

# DEN7441: Introduction to Oral Surgery (Part II)

Fall 2020

## Course Description:

This course introduces the student to assessment of surgery for impacted teeth, preprosthetic surgery, biopsies, and the diagnosis and treatment of odontogenic infections.

## I. General Information

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Course Credits: 1  
Semester: Fall

## Contributing Faculty

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## Support Staff

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## II. Course Goals

Introduction to Oral Surgery Part II continues to provide the student with a comprehensive description of the diagnosis and surgical correction of acute and chronic diseases of the hard and soft tissues of the oral cavity. These procedures are typically those which may be performed by a general practitioner in his or her office. This course is predicated upon knowledge gained in DEN 6440, Introduction to Oral Surgery Part I and DEN 6250C, Pain and Anxiety Control in Dental Patients.

Upon the completion of this course, the student will be able to formulate diagnosis and treatment plans in order to provide surgical care within the context of a patient-centered system of care delivery. In addition, this course will promote surgical principles and techniques to correct the pathologic conditions reviewed.

### III. Course Overview

This is a 7 hour lecture-based course with 2 examinations.

### IV. Course Outline

- A. Preprosthetic Surgery
- B. Principles of Differential Diagnosis and Biopsy
- C. Principles and Management of Odontogenic Infections
- D. Complex Odontogenic Infections
- E. Assessment of and Surgery for Impacted Teeth
- F. Management of the Radiation Therapy and Chemotherapy Patient
- G. Surgical Management of the Medically Compromised Patient

### V. Course Material

#### Required Text:

Ellis III, E.; Hupp, Jr., JR; and Tucker, M.R.; Contemporary Oral and Maxillofacial Surgery. C.V. Mosby, Fifth Edition, 2008 ISBN: 0323049036

#### Additional Resource:

Dental Lib Guide: <http://guides.uflib.ufl.edu/dental>

### VI. Course Objectives

- A. Preprosthetic Surgery
  - A01 State the objective of preprosthetic surgery.
  - A02 Describe the characteristics of ideal denture support.
  - A03 Designate the types of alveoloplasty and discuss their indications in solving specific surgical problems. Include the following in your discussion: Simple alveoloplasty associated with removal of multiple teeth, intraseptal alveoloplasty, maxillary tuberosity reduction, buccal exostosis and excessive undercuts, lateral palatal exostosis, mylohyoid ridge reduction, genial tubercle reduction, maxillary and mandibular tori removal.

- A04 List the indications and enumerate the surgical steps for the surgical correction of soft tissue abnormalities. Include the following in your discussion: Maxillary tuberosity reduction, retromolar pad reduction, lateral palatal soft tissue excess, unsupported hypermobile tissue, inflammatory fibrous hyperplasia, inflammatory papillary hyperplasia of the palate, labial frenectomy, and lingual frenectomy.
- A05 Enumerate the surgical considerations and formulate a surgical treatment plan for an immediate denture case.
- A06 Enumerate the surgical considerations and formulate a surgical treatment plan for an overdenture case.

#### B. Principles of Differential Diagnosis and Biopsy

- B01 Describe the examination and diagnostic methods used to develop a differential diagnosis of an oral lesion.
- B02 Apply the examination and diagnostic methods described in your text to a simulated situation (an oral lesion, a salivary gland disease, or an odontogenic disease of the maxillary sinus) and arrive at a differential diagnosis.
- B03 Discuss maxillary sinus infections of odontogenic origin. Include in your discussion the definition of sinusitis, clinical and radiographic examination indicated for diagnosis, predominant organisms, and treatment.
- B04 Define the mucus-retention phenomenon of the maxillary sinus. Describe the radiographic appearance and treatment of this phenomenon.
- B05 Define sialolithiasis.
- B06 Describe the clinical characteristics of acute bacterial salivary gland infections and state the initial empiric antibiotic of choice.
- B07 List the eight indications for biopsy stated in your text.
- B08 List seven characteristics of lesions that raise the suspicion of malignancy, as stated in your text.
- B09 Define and state specific indications for oral cytology, aspiration biopsy, incisional biopsy, and excisional biopsy.
- B10 Describe in sequential steps the surgical technique for soft tissue biopsy.
- B11 Delineate the special considerations associated with intraosseous biopsy technique.
- B12 State three criteria the dentist may use to determine which biopsies to perform and which to refer.

#### C. Principles of Management of Odontogenic Infections

- C01 Discuss the microbiology of odontogenic infections. Specifically address the polymicrobial nature of these infections.
- C02 Delineate and differentiate specific aerobic, anaerobic, gram-negative, and gram-positive bacteria commonly implicated in odontogenic infections.
- C03 Compare and contrast the natural progression of odontogenic infection originating from pulpal necrosis with the progression of odontogenic infection originating from periodontal disease.
- C04 List and discuss the eight principles of therapy of odontogenic infections as presented in your text.

- C05 List and discuss the five principles of prevention of odontogenic infection as presented in your text.
- C06 Define metastatic infection and describe a classic example of metastatic infection.
- C07 Given a specific patient history, discuss your rationale for the selection of an antibiotic regimen for prophylaxis of bacterial endocarditis.
- C08 State the current recommendation for prophylaxis of total joint replacement infection.

#### D. Complex Odontogenic Infections

- D01 Define fascial spaces as they relate to the spread of odontogenic infection.
- D02 List and categorize the spaces involved in odontogenic infections as presented in your text, i.e., primary maxillary, primary mandibular, and secondary fascial spaces
- D03 Delineate the boundaries of the following spaces: canine, buccal, submandibular, sublingual, masseteric, and pterygomandibular.
- D04 Discuss the progression of odontogenic infection which results in cavernous sinus thrombosis.
- D05 Define Ludwig's angina in terms of the clinical symptoms and discuss specific management concerns of this infection.
- D06 State five general goals in the management of fascial space infections.
- D07 List the indications for use of antibiotics.
- D08 State five common infectious situations in which the use of antibiotics is not necessary assuming that the patient has no other compromising conditions and that appropriate local therapy is provided.
- D09 State the indications for culture and antibiotic sensitivity testing.
- D10 State the mechanism of action, dose-interval, site where metabolized, toxicity and side effects, primary indication for use, and relative cost of the following antibiotics: Penicillin V, Erythromycin, Clindamycin, Cephalexin, and Amoxicillin.
- D11 Define osteomyelitis and discuss its relative incidence, as well as, its predisposing factors.
- D12 Differentiate the clinical findings in acute suppurative osteomyelitis from those of chronic suppurative osteomyelitis.
- D13 Discuss actinomycosis. Include the clinical presentation, laboratory findings, and recommended management of this infection in your discussion.
- D14 Discuss the significance and treatment of oral candidiasis.

#### E. Assessment of and Surgery for Impacted Teeth

- E01 State nine indications for removal of impacted teeth.
- E02 State three contraindications for removal of impacted teeth and relate these contraindications to the concept of relative risk benefit ratio.
- E03 Discuss the parameters described in your text which, if applied when evaluating a prospective impaction case, will help you assess the degree of surgical difficulty and relative potential for surgical complications. Differentiate the parameters of evaluation which apply only to maxillary third molars and those that apply only to mandibular third molars from those, which apply to all impacted teeth.
- E04 List 11 factors that make impaction surgery less difficult.

- E05 List 11 factors that make impaction surgery more difficult.
- E06 List and describe in detail the five basic steps, presented in your text, for removing impacted teeth.
- E07 Compare and contrast the perioperative patient management of a single-tooth, forcep-extraction case with the perioperative patient management of an impacted third molar case.

#### F. Management of the Radiotherapy or Chemotherapy Patient

- F01 Describe the effects of radiotherapy on oral mucosa, salivary glands, bone, and normal oral flora.
- F02 Discuss the treatment of xerostomia.
- F03 Discuss evaluation of the dentition before radiotherapy. In your discussion, include the following factors: condition of the residual dentition, patient's dental awareness, immediacy of radiotherapy, radiation location, and radiation dose.
- F04 Discuss preparation of the dentition for radiotherapy. Pre-irradiation extractions, the interval between extractions and the beginning of radiotherapy, and impacted third molar removal before radiotherapy should be included in your discussion.
- F05 Discuss maintenance of the dentition after irradiation. In your discussion, include the following problems: postradiotherapy caries, postirradiation extractions, prevention of osteoradionecrosis, and postirradiation denture wear.
- F06 Define osteoradionecrosis. Discuss the management of patients who develop osteoradionecrosis.
- F07 Describe the effects many chemotherapeutic agents have on the oral mucosa.
- F08 Define myelosuppression, a common sequela of several forms of cancer chemotherapy, and discuss the effect of myelosuppression on the oral cavity.
- F09 Discuss the principles of dental management for the patient who has had or will have chemotherapy, including the rationale for treatment decisions, oral hygiene, white blood cell count, platelet status, and prophylactic antibiotics.

#### G. Management of Oral Surgery Patients with Compromising Medical Conditions

- G01 State and discuss the specific protocols listed in your text for the management of patients with a history of angina pectoris, myocardial infarction, or hypertrophic cardiomyopathy.
- G02 State and discuss the specific protocols listed in your text for the management of patients with a history of asthma or chronic obstructive pulmonary disease.
- G03 State and discuss the specific protocols listed in your text for the management of patients with a history of renal dialysis, renal transplant, or adrenal suppression.
- G04 State and discuss the specific protocols listed in your text for the management of patients with a history of hepatic-insufficiency, coagulopathy, or the therapeutically-anticoagulated patient.
- G05 State and discuss the specific protocols listed in your text for the management of patients with a history of hypertension, insulin-dependent diabetes, non-insulin dependent diabetes, hyperthyroidism, or seizure-disorder.
- G06 State and discuss the specific protocol listed in your text for the management of pregnant patients.

- G07 Recognize the dental medications to avoid in pregnant patients as listed in your text.
- G08 State the 11 medications listed in your text with potentially harmful clinical effects to breast-feeding infants and suggest reasonable alternatives to these medications in the management of lactating mothers.

## VII. Course Competencies

This course teaches to the following competencies in the "Competencies for the New Dental Graduate".

16: Emergency Treatment: Provide oral health care within the scope of general dentistry to include dental emergencies.

22: Provide oral health care within the scope of general dentistry to include hard and soft tissue surgery.

25: Provide oral health care within the scope of general dentistry to include oral mucosal and osseous disorders.

## VIII. Evaluation

The student's comprehension and attainment of the knowledge described by the cognitive objectives for DEN 7441, as well as material presented in the lecture will be evaluated by two, written examinations; a midterm examination and a final examination. The average of the two examinations will determine the final grade for the course.

The examinations will consist of multiple choice questions, short answer essay questions and true/false questions. Each examination will require 50 minutes to complete. The examination will cover the material from the previous lectures.

DEN 7441 is a prerequisite for DEN 7442 and advanced assignments in the Oral Surgery Clinic.

## Course Remediation

Students who receive an "E" grade in DEN 7441 must meet with the Course Director to schedule an oral remediation examination.

## IX. Administrative Practices

Administrative practices for all UFCD courses are universally applied. Exceptions to or deviations from these practices are stated in the individual syllabi by the course director. When not individually stated in the syllabus, course administrative practices default to those identified under "Course Policies" on the DMD Student Website:

<https://dental.ufl.edu/education/dmd-program/course-policies/>

# X. Grade Scale

DEN7441 Grade Scale

Method Letter Grade

Scale 100

Tolerance 0.5 (Final letter grades within this range will be rounded up.)

A 95 - 100

A- 92 - 95

B+ 88 - 92

B 84 - 88

B- 80 - 84

C+ 76 - 80

C 70 - 76

E 0 - 70