Course Description:

The series of topics on radiographic diagnosis is designed to reinforce the concept that radiographic data assists in the assignment of patient abnormalities into general categories of conditions: developmental, trauma, inflammation, and neoplasia. This method should help you develop differential diagnostic impressions when conditions other than caries and periodontitis are present.

I. General Information

Course Director:

Course Director: Anita Gohel
Office:
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Phone: (352) 273-6775
Course Credits: 1
Semester: Spring

Contributing Faculty

Deeba Kashtwari (352) 273-6692 DKashtwari@dental.ufl.edu
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Support Staff

Janie Berger (352) 273-6757 JBerger@dental.ufl.edu TA / Grade
Administrator
Marwa Almahndr (713) 315-0122 TA
Karen Gaines (352) 555-1212 TA
Sergio Palacios (352) 273-5950 TA
II. Course Goals

The goals of this course are to present the advanced imaging techniques including panoramic imaging and CBCT imaging. The students will be able to analyze radiographs and be proficient in interpretation of caries, periodontal disease and periapical pathology. The students will also learn radiographic features of various jaw diseases including cysts, tumors, fibro-osseous lesions, systemic disease, infections and developmental diseases affecting the oral tissues.

III. Course Overview

The course format will include lectures and case conferences. Multiple cases will be presented as formative learning throughout the course. The lectures will be conducted on Zoom and will be recorded.

The students are to attend and participate in all zoom lecture presentations. Video recordings will be available if illness or emergencies arise so that students may keep up with the material. Course materials will be posted on the course Canvas site at least 2 business days prior to the relevant class activity. These course materials include the presentations slides as pdf files. The course materials will be posted on the canvas website under modules.

IV. Course Outline

Understanding and recognizing normal versus abnormal is crucial for proper radiographic diagnosis. The case-based lectures will include:

A: Radiographic features of normal and abnormal findings

B: Understanding various disease processes including cysts, tumors, infections, developmental anomalies, diseases of bone and systemic diseases

C: Analyzing the radiographic features to differentiate between a benign and aggressive disease process

Proper radiographic diagnosis includes evaluating the lesions systematically:

A. Patient history and clinical information

B. Location and shape
C. Margins and zone of transitions of the lesion

D. Internal matrix

E. Location and distribution

F. Effect of the lesion on surrounding structures

G. Periosteal reactions

H. Presence of soft tissue component

I. Synthesizing the findings to create an appropriate radiographic differential diagnosis

V. Course Material


**ADDITIONAL READING:**


Dental radiographic examinations: recommendations for patient selection and limiting radiation exposure. FDA/ADA (2012)(required)


HSC Dental Libibrary Guide - includes ebooks

**Optional resource:**

HSC Dental Library Guide

VI. Course Objectives

Upon completion of the course, the student should be able to:
1. Assess the risk of radiation exposure and diagnostic benefits of radiographic procedures, and select the appropriate radiographs required for diagnosis based on evidence and current literature.

2. Apply critical thinking and problem solving skills in the radiographic diagnosis and comprehensive patient management.

3. Apply the role of information technology in a contemporary dental practice.

4. Understand the role of advanced imaging in the maxillofacial region.

5. Describe normal anatomy on intra-oral radiograph, panoramic and CBCT images and gain an understanding of the object localization technique.

6. Comprehend and recognize common incidental findings on radiographs

7. Recognize the radiographic manifestations of caries, periodontal and pulpal disease.

8. Identify the radiographic appearance of oral developmental anomalies.

9. Recognize the radiographic features of benign and malignant lesions affecting the jaws

10. Understand the radiographic changes in fibro-osseous conditions and systemic/metabolic diseases

11. Recognize the radiographic features of infections and trauma

12. Identify soft tissue calcifications in the maxillofacial region.

13. Understand the fundamentals of Implant and TMJ imaging.

VII. Course Competencies

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

Domain I: Critical Thinking

1: Critical Thinking: Use critical thinking and problem-solving, including their use in the comprehensive care of patients, scientific inquiry and research methodology.

3: Apply biomedical science knowledge in the delivery of patient care.

Domain II: Professionalism

5: Legal Standards: Apply legal and regulatory concepts related to the provision and/or support of oral health care services.

Domain VI: Patient Care

A. Assessment, Diagnosis, and Treatment

12: Patient Assessment, Diagnosis, Treatment Planning and Informed Consent: Provide oral health care within the scope of general dentistry to include patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent.

B. Establishment and Maintenance of Oral Health
25: Provide oral health care within the scope of general dentistry to include oral mucosal and osseous disorders.
26: Provide oral health care within the scope of general dentistry to include screening and risk assessment for head and neck cancer.

VIII. Evaluation

Student Assessment in DEN8303 includes:

There will be group and individual case assignments that will contribute 70% of the grade. The final examination will be a case-based with multiple choice format and will be CUMULATIVE in nature. The final examination will consist of about 60 questions.

The final grade will be computed as follows:

Case assignments: 70%
Final Examination: 30%

Remediation:

Students that receive an E grade in this course must meet with the course director to establish a remediation plan. This remediation may be in the form of a case-based oral or written examination. The highest exam grade possible after remediation would be a remediated C grade. Please see "Administrative Practices" Tab for detail on final grade determination.

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-polices/

X. Grade Scale

DEN8303 Grade Scale
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