of practical sessions weekly.

- . All ceramic preparation
- . Non-metallic restoration: Porcelain and acrylic jacket crowns
- . Veneered preparations



- . Casting alloys
- . Ceramometallic bond
- . Spruing
- . Investing
- . Casting
- . Working casts and dies

## **ENDODONTICS (END 311,322)**

The science of Endodontics is first introduced to the student at the beginning of the third level with a preclinical course.

It consists of a series of lectures and laboratories which stress the fundamentals of the basics of Endodontics. Upon completion of this course the student is ready to perform the same procedures on clinical patients.

The practical education sessions are designed to provide each student with a broad background of pulp space morphology of all teeth, enable the student to perform the access cavity preparation of all teeth properly according to the fundamental principles and to familiarize the student with the basic endodontic instruments.

The course comprises one hour lectures and two hours of practical sessions weekly.

## **SYLLABUS**

### **ENDODONTICS (END311)**

- Introduction to endodontics.
- Pulp space morphology
- Endodontic instruments
- Access cavity preparation.
- Common errors during Access cavity preparation

### **ENDODONTICS (END322)**

- Length determination
- Cleaning and shaping the root canal system (cleaning and shaping concepts, working short of apex, apical preparation, instruments and methods, mechanical and biological objectives, concepts for canal preparation, recent techniques, finalizing preparation)
- Chemical aids in endodontics
- Common errors in root canal preparation
- Obturation of the canal space (purpose, rationales, importance, characteristics of ideal canal filling, gutta percha and cement sealers)
- Techniques for canal obturation (lateral condensation, vertical condensation, chemically altered gutta percha, thermoplasticized gutta percha, solid core filing techniques, paste root canal filling)
- Obturation errors.

**Evaluation:**

Upon completion of these practical sessions the student should be able to successfully prepare and obturate a single or multi rooted canal system in the laboratory

**Methodology:**

Lectures, data show demonstration and reading assignments.  
Written examination and pre-clinical laboratory performance evaluation.

**ORAL PATHOLOGY (OPT 311, 322)**

The program consists of an interdisciplinary course that covers the basic principles of pathology through presentation of morphologic, chemical and physical changes of basic disease processes. An important specific emphasis is placed on diagnosis, etiology, pathogenesis and clinical manifestation of disease processes in the oral cavity.

Important topics such as etiology and histopathology of dental caries, prevention of dental disease, immunology and diagnosis of pulp and periapical diseases are covered by this curriculum. The aim is to provide a sound basis for diagnosis of oral lesions and a rationale for their treatment. The aim of practical course of oral pathology is to identify different lesions microscopically to assist in the principles of differential diagnosis of oral lesions.

The course comprises two-hour lecture and two hours of practical sessions weekly.

**SYLLABUS****ORAL PATHOLOGY (OPT311)**

- .Developmental disturbance of oral and para-oral structures
  - Developmental disturbances of jaws
  - Developmental disturbance of the lip and palate
  - Developmental disturbances of gingival
  - Developmental disturbances of salivary glands
  - Developmental disturbances of shape, size and structure of teeth
- . Dental caries
  - Etiology, theories of dental caries
  - Role of carbohydrates
  - Role of microorganisms
  - Role of dental plaque
  - Clinical aspects, histopathology, methods of caries control
- Diseases of the pulp and periapical tissues
  - Pulpitis and its different types
  - Periapical lesions

- Acute and chronic periapical abscess
- . Cysts of the oral cavity
  - Classification and theories of cyst formation
  - Odontogenic cysts
  - Non-odontogenic cysts
  - Cysts of the soft tissue
  - Pseudocysts
- . Attrition, abrasion and erosion of teeth
- . Bone disease
  - Classification of bone diseases
  - Hereditary bone diseases
  - Dystrophic bone diseases
  - Nutritional bone disease and idiopathic disease
  - Inflammatory bone disease

#### **ORAL PATHOLOGY (OPT322)**

- White and premalignant lesions:  
(Leukoplakia, Erythroplakia, oral submucous fibrosis, Syphilitic leukoplakia, Plummer Vinson's syndrome)
- Benign non-odontogenic tumors
  - Benign tumors of epithelial origin:  
(papilloma, Keratoacanthoma, pigmented nevus)
  - Benign tumors of connective tissue origin:  
Reactive hyperplastic lesion
- Tumors of fibrous tissue
- Tumors of fat cells
- Vascular lesions
- Tumors of cartilage
- Tumors of bone
- Neural lesions
- Malignant epithelial tumors
- Malignant C.T. tumors
- Metastatic tumors
- Odontogenic tumors
- Odontogenic tumors of epithelial origin
- Odontogenic tumors of epithelium with odontogenic ectomesenchyme
- Odontogenic tumors of C.T. origin
- Malignant odontogenic tumors
- Salivary glands diseases
- Salivary gland tumors
- Vesiculo-Bullous lesions
- Infectious disease

## **RADIOLOGY (RAD321)**

This course includes the fundamentals of oral radiology starting from basic concepts of physics and components of dental film. The student develops the skill of proper film adjustment and proper selection of radiographic technique. The course also deals with factors affecting the image in order to point out areas that influence proper interpretation. Recent advances in oral radiology to assess bone quality and quantity and to recognize abnormal signs are considered. Practical course includes training of students on proper radiographic examination with detailed step-by-step description of film processing. The students attend demos on different recent techniques in oral radiology.

The course comprises a two-hours lecture and a two-hour clinical sessions weekly.

### **SYLLABUS**

- . Radiation physics
- . Biologic effects of radiation
- . Radiation safety and protection
- . X-ray films, intensifying screens and grids
- . Projection geometry
- . Processing x-ray films
- . Radiographic quality assurance
- . Infection control
- . Intra oral radiographic examination
- . Extra oral radiographic examination
- . Direct digital radiography, computed tomography
- . Magnetic resonance imaging, sialography
- . Normal radiographic anatomy
- . Interpretation of pathology, dental caries

## **ORTHODONTICS (ORT 411, 422)**

This course is directed towards providing the dental student with the knowledge and skills necessary to recognize an established or developing malocclusion and to institute preventive and therapeutic treatment plans within the scope of general dental practice.

The practical program includes didactic and laboratory exercises that provide a strong foundation for delivery of limited orthodontic treatment as part of an adult and child patient's comprehensive dental care.

The course comprises one-hour lecture and two hours of practical sessions weekly.

### **SYLLABUS**

#### **ORTHODONTICS (ORT411)**

- . Introduction
- . Growth and development of the head
- . Soft-tissue morphology and behavior
- . Normal development of the dental arches
- . Normal occlusion
- . Malocclusion
- . Etiology of malocclusion

#### **ORTHODONTICS(ORT422)**

- . Orthodontic forces
- . Biology of tooth movement
- . Preventive and interceptive orthodontics
- . Diagnosis
- . Principles of orthodontic appliances
- . Anchorage
- . Materials used in Orthodontics
- . Therapeutic extraction
- . Retention

## **CONSERVATIVE DENTISTRY (COD 413, 424, 515, 526)**

The course deals with the clinical applications of the preclinical course together with related relevant topics to introduce the student to clinical practice, proper patient handling, positioning, history taking, examination and diagnosis, diseases and conditions that he may have to handle and control in patient's mouth, cavity preparation and restoration, temporization of cavities, effect of cutting on the health of the tooth and other basic topics with direct impact on the clinical practice.

The course deals also with all topics pertaining at improving the student's knowledge, clinical skills and capabilities, introducing him to all topics related to operative dentistry practice, together with tackling newer and state of the art information and techniques.

The student is taught how to take history, examine a patient, diagnose caries and perform occlusal and occluso-proximal cavities for amalgam and restoring them. In the clinical sessions the student performs requirements of cavity preparation and restoration, including amalgams and composites

The course comprises one-hour lecture and two-hours of clinical sessions weekly for the fourth year students. The course comprises one-hour lecture and two-two hours of clinical sessions weekly for the fifth year students

## **SYLLABUS**

### ***CONSERVATIVE DENTISTRY (COD413)***

- . Patient assessment, examination diagnosis and treatment planning  
(Medical history, past-dental history, chief complaint, examination, detection of caries, radiographic examination, examination and diagnosis of the patient in pain, phases of treatment planning)
- . Cariology  
(Definition, contributing factors , caries risk assessment control and treatment)
- . Tooth form and occlusion  
(Occlusal anatomy, contour, contact and importance in properly restoring them)
- . Temporary restorations: (functions, requirements, types)
- . Control of fluids (targets, importance, methods)

### ***CONSERVATIVE DENTISTRY (COD 515)***

- . Control of pain  
(Causes of pain, factors affecting pain production, pain control)
- . Selection of restorative materials  
(Available restorative materials, ideal properties of restorative materials, factors affecting selection)
- . Biologic considerations in conservative dentistry  
(Effect of restorative procedures, effect of restorative materials and effect of conditions present in the oral cavity).
- . Indirect tooth- colored restorations  
(Indications, types, cavity preparation, limitations and precautions).
- . Adaptation  
(Definition of marginal adaptation and microleakage, importance of adaptation, adaptability of different restorative materials, methods of promoting adaptation)

### ***CONSERVATIVE DENTISTRY (COD526)***

- . Management of deep carious lesions
- . Management of non-carious lesion
- . Management of badly broken down teeth

- . Adhesion and adhesives (advanced)
- . Esthetics: (light and color perception, limiting problems, treatment modalities)
- . Failure and repair of restorations
- . Post-operative pain and hypersensitivity
- . Conservative approach

## **Removable Prosthodontics (RPD413, 424, 515, 526)**

### **Removable Prosthodontics (RPD413)**

This clinical complete denture course includes a detailed step-by-step description of the clinical procedures performed at each patient appointment. Different philosophies and rationales concerning the different procedures of impression making, occlusion and jaw relation are discussed.

In the clinical sessions the students treat completely edentulous patients under the supervision of the staff. Prior to each clinical step there is a demonstration by a member of the staff for each clinical step at the different appointments in constructing a complete denture for a patient.

The course comprises one-hour lecture and two hours clinical sessions weekly.

### **SYLLABUS**

- Introduction and orientation to the course
- Diagnosis and treatment planning in complete denture construction
- Impression making
- Retention and stability related to complete dentures
- Mandibular movements
- Recording jaw relations
- Dental articulation
- Try-in stage
- Denture insertion

### **Removable Prosthodontics (RPD424)**

In this course a special interest is given to problem cases and problem solving in complete denture cases. The recent trends in complete denture construction are introduced including implants.

In the clinical sessions the students treat completely edentulous patients under the supervision of the staff. Prior to each clinical step there is a demonstration by a member of the staff for each clinical step at the different appointments in constructing a complete denture for a patient.

The course comprises one-hour lecture and two hours clinical sessions weekly.

### SYLLABUS

- Post-insertion complaints
- Management of some problematic complete denture cases
- Concepts of occlusion
- Duplication of dentures
- Single dentures
- Overdentures
- Implantology
- The geriatric patient

#### *Removable Prosthodontics (RPD515)*

In the clinical removable partial denture course the students have a full understanding of the sequence of clinical procedures involved in treating partially edentulous cases for removable partial denture.

Special attention is given to principles of design, impression techniques and problems of the different classes.

The students continue treating partially edentulous patients in addition to the completely edentulous cases to complete their requirements with special emphasis on special advanced cases of flat, flabby ridges and single dentures.

The course comprises one-hour lecture and two-two hours of clinical sessions weekly

### SYLLABUS

- Examination and diagnosis of partially edentulous cases
- Mouth preparation of partially edentulous cases
- Principles of partial denture design
- Removable partial denture designs
- The final impression techniques
- Trial insertion of the framework
- Occlusal relations for removable partial dentures
- Initial placement of partial dentures
- Patient's complaints following partial dentures insertion
- The damaging effects of removable partial dentures



- Relining and repair of removable partial dentures
- Removable Partial over dentures

### *Removable Prosthodontics (RPD526)*

#### **Maxillofacial Prosthodontics**

In the maxillofacial prosthodontics course the students are acquainted with the causes and management of some maxillofacial defects and problematic cases that require special attention.

The student should be also aware with radiation therapy and radiotherapy prostheses, maxillofacial splints and deferent types of stents besides the use of implants with maxillofacial appliances.

The course comprises one-hour lecture and two-two hours of clinical sessions weekly

#### **SYLLABUS**

- Prosthetic management of congenital maxillary defects
- Speech and speech appliances
- Prosthetic management of acquired maxillary defects
- Maxillofacial splints and management of jaw fractures
- Maxillofacial stents
- Truisms of the mandible
- Prosthetic rehabilitation of mandibular defects
- Radiation therapy and radiotherapy prostheses
- Implants in maxillofacial prosthodontics
- Immediate dentures

### **FIXED PROSTHODONTICS (FPD 413, 424, 515, 526)**

Concepts and skills used in replacing teeth are introduced to the students. Simple clinical treatment after proper diagnosis is presented with staff guidance to facilitate application of fundamentals of fixed prosthodontics. Single units are required from the students and performed under staff guidance in the clinics. Single units are required from the students and performed under staff guidance in the clinics.

Mouth preparations are done to prepare the teeth as sound foundations for fixed restorations. This course is an integration of different preparation

The course comprises one-hour lecture and two-hours of clinical sessions weekly for the fourth year students. The course comprises one-hour lecture and two-two hours of clinical sessions weekly for the fifth year students.

## SYLLABUS

### ***FIXED PROSTHODONTICS (FPD413)***

- . Diagnosis: (Clinical examination, study cast analysis, x-ray examination)
- . Partial coverage: (posterior and anterior)
- . Abutments
- . Pontics
- . Bite registration
- . Articulators

### ***FIXED PROSTHODONTICS (FPD424)***

- . Wax pattern
- . Occlusion
- . Connectors
- . Precision attachments
- . Posts
- . Temporary protection
- . Cements

### ***FIXED PROSTHODONTICS (FPD515)***

- . Mouth preparation
- . Treatment planning and design
- . Preparations for periodontally affected teeth
- . Laminate veneers
- . Resin bonded fixed partial denture

### ***FIXED PROSTHODONTICS (FPD526)***

- . Esthetics and color
- . Implants
- . Checking
- . Failure
- . Recent advance in material and technology

## ***ENDODONTICS (END 413, 424, 515, 526)***

The general purpose of this course is to introduce the student to the various procedures and concepts used in clinical endodontics; this course examines specific treatment modalities and principles of endodontic therapy which will be incorporated into the students' clinical experience.

In the fifth year .lectures are presented with stress to diagnosis and the integration of the biological aspects of endodontics into the clinical setting. Cases are

treated clinically with the student demonstrating an acceptable level of mastery by the completion of the fifth year.

This course comprises one hour lecture and two hours of clinical sessions weekly

## **SYLLABUS**

### *ENDODONTICS (END 413)*

- Diagnosis
- Pulp and periapical changes.
- Selection of cases
- Tooth isolation.
- Management of Endodontic appointment.
- Vital pulp therapy
- Revision

### *ENDODONTICS (END424)*

- Treatment of immature permanent teeth.
- Radiographic technique
- Treatment plan.
- Root canal microbiology.
- Aseptic technique in Endodontics.
- Anesthesia in Endodontics.
- Pre-endodontic therapy.
- Revision.

### **Methodology:**

Lectures, data show demonstration and reading assignment  
Written examination and pre- clinical laboratory performance.

### *ENDODONTICS (END 515)*

- Endodontic management of trauma.
- Post endodontic therapy.
- Tooth fracture.
- Root resorption.
- Endodontic emergencies
- Revision

### *ENDODONTICS (END 526)*

- Surgical endodontics.
- Endodontic periodontal problem.
- Combined endodontic periodontal therapy.
- Success, failure, and prognosis in endodontics.
- Current concepts in endodontic techniques and filling materials.

### **Methodology:**

Lectures, data show demonstration and reading assignment  
Written examination and clinical performance.

## **GENERAL SURGERY (GSG 411)**

This course includes an introduction to topics in general surgical practice that are closely related to the previous basic sciences and serves as an application to such basic knowledge.

This course comprises two-hour lecture and two hours of practical sessions weekly.

### **SYLLABUS**

- . Wounds
  - Types
  - Wounds healing and complications
  - Management, suture material
- . Surgical infections
  - Pathogenesis, wound infection and treatment
  - Common non-specific surgical infection
  - Specific infection (Tetanus, gangrene, Actinomycosis)
- . Hemorrhage
  - Causes, types
  - Physiological effect, management and assessment
  - Blood grouping, blood transfusion, indications and complications
- . Shock: Pathophysiology of different types and management
- . Fluids, electrolytes and acid - base balance:
  - Body water & water balance, sodium & potassium metabolism
  - Acid base disturbances and buffer systems
  - Indication, complications and methods of infusion therapy
- . Nutritional support and surgical patient:
  - Metabolic and endocrine responses offer injury on surgery
  - Indications and complications
- . Burns:
  - Etiology, pathology
  - Clinical evaluations
  - Complications, management, reconstruction type of flap
- . Lymph nodes in the neck:
  - Review of anatomy of cervical nodes, pathological causes of enlargement
  - Management and diagnosis
- . Thyroid surgery:
  - Review of anatomy a physiology, pathological causes of enlarged thyroid
  - Diagnosis and management plans for thyroid swellings

- Hyperthyroidism
- . Head Injuries:
  - General principles & types, pathology and diagnosis of head injuries
  - Management strategies
- . Cysts in the neck:
  - Dermoid
  - Branchial
  - Thyroglossal
  - Developmental background of each type and diagnosis with management
- . Pre-operative assessment and post operative complications in general with main stress on D.V.T.

### **GENERAL MEDICINE (GMD 421)**

This course deals with systemic diseases of primary importance to the dental field. It provides the students with knowledge about clinical features and pathogenic mechanisms in some medical diseases. In addition the course includes problems, which confront medical and dental health personnel in management of systemically compromised patients.

The course comprises a two-hours lecture weekly.

### **SYLLABUS**

- . Hematological Diseases: Introduction, hematological symptoms
  - Anemia
  - Leukemia
  - Normal hemostasis
  - Congenital coagulopathies
- . Cardiovascular Diseases:
  - Circulatory disturbances
  - Rheumatic fever
  - Subacute bacterial endocarditis
  - Ischemic heart diseases
  - Symptoms of cardiovascular disease
  - Signs of cardiovascular disease
  - Heart sounds and murmurs
- . Gastrointestinal Diseases:
  - Diseases of the oesophagus
  - Peptic ulceration
  - Diseases of the liver
  - Acute viral hepatitis
  - Hepatotoxicity of drugs
  - Chronic hepatitis, jaundice

- . Infectious diseases:
    - Bacterial infections, chemotherapy for bacterial infections
    - Viral infections
    - Antiviral chemotherapy
    - Antifungal chemotherapy
  - . Endocrinal diseases:
    - Diabetes mellitus
    - Porphyrias
    - Disorders of calcium metabolism, hyperparathyroidism
    - Hypoparathyroidism
    - Disorders of vitamin D-metabolism, hypothyroidism, hyperthyroidism
    - The adrenal cortex
  - . Kidney diseases:
    - Toxic nephropathies
    - Renal involvement in systemic disorders, diabetic glomerulosclerosis and amyloid disease
    - Haemolytic uraemic syndrome, multiple myeloma and familial mediterranean fever
    - Henoch-Schönlein purpura, gout (Podagra)
    - Systemic lupus erythematosus
- Progressive systemic sclerosis, polyarteritis nodosa

### **ORAL SURGERY (OSG 411, 422, 513, 524)**

The course of oral surgery includes minor oral and maxillofacial surgery. Various methods and types of local anesthesia are discussed with related relevant topics of human anatomy. Students have to deal with pain evoked during surgical treatment and are able to apply basic scientific knowledge of pain pathway. Different techniques of exodontias and possible complications are considered.

The clinical course includes training the dental student in order to achieve proper anesthetic technique. The student is allowed to perform infiltration and nerve block anesthesia under supervision.

Clinical course deals with different approaches of exodontias. The student has the opportunity to manage some complications encountered in dental clinic.

Fifth year students are exposed to various surgical approaches for impacted teeth. The course includes surgical management of various pathological oral lesions. Emphasis is placed on phases of oral and maxillofacial surgery and general anesthesia. Dental students attend demonstrations on chair side in order to apply the basic scientific knowledge of oral surgery. In clinical session, recent advances in oral surgery are applied. Students are rotated to the oral and maxillofacial surgery clinic in block assignments for progressive participation in oral surgical procedures.

The course comprises two-hours lecture and two hours of clinical sessions weekly.

## SYLLABUS

### ORAL SURGERY (OSG 411)

- . Introduction to oral surgery, sterilization and disinfections
- . Operating room and dental clinic sterilization discipline, cross infection contr
- . Anatomical landmarks of the oral cavity and jaws, Trigeminal N (Mx. N)
- . Md. N, applied anatomy for Md and Mx teeth and their investing structures
- . Pain pathway, theories of pain and methods of pain control
- . Local anaesthesia (methods of producing LA., kinds of L.A), choice of L.A technique and factors affecting it.
  - . Injection technique (infiltration anaesthesia of Mx. and Md teeth), nerve block A. mandibular Inj. (Rt. and Lt.)
- . Errors in Md. Inj. Technique, Mental and incisive N. block technique
  - . Post sup. Alv. N. block ant and Mid. Sup. Alv. N. block (infraorbital injection) and L.A (indications, contraindications and failures)
- . L.A solutions, contents of carpule, ideal LA. drug, mode of action of L.A, L.A drugs (types and properties)
  - . Vaso-constrictors (chemistry, types, Mode of action and contraindications)
- . Exodontia definitions, factor complicating dental extraction, indications for teeth removal, contraindication.) pre extraction clinical examination.
  - . Anatomical considerations for dental extraction, forceps extraction (positions of pt., dentist and chair, extraction forceps requirements technique of forceps extraction)
  - . Forceps extraction of each individual teeth, post-extraction procedures, anaesthetic complications and local management).
- . Anaesthetic complications: local complications (causes and management), systemic complications (causes and management)
- . Emergencies in dental office

### ORAL SURGERY (OSG422)

- . Complications of exodontia (Operative and post-operative).
- Operative complications involving:
- Tooth fracture (causes and treatment).
  - Forcing a root or tooth into anatomical structures (causes and treatment)

- Miscellaneous complications (causes and treatment)

Postoperative complications of exodontia:

Transalveolar extraction (surgical removal of teeth):

(Principles, radiographic examination, access to the surgical field, definition, mucoperiosteal flaps (Requisites, types, indications, advantages and disadvantages)

Reduction of resistance (Methods, purpose, advantages and disadvantages),  
Instruments: (Elevators): (Uses, principles of use, indications, dangers, rules, classification and types)

Debridement

Closure (suturing): principles, suture needles (classification and types, advantages and uses), suture materials (Requirements and types) techniques, instruments, post operative care).

- . Impacted teeth  
(Definitions, causes or etiologic factors, indications for removal, Pericoronitis, types, signs and symptoms, treatment, contraindications for removal.
- . Impacted mandibular 3<sup>rd</sup> molar  
(Classification, preoperative evaluation, complicating factors, operative plan and techniques for removal)
- . Impacted Maxillary 3<sup>rd</sup> molar  
(Classification, complicating factors, operative procedures for removal).
- . Impacted Maxillary Canine:  
(Etiologic factors, classification, localization (clinical and radiographic), complicating factors, management, operative procedure for removal.)
- . Impacted teeth (operative and post-operative complications)
- . Management of patients with systemic disease
- . Maxillary sinus affections

### ORAL SURGERY (OSG 513)

- . Infections of the oro-facial region
  - Definitions-principles of management acute dento-alveolar abscess.  
A.D.A.A: types, diagnosis, treatment.
  - A.D.A.A. Spread of infection: facial cellulitis (diagnosis and treatment).
  - I and D: Advantages, technique, Drains (types).
  - Ludwig angina: Definition, types, diagnosis and treatment.
  - Chronic D.A.A: Diagnosis and treatment, complications of D.A.A
  - Periapical granuloma; diagnosis, treatment.
  - Osteomyelitis: definition, types, diagnosis, pathogenesis, treatment
- . Cysts: general considerations, definition, and classification.
  - Diagnostic features: odontogenic cysts, pathogenesis, diagnosis.
  - Odontogenic cysts: pathogenesis, diagnosis.
  - Treatment outlines of odontogenic cysts: advantages, disadvantages, techniques and complications
  - Non odontogenic cysts pathogenesis, diagnosis and treatment



- Cysts-like lesions, differential diagnosis
- . Preprosthetic surgery
  - Alveoloplasty and alveolectomy: definitions, indications, and techniques.
  - Enlarged Mx. tuberosity (indications, techniques), mylohyoid ridge reduction (indications, technique)
  - Torus mandibularis: indications and technique.
  - Torus palatinus: indications and technique.
  - Flabby ridge reduction and denture fissuratum excision (techniques)
  - Labial frenectomy:
    - Abnormal lingual frenum (Corrections and frenectomy).
- . TMJ disorders: anatomy, pathology, diagnostic aids.
  - Dislocation and subluxation (hypermobility) definitions, causes, diagnosis
  - Dislocation and subluxation "hypermobility" treatment.
  - Ankylosis "hypomobility", definition, types, etiology and treatment of false ankylosis. True ankylosis: types, pathogenesis, etiology and diagnosis.
  - Treatment of true ankylosis
- . Facial pain and trigeminal Neuralgia
  - Definition, classification, etiology and clinical features of trig. N.
  - Differential diagnosis of facial pain, treatment of trig. N.

### **ORAL SURGERY (OSG 524)**

- . Tumors
  - Classifications, diagnostic considerations, biopsy
  - Odontogenic tumors: diagnosis, treatment.
  - Non-odontogenic tumors: differential diagnosis, treatment
  - Malignant tumors: classification, diagnostic considerations, treatment, role of dentist. Treatment outline of malignant tumors
- . Salivary gland disorders
  - Diagnostic aids. Inflammatory disorders (sialodochitis, sialadenitis): Definitions, diagnosis and treatment
  - Obstructive disorders: mucous retention phenomenon, Ranula, sialolithiasis. Definition, diagnosis, treatment.
  - Tumors (benign and malignant): Diagnosis and treatment
  - Salivary gland disorders
- . Maxillofacial trauma: Maxillofacial fractures, definitions, etiology.
  - 1<sup>st</sup> aid treatment.
  - Soft tissue injuries (wounds), types, treatment and postoperative care.
- . Mandibular Fractures
  - Classification.
  - Diagnosis, goals of management.
  - Treatment
  - Complications

- Fractures of the middle third of the face (classification, diagnosis, treatment outline).
- . Zygomatic complex fractures: classification, diagnosis, treatment outline.  
Fractures (middle 1/3 and zygomatic complex).
- . Implants
  - Osseointegration: Definition, classification and designs of dental implants.  
Indications, clinical application, surgical technique.
- . Orthognathic surgery
  - Introduction; definitions, indications, diagnosis of jaw abnormal ides.  
Surgical techniques and complications.
- . Laser in oral surgery
  - Definitions, types.  
Advantages and clinical applications

## ***PEDODONTICS (PED 511, 522)***

This course deals with the branch of dental science, which provides the guidance of the primary and young dentition in growth and development as well as the prevention and treatment of pathological oral conditions, which may occur during childhood.

The course comprises two-hour lecture and two hours of clinical sessions weekly.

### ***SYLLABUS***

#### ***PEDODONTICS (PED 511)***

##### **A. Public Health**

- . Course objectives and general epidemiology
- . Epidemiology of dental caries and periodontal disease
- . Assessment of dental caries and periodontal disease
- . Biostatistics
- . Dental health education

##### **B. Pedodontics**

- . Behavior management
- . Pharmacological management
- . Development of occlusion
- . Preventive orthodontics
- . Interceptive orthodontics
- . Space maintainers
- . Oral habits

## ***PEDODONTICS (PED 522)***

### **A. Public Health**

- . Fluorides
- . Sealants
- . Prevention of dental caries
- . Prevention of periodontal disease
- . Infection control

### **B. Pedodontics**

- . Handicapped
- . Restorative dentistry, pulp therapy
- . Rampant caries
- . Traumatic injuries
- . Gingival disease
- . Oral surgery
- . Nutrition

## ***ORAL MEDICINE, DIAGNOSIS AND PERIODONTOLOGY (OMD 411,422)***

The basic course of oral medicine is organized to supply the student with the fundamental principles of identification of oral diseases. Physical signs of systemic diseases of dental interest are considered to provide the students with the essentials of assessment and management of medically compromised patient.

The course on oral diagnosis includes the basic principles of patient interview, the fundamentals of physical examination, recognition of oral disease. Principles of Biomedicine, an interdisciplinary course is taught in conjunction with the Department of Oral Pathology, it introduces the student to oral diagnosis through didactic presentations concerning patient interview, clinical examination and treatment plans.

The course of periodontology deals with fundamentals of periodontal problems. The clinical phenomena of periodontal disease in terms of underlying tissue changes and the nature of periodontal response.

The clinical course is supplementary to the first term where the students are allowed to record patient history and perform a comprehensive physical examination. In addition interpretation of various laboratory test results and relation between physical status of the patient and dental plan are considered.

The course comprises two hours lectures and two hours clinical session weekly, to diagnose and integrate the biological aspect of the disease into the clinical setting.

## **SYLLABUS**

### **ORAL MEDICINE, PERIODONTOLOGY AND DIAGNOSIS (OMD 411)**

#### **A- ORAL MEDICINE**

##### Basic immunology

- Innate immune response
- Humoral immune response
- Cell mediated immune response

##### Hypersensitivity reaction

- Type I, II reaction
- Type III reaction
- Type IV reaction
- Drug related reaction

##### Blood cell disorders

- Pernicious anemia
- Iron deficiency anemia
- Plummer Vinson syndrome
- Hemolytic anemia
- Aplastic anemia, Polycythemia
- Leukemia
- Multiple myeloma
- Agranulocytosis, cyclic neutropenia

##### Bleeding clotting disorders

- Platelet disorders
- Hemophilia
- Patients on anticoagulants
- Management of patients with bleeding and clotting disorder

#### **B- PERIODONTOLOGY**

- Macroanatomy of the periodontium
- Gingiva and periodontal ligament
- Alveolar bone and cementum
- Classification of periodontal disease
- Pathogenesis of periodontal disease
- Gingival inflammation
- Gingival enlargement
- Acute gingival conditions

#### **C- ORAL DIAGNOSIS**

- Terminology/ outline of diagnosis
- Case history
- Techniques for clinical examination

- Outline of clinical diagnosis
- Extra-oral examination
- Face
- Skull and eye
- Nose, hair, skin
- Neck
- Lymph node
- Intra-oral examination

## *ORAL MEDICINE, PERIODONTOLOGY AND DIAGNOSIS (OMD 422)*

### **A- ORAL MEDICINE**

- . Evaluation and management of patient with cardiovascular disease
  - Patients at risk for endocarditis
  - Coronary vessel disease
  - Hypertension
  - Heart failure
- . Evaluation and management of patient with endocrinal disease
  - Thyroid gland disorder
  - Adrenal gland disorder
  - Diabetic patient
- . Evaluation and management of sexually transmitted disease
  - Acquired immune deficiency syndrome
  - Hepatitis
- . Occupational diseases
- . Halitosis
- . Focal infection

### **B- PERIODONTOLOGY**

- . Etiology of periodontal disease
- . Dental plaque formation
- . Role of dental plaque in periodontal disease
- . Ecology of dental plaque
- . Dental calculus
- . Local predisposing factors

### **C- ORAL DIAGNOSIS**

- . Hemogram
- . Tests bleeding and clotting disorder
- . Blood chemistry
- . Liver function test

- . Biopsy
- . Urine analysis

## **ORAL MEDICINE, PERIODONTOLOGY AND RADIOLOGY (OMD 513.524)**

The clinical course deals with the diagnosis of patients with clinical conundrum and treatment of the oral lesion even in patients with a therapeutically challenging disease. Chair side case and slide presentation are scheduled for students in order to discuss the appropriate approach for each patient.

The course of periodontology deals with the fundamentals of periodontal problems. The clinical phenomena of periodontal disease in terms of underlying tissue changes and the biological nature of periodontal response are discussed. Once this aspect is mastered the students are introduced to the diagnostic criteria of periodontal disease and possible prognostic factors, which may judge the outcome of treatment. Non-surgical approach for management of periodontal disease and the wide array of pharmacological therapeutic modalities are included in the course. In addition, various surgical techniques for regenerative and cosmetic purposes are illustrated and comprehensive rationale for periodontal treatment is applied in clinical sessions.

Clinical course is supplementary to the first semester including case presentation and open discussions. The ability of the students to perform proper care for patients with oral diseases is evaluated. Identification of medically compromised patients and their management are discussed in clinical sessions.

Clinical course deals with diagnosis of periodontal disease and recent advances in periodontal evaluation. Students have didactic exposure to advanced periodontal procedures and enter into a learning contact that delineates a set of basic minimum experiences.

Moreover the clinical course deals with prognosis and treatment of periodontal disease where scientific basis for the practice of periodontology are evaluated. New hypothesis and treatment concepts are discussed. Students develop the skill for non-surgical management of periodontal disease. Students attend demonstration on various surgical techniques. Interested students have the opportunity to choose from a broad range of additional experiences on selected case under supervision.

The course comprises two-hour lecture and two hours of clinical sessions

### **SYLLABUS**

#### **ORAL MEDICINE & PERIODONTOLOGY (OMD 513)**

##### **A-ORAL MEDICINE**

- White and red lesions
  - Oral keratosis
  - Lichen planus
  - Leukoplakia

- Lupus erythematosus
- Candidosis
- Miscellaneous lesions
- . Diseases of the tongue
- . Oral sensory disorders

### **B-PERIODONTOLOGY**

- Mechanical plaque control
- Systemic modifying factors
- Periodontal pocket
- Chronic periodontitis
- Aggressive periodontitis
- Abscess of the periodontium
- Relationship between orthodontic and periodontal problem
- Relationship between endodontic and periodontal problem

### **ORAL MEDICINE & PERIODONTOLOGY AND RADIOLOGY (OMD 524)**

#### **A-ORAL MEDICINE**

- Oral ulcers
  - Aphthous ulcer
  - Mucocutaneous ocular syndrome
  - Erythema multiforme
  - Pemphigus
  - Pemphigoid
  - Herpes virus infection
  - Coxsackievirus infection
  - Miscellaneous oral ulcer
  - Pigmentation of the oral tissue
  - Melanotic lesion
  - Vascular lesion
  - Metallic intoxication

#### **B-PERIODONTOLOGY**

- . Prognosis of periodontal disease
- . Outline for treatment plan
- . Chemotherapeutic agent
- . Rationale for periodontal surgery
- . Surgical-instrument-periodontal pack
- . Gingivectomy
- . Classification of dental flaps
- . Modified Widman flap
- . Osseous grafts

- . Guided tissue regeneration
- . Growth factors
- . Indications and contraindications of mucogingival surgery
- . Apically and laterally positioned flap
- . Free gingival graft and subepithelial connective tissue graft

### **C- RADIOLOGY**

- Radiographic interpretation of bone
- Radiographic assessment of dental implants

## **Elective courses**

### ***MEDICAL ETHICS & LAW (ETH 211)***

The course deals with ethical obligation of dentist and legal aspect of health care. The student will be able to understand the patient's right and the significance of patient's consent. The course consists of one hour lecture weekly.

#### ***SYLLABUS***

- Theories of ethics
- Legal aspects in medical field
- Consistent medical record
- Major contemporary health care issue
- Patient record confidentiality

### ***TOTAL QUALITY MANAGEMENT (BAD 221)***

The concept of quality simply means the absence of defects from a service. The student will learn about the benefits of total quality management to the patients, the organization and its employees. In addition they will learn more about the three TQM processes; quality planning, quality control, and quality improvement.

### ***COLOR AND APPEARANCE (ART 311)***

Students will learn some appearance attributes such as gloss, surface roughness, transparency, translucency, opalescence, fluorescence, and phosphorescence. Corrections of restorative materials and tooth bleaching will be covered as well. In addition, the student will learn about clinical shade matching and participate in a color training program using custom designed software.

### ***RESEARCH METHODOLOGY (RES 311)***

This course provides an introduction to program evaluation research in health care. It focuses on designing, conducting and using results of research. Practical issues are also addressed such as how to obtain informed consent and approval of institutional review boards, and how to get the most out of limited sources.



Through a series of case studies, students acquire an understanding of strength and limits of different kinds of evaluation research.

### ***ADVANCED TOPICS IN FINANCIAL PLANNING (BAD 321)***

It includes cost accounting and financial planning in the implementation and management of public health programs and dental care. Finance tools such as net present value and various measures of return on investment are developed by looking at the costs and benefits of public health policies. The course discusses aspects of program management such as loans, financing, leasing, and investments and emphasizes computer spreadsheet software use.

### ***FORENSIC DENTISTRY (FOD321)***

This elective course will introduce the participant to the field of forensic science focusing on forensic dentistry. Participants will be able to understand the scope of forensic dentistry, the role of forensic pathology, forensic anthropology, forensic photography, and forensic dental radiology.

Human dental identifications, child abuse issues, and bite mark investigations will be included. Dental jurisprudence and dental record keeping will be clarified.

### ***PSYCHOLOGY AND SOCIOLOGY (PSY 421)***

According to the Bi/Polar theory of personality presented in this interactive elective, people are composed of three pairs of opposite strengths which, paradoxically, work together to produce an effective, productive individual. Learning to use these strengths in balance is not only crucial for personal fulfillment, but also for effectively communicating and working with others.

This course constitutes interlinked workshops for healthcare students and professionals interested in exploring the subject of empathic communication between caregivers and their patients. The course will be both philosophical and practical in outlook, seeking to provide an arena for lively, debate as well as functional learning. As it is the aim of the instructor, a professional actor, to provide participants with tools for more effective communication based on a model of actor training, the focus of the workshops will be active, experiential, and free-flowing.

### ***INSTRUCTOR CPR (OSG 421)***

This elective course consists lectures on background material relevant to teaching CPR as well as manikin skills mastery. Students must be able to demonstrate their CPR skills on a manikin, demonstrate their teaching skills by presenting lecture

### ***ANATOMICAL MODEL CONSTRUCTION (ART 421)***

Students learn the anatomy of regions important to dentistry by recreating them in three dimensions, using waxes, acrylic, clay, wires and similar media to represent muscles, nerves, TMJ, etc, possibly using a skull as a framework. Suitable

subjects include the oral cavity, muscles of mastication and the distribution of the trigeminal nerve as well as other areas of interest to the student. This exercise makes the anatomy studied almost unforgettable.

### ***DENTAL PRACTICE MANAGEMENT (DPM 421)***

The course provides information on the non-scientific and non-technical aspects of dental practice, including office designing, financing, staffing and financial management.

## **Courses required by the faculty of dentistry**

### ***COMPUTER SCIENCE (COS 111, 122)***

This course includes the concepts of computer science. An introduction to practical application of computer is discussed. This basic part helps students as the beginning to use computer and are useful later as a way to organize knowledge and order patient's file. The practical course deals with the applied data and navigating through various scientific sites to help students in their research work.

### ***ENGLISH LANGUAGE (ENG 111, 122)***

This course focuses on extensive practice in rhetorical strategies and techniques, appropriate grammatical structures and verb tenses. It presents an integrated program of writing for dental students. The goal of this course is to help students to understand the terminology in medical and dental fields and to provide the correct spelling and division of words most commonly used in medical writing.

### ***Introduction to dentistry (ITD)***

This course concerns with the introduction of the field of dentistry to the students ,to have a knowledge about history of dentistry ,to indentify the dental team personnel and their jobs ,also ,the course helps the student to identify the dental branches

This course enables the student to recognize infection control measures in the dental office in regards to patient and dental team prophylaxis against infection .Also ,it explains dental occupational hazards and how to ovoid these hazards and risks