Course Outcomes Guide  
Fall 2017

**Course/Program Title:** DEN 107 Dental Materials  
**Date:** Fall 2017  
**Course/Program Team:** Professor Rebecca Leonard

**Expected Learning Outcomes:**
1. Categorize the variety of materials utilized in clinical and laboratory settings.  
2. Identify the dental materials that the dental assistant is allowed to prepare.  
3. Maintain asepsis protocol during procedures utilizing various forms of dental materials  
4. Identify dental materials in radiographic surveys.  
5. Explain the differences and importance of maintaining up-to-date information about dental materials.  
6. Describe the methods and procedures of working with dental materials.  
7. Describe safety measures employed with dental materials.  
8. Demonstrate competency in dental charting

**Assessment:**
Course completion: Number passing at 75% or greater 15/15  
Course outcomes:  
CO#1 ILAs, exams, group projects. Final question #30 identify the various materials in a clinical setting  
CO#2 ILAs, exams, group projects, final questions #10 skill evaluations laws/procedures for preparation  
CO#3 ILAs, exams, and group projects final question #38 infection control protocol for dental materials  
CO#4 interpretation of radiographs identifying dental materials on an x-ray  
CO#5 ILAs, exams, group projects, final Question #8 expiration dates, MSDS sheets  
CO#6 ILAS, exam question #14 amalgam procedures/composite procedures  
CO#7 projects, final exam questions #5 Emergency spill kits/protocol  
CO#8 ILAs, lab procedures. Demonstrating charting skills and anatomy

**Validation:**
Course completion  
Completion of course with an average grade of 75% or higher: Average for Fall/17:81.5%  
Course outcome 1 ILAs, exams, group projects categorizing materials/how to mix cements/how to store dental materials  
Course outcome 2 ILAs, exams, group projects, skill evals What materials is the dental assistant allows to prepare for the dentist, which materials are the dental assistant allowed to place in the patients mouth. State laws.  
Course outcome 3 ILAs, exams, and projects making sure the students understand asepsis and infection control associated with the preparation of dental materials.  
Course outcome 4 Interpretation of radiographs Assessing if students can distinguish between tooth structure and a dental material when viewing a radiograph.
Course outcome 5  ILAs, exam, projects final questions 16 & 17  assessing if the students understand the importance of maintaining products that are within their shelf life and not expired. How to store/ prepare and maintain dental materials
Course outcome 6  ILAs, exams questions 3,5,8,12,13 Student repetitions of dental procedures and assisting in preparing dental materials for those procedures.
Course outcome 7  Final exam questions 51 & 79  Explain how to clean up mercury from an amalgam procedure/ stone from pouring up models etc…
Course outcome 8  ILAs, exam questions 80-85  have students demonstrate their ability to view a dental material in a mouth and adequately chart on a patient chart that material.

Results:
Course completion:
100% (15/15 students) completed the course with a grade of 75% or higher
0% of students (0/15) received a grade less than 75%.

Course outcomes (common ILAs, exams and final exam questions): N= 15
Course outcome #1  Question #30: 13/15 students answered correctly for 86% 90% received a 75% or greater on ILA assignments
Course outcome #2  Question #10: 15/15 answered correctly for 100% 100% received a 75% or greater on ILA assignments
Course outcome #3  #38: 10/15 answered correctly for 66% 80% received a 75% or greater on ILA assignments
Course outcome #4  100% of students could identify materials on x-rays in lab
Course outcome #5  Question #8: 15/15 answered correctly for 100%, 90% on ILA assignments
Course outcome #6  Question #14: 13/15 answered correctly for 90%. 86% on ILA
Course outcome #7  Question #5: 15/15 answered correctly for 100%
Course outcome #8  92% received a 75% or greater on final lab procedures

Follow-up
I will continue to get student feedback about my classes and attempt to make intuitive changes. Continue to improve this course where needed. Increase projects: students responded well to the experiment project and materials poster board project.