DEN8290: Digital Systems in Clinical Dentistry

Spring 2021

Course Description:
This is a rotating topics course. Students must complete 6 credits of elective courses during the 4 year curriculum.
This is an elective course on three digital dentistry systems.

General Information
Course Director: Panagiotis Zoidis Office:
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Course Credits: 1 Semester: Spring

Contributing Faculty
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Support Staff
Michelle R Watson (352) 273-5830 MWATSON@dental.ufl.edu TA / Grade Administrator

Course Goals
The goal of this course is to provide students with an understanding of the digital systems available in clinical dental practice. Students will discuss and compare the current literature of digital systems, as well as scan and design with the following open and closed systems:
1. Planmeca - E4D
2. Cerec Omnicam
3. 3M True Definition

This course also provides students the opportunity of reviewing the literature of these systems and preparing a comparative manuscript that could be suitable for submission for publication.
After designing, the students will learn how to 3D print or mill a three unit bridge provisional restoration

Course Overview

Students will work with the following digital dentistry systems:

Planmeca - E4D:
Literature review session (2 hr@)
*Hands on lab- next to sim lab (4 hr@)

Cerec Omnicam
Literature review session (2 hr@)
*Hands on lab- next to sim lab (4 hr@)

3M True Definition
Literature review session (2 hr@)
*Hands on lab- next to sim lab (4 hr@)

Independent Study / Review Manuscript
4 hrs

*Students will bring a prepared typodont with 2 abutment teeth for a 3 unit bridge to scan for each lab session. Students will be able to 3D print or mill this 3 Unit bridge.

Course Outline

Students will work with the following digital dentistry systems:

Planmeca - E4D, Cerec Omnicam, 3M True Definition

Upon completion of these labs and literature reviews, the students will prepare a comparative literature review of the systems.

Course Material

Students will perform their own comparative literature search
Students will need to have a typodont with teeth #18-20 prepared for a combination bridge (#20 for a PFM and #18 for a FMC) which they will scan, design and 3D print or mill the provisional restoration.

Course Objectives

Through seminars and lab assignments in this course students will be able to:

Knowledge:
Conduct a comparative literature review of the three digital systems. Write a review manuscript suitable for publication.

Skills:
Prepare 2 typodont abutment teeth for a 3 unit bridge. Scan using the 3 different digital systems. Print or mill a provisional restoration.

Professional Values:
Appreciate the range of options for restoration/replacement of teeth to meet the long term needs of the patient.

VII. Course Competencies

Evaluation

This course is graded as Satisfactory/Unsatisfactory.

To receive a Satisfactory grade in this course students must complete the following:

1. Participation in all of the literature review and lab sessions.

2. Prepare a comparative literature review of the 3 systems. (Abstract of 250 words and paper of 1500-2000 words.) (Approximately 10 hours of independent study.) Manuscripts will be evaluated using a standard journal rubric.

Administrative Practices

Administrative practices for all UFCOD 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 "Administrative Practices" in the ECO sidebar for each electronic syllabus. These
practices include: Professional Behavior, Student Responsibilities in the Classroom, Attendance, Dress Code, Email Policy, Tutoring, Academy Honesty and the Student Honor Code, Student Accommodations, Post-exam Review, Grading System, Remediation, Student Evaluation of Instruction, Student Complaints, University Counseling Services and Mental Health Services and Electronic Course Material and Social Media.

Grade Scale

This course uses a Satisfactory/Unsatisfactory grade scale.