DEN6260 Oral Medicine and Pharmacotherapeutics
Spring 2021

Course Description:
This course describes the diseases of the organ systems that have an impact on oral health, the clinical pharmacology of prescription drugs and drug interactions, and the clinical therapeutics for treatment of disease processes related to the oral cavity.

I. General Information

Course Director:
Course Director: Joseph Katz
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Phone: (352) 273-6685
Course Credits: 2
Semester: Spring

Contributing Faculty
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Support Staff
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Administrator

II. Course Goals
The goal of this course is to provide an understanding of how medical diseases and the associated medical therapy affect dental care. This course represents the major correlation
between basic medicine, clinical care of the medically compromised patient and modifications required for safe and effective dental treatment. To support the goal of the course and the development of critical thinking in particular, students will work in small groups on patient cases.

My teaching philosophy is to create environments for students to be more actively involved in the learning process and replace some traditional lectures with small groups and peer learning, thus transferring the focus from the faculty to the students. Peer learning refers to students “learning with and from each other without any implied authority to any individual or a teacher.” Because students have different learning styles, many of them do not necessarily benefit in a class with a “top to bottom” instruction. Small groups and peer learning replace memorization, recall and regurgitation with an active process of internalization of the information learned, synthesis with previously learned data and application of the processed knowledge in a real case scenario. Explaining a clinical dilemma to a peer, requires a higher level of understanding and critical thinking. This process is significantly facilitated by the explosion of information technology, and online access to scientific journals and data base.

III. Course Overview

The course will be comprised of case based learning students group assignments and lectures.

At the completion of the course, students are expected to be able to do the following:

1. Determine the patient's ASA physical status classification and medical diagnoses by obtaining a thorough medical history,
2. Describe what medications are used for specific medical problems,
3. Assess how patient medications will affect dental treatment,
4. Describe how dental therapy must be altered to safely treat patients with various medical problems,
5. Recognize commonly prescribed medications,
6. Distinguish likely drug interactions and side effects.
7. Write prescriptions appropriately,
8. Consult concisely with other dental and medical practitioners regarding a patient's medical conditions, required alterations in treatment and potential concerns.
9. Interpret basic lab results.

IV. Course Outline

A. Ischemic Heart Disease, Cardiac Arrhythmias, Myocardial Infarction, Hypertension
B. Bleeding disorders
C. Oral Medicine Protocols for patients on chemotherapy and radiotherapy
D. Diabetes and essential lab review
E. Neuromuscular Disease
V. Course Material

Required Reading:


Supplemental Materials:


Mosby's Dental Drug Reference, 9th ed., Editor Jeske AH Elsevier 2010 (or other drug reference information in electronic or print format.) Please read drug information before appropriate classes

Recommended Articles:


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

Students will access and upload their group case assignments in Canvas.
VI. Course Objectives

A. Ischemic Heart Disease, Cardiac Arrhythmias, Myocardial Infarction, Hypertension
   1. Describe the etiology, risk factors, pathophysiology and complications of atherosclerosis.
   2. Distinguish between the clinical signs and symptoms of stable and unstable angina and discuss the dental management of each.
   3. Discuss a differential diagnosis of chest pain, including distinguishing features between angina and myocardial infarction and the emergent and long-term management of each condition.
   4. Identify and explain the medical tests for detection of coronary heart disease and myocardial infarction.
   5. Describe the modifications for dental treatment of the post-MI patient.
   6. Describe the significance and pathophysiology of the various cardiac arrhythmias.
   7. Describe the potential outcomes of common cardiac arrhythmias (A-fib, VT, VF, heart block, bradycardia, SVT).
   8. Describe the medical (pharmacotherapeutic) and surgical management of cardiac arrhythmias.
   9. Describe the modifications necessary for dental treatment of the patient with cardiac arrhythmias.
  10. Describe the clinical definition of hypertension and describe the physiology of the various types of hypertension.
  11. Describe the signs, symptoms and potential risks of hypertensive disease.
  12. Describe the pharmacological management of hypertensive disease.
  13. Describe the common problems associated with patients with hypertensive disease.
  14. Describe the necessary modifications for safe and effective dental treatment of the hypertensive patient.

B. Bleeding disorders
   1. Describe the pathophysiology of hemostasis in a healthy individual.
   2. Describe common coagulopathies and their associated etiology.
   3. Describe common platelet disorders.
   4. Recognize physical signs and symptoms of a coagulation disorder.
   5. Describe the use of anticoagulation therapy, their mechanism of action and the laboratory test used to evaluate therapeutic levels.
   6. Describe the medical and dental management of a patient with a coagulopathy.

C. Oral Medicine Protocols for patients on chemotherapy and radiotherapy
1. Describe the dental protocol for patients on chemotherapy and radiotherapy.

D. Diabetes

1. Describe the etiology, pathophysiology and clinical presentation of diabetes type I and II.
2. Describe the diagnostic tests used to identify and track the therapeutic compliance of the diabetic patient.
3. Describe the medical complications of diabetes mellitus and the management of both insulin shock and diabetic coma.
4. Describe the various oral hypoglycemic, insulin medications used by diabetic patients and their duration of action and dosing schedules.
5. Describe the various methods of administering insulin.
6. Describe the oral complications of diabetes and proper management of them.
7. Relate lab work up necessary for diagnosis of common medical conditions.

E. Neuromuscular Disease

1. Describe the clinical signs and symptoms, medical management of the following neuromuscular orders:
2. Describe the oral manifestations of the above disorders and dental management of these disorders.

F. Oral Medicine Issues in the Elderly

1. Describe the physiologic changes occurring in the elderly.
2. Distinguish between drug metabolism in the elderly as compared with a healthy adult patient.
3. Classify major drug interactions in elderly medically compromised patients.

G. Renal Disease, GI and Liver Disease

1. Describe the pathophysiology and clinical signs and symptoms of ESRD.
2. Describe the special dental management as needed for dialysis patients.
3. Describe dental management of renal transplant patients.
4. Describe the pathophysiology and laboratory findings for each type of viral hepatitis during each stage of infection.
5. Describe groups at risk for acquiring a hepatitis B and hepatitis C infection.
6. Describe the dental management of patients with various types of viral hepatitis.
7. Describe some clinical signs and laboratory findings consistent with advanced alcoholic liver disease.
8. Describe the significance of a history of alcoholic liver disease on dental treatment.
9. Describe the dental management of the pre- and post-liver transplant patient.
10. Assess oral complications in GI patients

H. Prescription Writing and Adverse Reactions

1. Define the classic parts of a prescription and write relevant prescriptions for selected clinical problems.
2. Demonstrate competency in using the Physician's Desk Reference (PDR).
3. Describe the types (classes) of allergic responses.
4. Describe hypersensitivity vs. allergy.
5. Assess oral complications in GI patients.
6. Write thorough and appropriate prescriptions as requested.
7. Describe mechanisms of drug interactions.
8. Discuss common drug interactions that can occur in the dental office.
9. Predict how you would avoid or minimize drug interactions.

I. Medication-related osteonecrosis of the jaw (MRONJ)

J. Top 25 Medications

1. Describe the indications and clinical conditions resulting from high or low blood levels of hormone replacement medications.
2. Describe the pharmacologic action of SSRI antidepressants and special precautions used by the dentist in treating patients on these medications.
3. List and Describe the antibiotics listed in the top 25 and common medical conditions associated with these medications.
4. Describe the various antihypertensive medications used by dental patients.
5. Describe asthma and the medications used in its treatment.
6. Describe the reasons for the rise of the prescription of coumadin and modifications needed for the dental patient.
7. Describe several medications used in the management of gastric ulcers.

VII. Course Competencies

This course teaches to 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.
2: Evidence-Based Patient Care: Access, critically appraise, apply and communicate scientific and lay literature as it relates to providing evidence-based patient care.
3: Apply biomedical science knowledge in the delivery of patient care.
Domain II: Professionalism
6: Appropriate Referral Provide oral health care within the scope of general dentistry to include recognizing the complexity of patient treatment and identifying when referral is indicated.

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.
13: Assess Patients with Special Needs: Assess the treatment needs of patients with special needs.

B. Establishment and Maintenance of Oral Health
14: Assessment of Treatment Outcomes: Provide oral health care within the scope of general dentistry to evaluate the outcomes of treatment, recall strategies and prognosis.
15: Patient Management: Provide oral health care within the scope of general dentistry to patients in all stages of life.
21: Provide oral health care within the scope of general dentistry to include local anesthesia and pain and anxiety control, including consideration of the impact of prescribing practices and substance use disorder.
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.
26: Provide oral health care within the scope of general dentistry to include screening and risk assessment for head and neck cancer.

VIII. Evaluation

Students will be evaluated by written examination over the material provided in class and the required article. There will be quizzes, a midterm, a case assignment and a final examination for this course.

Case Assignment: 20%, Students will work in small groups of approximately six students and be provided a case assignment to work on together. Students will access and upload their group case assignments in Canvas.

Exam 1: 40%
The midterm will be a multiple choice format examination. This examination will be based on lectures and case materials.
Exam 2: 40%
The final examination will be cumulative and include multiple choice format. This examination is cumulative and will be based on lectures and case materials.

Extra Credit: 10 points
Students attend an Oral Medicine rotation. This must be scheduled ahead of time with Dr. Katz and not conflict with any classes.

Remediation:
If a student does pass this course they must meet with the course director and schedule to take an oral remediation examination.

Honorlock will proctor your exams this semester. Honorlock is an online proctoring service that allows you to take your exam from the comfort of your home. You DO NOT need to create an account, download software or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webcam, and a stable Internet connection. To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at www.honorlock.com/extension/install.

When you are ready to test, log into the LMS, go to your course, and click on your exam. Clicking Launch Proctoring will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device. Good luck! Honorlock support is available 24/7/365. If you encounter any issues, you may contact us by live chat, phone (844-243-2500), and/or email (support@honorlock.com). If you encounter issues within the LMS, you may contact Your School's Online Support Services team at their number.

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

**DEN6260 Grade Scale**

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<th>Letter Grade</th>
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<tr>
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<tr>
<td>Tolerance</td>
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<table>
<thead>
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