COURSE SYLLABUS

CONTENTS:

1-INSTRUCTOR INFORMATION
2-COURSE DESCRIPTION
3-COURSE OBJECTIVES
4-LEARNING RESOURCES
5-COURSE REQUIREMENTS AND GRADING
6-DETAILED COURSE SCHEDULE
Class information

Course Director: Prof. Amal Al- Hessy, building # 9 Female section, office hours Sunday morning.

E-mail: aalhessy27@hotmail.com

Location: 5th year class room building # 10 for female and # 9 for Female

Periodontics: 501

Faculty members:

<table>
<thead>
<tr>
<th>Staff Members</th>
<th>Post ..</th>
<th>Ext.#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Ali Al- Ghamdi</td>
<td>Head of the Division</td>
<td>21262</td>
</tr>
<tr>
<td>Prof. Amal El-Hessy</td>
<td>Course Director 5th Year</td>
<td>23225</td>
</tr>
<tr>
<td>Prof. Mosaad Al-Sherbini</td>
<td>Course Director 6th Year</td>
<td>20013</td>
</tr>
<tr>
<td>Prof. Hakem El-Sayed</td>
<td>Course Director 4th Year</td>
<td>22351</td>
</tr>
<tr>
<td>Dr. Mohammad Al- Zahrani</td>
<td>Assistant Professor</td>
<td>20034</td>
</tr>
<tr>
<td>Dr. Nada AlGhorab</td>
<td>Assistant Professor</td>
<td>23294</td>
</tr>
<tr>
<td>Dr. Hadir Desouky</td>
<td>Assistant Professor</td>
<td>23297</td>
</tr>
<tr>
<td>Dr. Mamdouh Karima 20030</td>
<td>Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Dr. Hind Al-Johani</td>
<td>Lecturer</td>
<td>23219</td>
</tr>
<tr>
<td>Dr. Dina Al-Tayeb</td>
<td>Lecturer</td>
<td>23217</td>
</tr>
<tr>
<td>Dr. Ahmad Al- Hassani</td>
<td>Demonstrator</td>
<td></td>
</tr>
<tr>
<td>Dr. Arwa Badahdah</td>
<td>Demonstrator</td>
<td></td>
</tr>
</tbody>
</table>
**Required Reading:**

2. Fundamental of Periodontal Instrumentation and Advanced Root Instrumentation by Jill S. Nield Gebrig 5th ed, 2004
PERIODONTICS COURSE OUTLINE
(Perio 501)

Course Description:

Didactic component:

Includes a quick review of the classification and pathogenesis of periodontal diseases and a more detailed information on a comprehensive treatment plan and the prognosis of periodontal diseases. The maintenance phase of periodontal disease will be presented and discussed. The relationship between periodontal disease with other clinical disciplines of dentistry and more advanced aspects of the relationship between periodontal diseases and systemic conditions will be presented. The student should be aware of the objectives, indications and contraindications of the various surgical periodontal procedures. The surgical approaches to the management of periodontal diseases will be presented, such that the student will be exposed to the complete spectrum of surgical therapeutic techniques, nevertheless the development of skills in clinical practice will be limited to procedures that are expected to be performed in an integrated comprehensive care general practice. A problem based component was added this year so as to stimulates the student's abilities for critical thinking, evaluation and clinical decision making.

Clinical Component:

- The student should be able to accurately diagnose, plan and deliver routine non-surgical treatment to patients with periodontal diseases as well as accurately interpret and evaluate the results of the treatment rendered.
- The student should be aware of indications for surgical periodontal procedures as well as the principles which govern each procedure.
- The student should be able to perform basic diagnostic and therapeutic procedures consistent with the experience gained with the progression of the course.
- The student should be able to devise the appropriate periodontal maintenance program suitable for each patients.
- Clinical skills will be limited to procedures that are expected to be performed in an integrated comprehensive care general practice. e.g. basic surgical procedures such as gingivectomy and flap procedures, adjunct procedures e.g. crown lengthening. Emphasis will continue to be placed on gaining mastery of basic techniques of scaling and root planning.
- It is mandatory that the students should complete at least four cases, with all steps expect for the surgical phase. Grading will be carried out as outlined in the grading system.
Case Requirements and Grading

1. Continuous assessment 40%
   * Quiz 15 marks
   Midterm 30 marks
   Quiz 15 marks
   Clinical: (4 completed cases)* 20 marks
   TOTAL 80 marks

2. Final Examination: (covering the entire course) 60%
   Written Exam 80 marks
   Oral Exam. 20 marks
   Clinical Test Case 20 marks
   TOTAL 120 marks

Over all Grading Guidelines

The percentage (%) of total grading system will be used in this course

A = Excellent 85% or more of total
B = Very good 75% or more of total but less than 85% of total
C = Good (accepted) 65% or more of total but less than 75% of total
D = Marginally accepted 60% or more of total but less than 65% of total
F = Unacceptable (failed) less than 60% of total
# First Semester

## 5th year

<table>
<thead>
<tr>
<th>Wek</th>
<th>Date</th>
<th>REMARKS</th>
<th>LECTURER</th>
<th>Reading*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>11/9/2004</td>
<td>Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26/7/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>18/9/2004</td>
<td>Determination of Prognosis</td>
<td>Prof. El-Hessy</td>
<td>Chapter 33</td>
</tr>
<tr>
<td></td>
<td>4/8/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>25/9/2004</td>
<td>Objectives and Rationale for Periodontal Surgery</td>
<td>Prof. El-Sayed</td>
<td>Chapter 54</td>
</tr>
<tr>
<td></td>
<td>11/8/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>2/10/2004</td>
<td>General principles of periodontal Surgery</td>
<td>Prof. El-Sayed</td>
<td>Chapter 55</td>
</tr>
<tr>
<td></td>
<td>18/8/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>9/10/2004</td>
<td>Surgical Anatomy of the Periodontium and Related Structures</td>
<td>Dr. Al-Zahrani</td>
<td>Chapter 56</td>
</tr>
<tr>
<td></td>
<td>25/8/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>16/10/2004</td>
<td>Gingivectomy and Gingivoplasty</td>
<td>Prof. El-Hessy</td>
<td>Chapters 58, 59</td>
</tr>
<tr>
<td></td>
<td>2/9/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>23/10/2004</td>
<td>The periodontal Flaps</td>
<td>Prof. El-Hessy</td>
<td>Chapters 60, 61</td>
</tr>
<tr>
<td></td>
<td>9/9/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>30/10/2004</td>
<td>Suturing Techniques</td>
<td>Dr. Al-Johani</td>
<td>Chapter 60</td>
</tr>
<tr>
<td></td>
<td>16/9/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Ramadan Vacation

<table>
<thead>
<tr>
<th>Wek</th>
<th>Date</th>
<th>REMARKS</th>
<th>LECTURER</th>
<th>Reading*</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>20/11/2004</td>
<td>Healing after Periodontal surgery</td>
<td>Dr. Ghourab</td>
<td>Chapters 57, 60</td>
</tr>
<tr>
<td></td>
<td>7/10/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>27/11/2004</td>
<td>Acute Gingival and Periodontal Infections (I)</td>
<td>Dr. Ghourab</td>
<td>Chapters 19, 46</td>
</tr>
<tr>
<td></td>
<td>14/10/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>4/12/2004</td>
<td>Acute Gingival and Periodontal Infections (II)</td>
<td>Dr. Ghourab</td>
<td>Chapters 27, 45</td>
</tr>
<tr>
<td></td>
<td>21/10/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>11/12/2004</td>
<td>Influence of Systemic Disease and Disorders on the Periodontium (I)</td>
<td>Prof. El-Sayed</td>
<td>Chapter 12</td>
</tr>
<tr>
<td></td>
<td>28/10/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Revision

*Textbook required : Carranza. Clinical periodontology, 9th ed*
## Second Semester

### 5th year

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>REMARKS</th>
<th>LECTURER</th>
<th>Reading*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>5/2/2005</td>
<td>Influence of Systemic Disease and Disorders on the Periodontium (I)</td>
<td>Prof. El-Sayed</td>
<td>Chapter 12</td>
</tr>
<tr>
<td></td>
<td>25/12/1425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>12/2/2005</td>
<td>Periodontal Disease as a Potential Risk Factor for Systemic Diseases</td>
<td>Dr. Dina Al-Tayeb</td>
<td>Chapter 13</td>
</tr>
<tr>
<td></td>
<td>3/1/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>19/2/2005</td>
<td>Chemotherapeutic agents in Periodontal</td>
<td>Prof. El-Sherbini</td>
<td>Chapter 50</td>
</tr>
<tr>
<td></td>
<td>10/1/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>26/2/2005</td>
<td>Other medications in periodontal therapy</td>
<td>Prof. El-Sherbini</td>
<td>Chapter 50</td>
</tr>
<tr>
<td></td>
<td>17/1/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>5/3/2005</td>
<td>Resective Osseous Surgery</td>
<td>Dr. Al-Ghamdi</td>
<td>Chapter 62</td>
</tr>
<tr>
<td></td>
<td>24/1/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>12/3/2005</td>
<td>Regenerative Osseous Surgery</td>
<td>Dr. Al-Ghamdi</td>
<td>Chapter 63</td>
</tr>
<tr>
<td></td>
<td>2/2/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>19/3/2005</td>
<td>Furcation: The Problem and its Management</td>
<td>Dr. M. Karima</td>
<td>Chapter 64</td>
</tr>
<tr>
<td></td>
<td>9/2/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>26/3/2005</td>
<td>The Periodontic-Endodontic Continuum</td>
<td>Dr. Dina Al-Tayeb</td>
<td>Chapter 65</td>
</tr>
<tr>
<td></td>
<td>16/2/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>2/4/2005</td>
<td>Preparation of the Periodontium for Restorative Dentistry</td>
<td>Dr. Al-Ghamdi</td>
<td>Chapters 74, 75</td>
</tr>
<tr>
<td></td>
<td>23/2/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>9/4/2005</td>
<td>Interrelationship of Periodontics to Orthodontic Treatment</td>
<td>Dr. Al-Ghamdi</td>
<td>Chapter 53</td>
</tr>
<tr>
<td></td>
<td>30/2/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>16/4/2005</td>
<td>Periodontal Plastic and Esthetic Surgery</td>
<td>Dr. Al-Zahrani</td>
<td>Chapter 66</td>
</tr>
<tr>
<td></td>
<td>7/3/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14/3/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>30/4/2005</td>
<td>Clinical and Biological Aspects of Dental Implants</td>
<td>Dr. Al-Johani</td>
<td>Chapters 68, 69</td>
</tr>
<tr>
<td></td>
<td>21/3/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>7/5/2005</td>
<td>Surgical Aspects of Dental Implants</td>
<td>Dr. Al-Johani</td>
<td>Chapters 70, 71</td>
</tr>
<tr>
<td></td>
<td>28/3/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>14/5/2005</td>
<td>Supportive Periodontal Treatment &amp; Results of Periodontal Treatment</td>
<td>Dr. Ghorab</td>
<td>Chapters 76, 77</td>
</tr>
<tr>
<td></td>
<td>6/4/1426</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Textbook required : Carranza. Clinical periodontology, 9th ed*
COURSE RELATED MATERIAL

CONTENTS

1-LECTURES OUTLINES AND OBJECTIVES
2-LECTURES HANDOUTS
3-EXAMPLES OF QUIZZES; MIDYEAR; AND FINAL EXAMS
Course Objectives

Lectures

**Acute gingival & periodontal diseases (I) and (II)**
(Necrotizing ulcerative gingivitis, Necrotizing ulcerative periodontitis, Acute herpetic gingivostomatitis, Pericoronitis, gingival and periodontal abscess)

At the end of the lecture students will learn the following:

1. Etiology
2. Clinical feature and course
3. Histopathology
4. Diagnosis
5. Differential diagnosis
6. Treatment
7. Communicability

**Influence of systemic diseases & disorders on periodontium**

After this lecture the students will learn the following:-

1. The effect of nutrition on oral & periodontal tissue
2. The clinical periodontal manifestations of vitamin deficiency (Fat-soluble & Water soluble vitamin deficiency)
3. The relationship between endocrine disorders & periodontal disease as:
   - Diabetes mellitus – Hyperparathyroidism – Sex hormones – Corticosteroid hormones
4. The fundamental interrelationships between oral & periodontal tissue and hematological disorders as (Leukemia – Anemia – Thrombocytopenia)
5. The relation between deficiencies in host defense mechanism & destructive periodontal lesions
6. The possible relation between Cardiovascular diseases & the severity of periodontitis
7. Metal intoxication & its effect on the gingival tissue
8. The possible correlation between psychosomatic disorders and the occurrence of periodontal disease

*Periodontal Disease as a Potential Risk Factor for Systemic Disease*

At the end of the lecture students should be able to:

1. Understand the association between periodontal disease and heart disease.
2. Understand the role of disease in diabetes mellitus
3. Understand the effect of periodontal disease on pregnant women
4. Know the association between periodontal disease and respiratory disease
5. Be aware of the importance of patient’s education regarding the connection between periodontal and systemic conditions

*Chemotherapeutic agents in the treatment of periodontal diseases*

At the end of the lecture students should be able to know the following:

1. Principles for use of antibiotic therapy in periodontics
   A- specific characteristic of periodontal infection
   B- limitation of mechanical therapy and if antimicrobial agents can help
2. Systemic administration of antibiotics
3. Single, serial and combination antibiotic therapy
4. Local delivery of antibiotic and, antiseptic agents
5. Clinical applications of systemic and local delivery chemotherapeutic agents for different types of periodontal disease
6. Host modulation agents (Anti-inflammatory agents)
Surgical Phases of Periodontal Therapy

A. Objectives of Surgical & Rationale for periodontal surgery

At the end of the lecture students should be able to know the following:
1. Goals, objectives & rationale of this phase
2. Comparison between the expected results after non-surgical & surgical treatment
3. Indications of periodontal surgery
4. An overview of different modalities of periodontal therapy, according to lesions severity.

B. General principles of periodontal surgery

At the end of the lecture students will learn the following:
1. The fundamental roles (general principles) to be followed, before, during, and after periodontal surgery
2. Management of some critical & emergency situations; as Syncope – excessive bleeding – post operative complications
3. Dealing with apprehensive patients
4. Indications for hospital periodontal surgery

Gingivectomy

At the end of the lecture students should be able to know the following:
1. Indications and contraindications
2. Advantages and disadvantages
3. Surgical gingivectomy
4. Gingivectomy by electrosurgery
5. Laser gingivectomy
6. Gingivectomy by chemosurgery
7. Gingivoplasty
**Periodontal flaps**

At the end of the lecture students should be able to know the following:

1. Classification of flaps
2. Design of the flap
3. Indications & contraindications
4. Advantages & disadvantages
5. Types of Incisions:
   - Horizontal incision
   - Vertical incision

**Suturing Techniques**

At the end of the lecture students should be able to know the following:

1. When suturing is needed
2. The different types of sutures material
3. The different techniques of suturing, their application, and indication
4. The different techniques by making a suturing workshop on models after the lecture

**Resective Osseous Surgery**

At the end of the lecture students should be able to:

1. Identify the normal and abnormal alveolar bone morphology
2. Understand different factors which help in the selection of resective osseous surgery
3. Become familiar with different methods and techniques of osseous resective surgery
4. Understand other specific osseous reshaping situations
5. Become familiar with postoperative complications and managements

**Regenerative Osseous Surgery**

At the end of the lecture students should be able to:

1. Become familiar with factors that help in selection of regenerative osseous surgery
2. Understand different regenerative techniques, and advantages and disadvantages of each technique
3. Become familiar with graft materials used for periodontal osseous regeneration
4. Understand the concept of guided tissue and guided bone regeneration
5. Determine when to use bone graft or membrane or both
6. Become familiar with methods used for evaluation of new attachment and bone regeneration
7. Become familiar with factors influencing a successful outcome

**Furcation, The problem and its management**

At the end of the lecture students should be able to know the following:

1. Identify the etiologic factors of furcation problems
2. Achieve an accurate diagnosis and classification of furcation defects
3. Recognize the anatomy of the tooth and the bony lesions that might affect the outcome of furcation treatment
4. Select an adequate treatment of furcation defects

**The Periodontic-Endodontic Continuum**

At the end of the lecture students should be able to:

1. Understand the classification of pulpal disease
2. Know the classification of peri-radicular lesions
3. Differentiate between periodontal and pulpal lesions
4. Know the symptoms, diagnosis, prognosis and treatment of combined lesion

**Surgical Anatomy of the Periodontium and Related Structures**

At the end of the lecture students should be able to:

1. Recognize the important anatomical structures when performing periodontal surgery.
2. Understand their clinical implications.
3. Recognize the following structures in the maxilla:
   - Alveolar process, palatine process, zygomatic process, frontal process, incisive canal and papilla, greater palatine foramen, palatal glands, maxillary tuberosity, maxillary sinus and tori
4. Recognize the following structures in the mandible:
   - Mandibular canal, mental foramen, lingual nerve, alveolar process, external oblique ridge, retromolar triangle, mylohyoid ridge and tori

**Preparation of the Periodontium for Restorative Dentistry**

At the end of the lecture students should be able to:

1. Understand biologic, esthetic, restorative, and occlusal considerations in periodontal-restorative interrelationship
2. Become familiar with different surgical procedures used for preparation of the periodontium for restorative dentistry
3. Understand when to use or not use each technique and its limitations
4. Become familiar with pathologic conditions that may occur due to improper restorative procedures

**Periodontal Plastic and Esthetic Surgery (part 1 & II)**

At the end of the lecture students should be able to:

1. Differentiate between the terms mucogingival surgery and periodontal plastic surgery
2. Identify Periodontal problems related to lack of attached gingiva, shallow vestibule and aberrant frenum
3. Discuss etiological factors of gingival recession
4. Classify gingival recession based on Sullivan and Atkins and Miller classifications
5. Have general idea about different procedures to increase width of attached gingiva, cover exposed roots and to augment and preserve alveolar ridge
6. Understand indications and contraindications of each procedures

**Clinical and Biological Aspects of Dental Implants**

At the end of the lecture students should be able to:

1. Know the different biomaterials of implants
2. Know what is the peri-implant mucosa
3. Explain the implant bone interface
4. Know the clinical management of dental implants, their indication, contraindication
5. Know the various implant systems

**Surgical Aspects of Dental Implants**

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

1. Know how to select suitable cases for implant cases therapy
2. Know complications of implants and how to maintain implant patients
3. Know the different techniques of endosseous implant surgeries
4. Explain how to diagnose and treat peri-implant disease

**Interrelationship of Periodontics to Orthodontic Treatment**

At the end of the lecture students should be able to:

1. Become familiar with benefits of orthodontics for periodontal patients
2. Understand the concept of using orthodontics for treatment of osseous defects
Course Objectives

The students at the end of the course of the 5th year should be able to:

* Diagnose accurately patients with periodontal diseases, plan and deliver routine non-surgical treatment as well as accurately evaluate the results of the treatment rendered.

* Students differentiate the various indications and contraindications for surgical periodontal procedures as well as the principles which govern each procedure.

* The students evaluate the different considerations of periodontal patients with systemic diseases and conditions.

* The students should be able to manage periodontal case with other dental involvement as restorative, endodontic and orthodontic treatment.