COURSE INFORMATION FORM

DISCIPLINE: Allied Health / DENA

COURSE TITLE: Dental Materials II

CR.HR  3  LECT HR.  ______  LAB HR.  6  CLIN/INTERN HR.  ______  CLOCK HR.  ______

CATALOG DESCRIPTION
This course provides instruction in advanced manipulation of dental cements, amalgam, esthetic restorations (composites), alginate, gypsum products, sealants and various specialty dental materials. Emphasis is placed on the understanding and safe application of materials used in the dental office and laboratory.

PREREQUISITES
DENA 101, DENA 102, DENA 103, DENA 104, DENA 105, EMS 100

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Identify safety regulations in the laboratory.
2. Identify the various types and uses for each kind of dental materials.
3. Explain the properties and composition of each dental material.
4. Demonstrate the recommended technique for manipulation and use of each dental material.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>ESO</th>
</tr>
</thead>
</table>
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Carry out the role and function of a Dental Assistant.
   • Analyze various materials and their effect on individuals.
2. Apply foundational knowledge of basic dentistry.
   • Analyze different occupational tasks.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Hands-on Practice and Competency Check-off Sheets, 1-4
2. Assignments, 1-4
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Safety Rules for Dental Laboratory  
   A. Safety  
   B. Attire  
   C. Expectations  
   D. Hair Care  
   E. Foot Wear  
   F. Hours  
   G. Emergency Procedures  

II. Laboratory Equipment and Instruments  
   A. Instruments and Equipment used per Procedure  
   B. Dentoforms (typodonts)  

III. Dental Materials  
   A. Liners  
   B. Bases  
   C. Varnishes  
   D. Cements  

IV. Pit and Fissure Sealants  
   A. Types of Sealant  
   B. Light Cured  
   C. Auto Cured  

V. Abrasion and Polishing  

VI. Instruments used in Cutting, Abrading and finishing procedures  

VII. Amalgam Restorative Material  
   A. Class I, VI, V  
   B. Finishing/Polishing  

VIII. Composite Restorative Material  
   A. Class I, IV, V  
   B. Finishing/Polishing  
   C. Expanded Function in Restorative Dentistry  

IX. Temporary Crowns  

X. Use in Dentistry  

XI. Temporary Restorations  

XII. Types of Provisional Coverage  
   A. Aluminum  
   B. Acrylic  

XIII. Vital Tooth Whitening Materials  

XIV. Bleaching Tray preparation
XV. Fixed Prosthetics
   A. Definition
   B. Drawbacks
   C. Reason to Replace Missing Teeth
   D. Patient Considerations
   E. Case Presentation
   F. Role of the Dental Assistant
   G. Types of Materials
   H. Lab Technician
   I. Lab preparation
   J. Retention Techniques
   K. Dental Implants

XVI. Removable Prosthetics
   A. Definition
   B. Goals of Removable Prostheses
   C. Role of the Dental Assistant
   D. Custom Trays with Triad
   E. Acceptable Tray Criteria
   F. Supplies
   G. Undercuts
   H. Outlines
   I. Spacers
   J. Spacer Stops
   K. Separating Medium
   L. Handle
   M. Finishing

XVII. Materials for Cast Restorations

XVIII. Waxes
   A. Types and Uses in Dentistry
   B. Definition of Bite Rims
   C. Steps in its Use
   D. Die Materials
   E. Investment Materials

XIX. Expanded Function in Prosthodontics