**Course Number and Name:** 3530 Applied Dental Materials  

**Course Type:** Lecture/Laboratory  

**Academic Year and Semester Offered:** Spring semester  

**Course Director(s):** Kathleen Muzzin, R.D.H., M.S.; Loulou Moore, D.D.S. MP.H  

**Other Participating Faculty:**  
Christine Beninger, D.D.S.  
Janice DeWald, D.D.S., M.S.  
Steve Karbowski, D.D.S.  
Marie Koike, D.D.S., PhD  
Danette McNew, D.D.S.  
Stan A. Richardson, LIBST  
Beverly York, D.D.S.  

**Course Description:** Didactic and laboratory instruction in the principles of the science of Dental Materials and in the procedures within the scope of dental hygiene practice.  

**Course Objectives:** See attached  

**Course Goal:** This Applied Dental Materials course is designed to provide the Dental Hygiene students with the principles of the science of Dental Materials and related technologies and to acquaint them with the materials used in the dental health field. The goal of the Applied Dental Materials Course is to build a foundation that will help the students pursue their goals to be successful dental hygienists.  

**Related Competencies:** [as submitted in August, 2008]  
2.3 Evaluate the safety and efficacy of oral health products and treatments.  
5.1 Identify services and agencies that promote oral health and prevent oral disease and related conditions.  
6.7 Accurately perform and record examination of teeth.  
6.8 Identify the need for radiographs.  
6.9 Radiographically distinguish normal from abnormal anatomical findings.  
8.6 Provide adjunct dental hygiene services that can be legally performed in the State of Texas.  
8.7 Identify policies and implement procedures for increasing employee and patient safety in the dental environment.
The following procedures are taught to clinical competency:
1) placement and removal of periodontal dressings
2) placement of pit and fissure sealants
3) make a maxillary and mandibular alginate impression
4) place and remove a rubber dam
5) fabrication of a mouth protector

The following procedures are taught to laboratory competency in this course. However, they are later performed to clinical competency in Clinical Dental Hygiene I (3830), Clinical Dental Hygiene II (4820), Clinical Dental Hygiene III (4140), and Clinical Dental Hygiene IV (4240):
1) suture removal
2) finishing and polishing an amalgam restoration
3) placement of an IRM temporary restoration

**Evaluation Criteria/Methods:** Grading Scale: A (93-100); B+ (90-92); B (84-89); C+ (81-83); C (75-80); D (70-74); F (69 and below)
Evaluation criteria are as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Examinations:</td>
<td>80%</td>
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<tr>
<td>Laboratory &amp; Clinical Performance:</td>
<td>10%</td>
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<tr>
<td>Quizzes:</td>
<td>5%</td>
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<tr>
<td>Laboratory Practical Exam</td>
<td>5%</td>
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**Attendance Policy:**
- Attendance at all lecture and laboratory sessions is mandatory.
- No make-up exams will be permitted unless it is an excused absence. Make-up examinations will be essay and must be taken within 10 days after returning to school. If the exam is not taken within this time frame, the student will receive a zero for that exam.
- **No make-up** will be given for the Laboratory Practical Exam.
- Quizzes will only be administered during the first 10 minutes of class. Quizzes will not be administered after ten minutes past the hour. No make-up quizzes are allowed unless it is an excused absence.
Laboratory/Clinic Policies and Procedures: These laboratory experiments and clinical experiences serve two important functions. They are designed to: 1) provide the student with the opportunity to become familiar with the various materials used in dental health care and 2) emphasize the important variables which can affect the manipulation and ultimate performance of the materials used in common dental procedures. The uses and handling of the materials taught in this course have been closely coordinated with material from other courses. This course should be viewed as an opportunity to experiment with the materials the student will be exposed to throughout his/her dental hygiene career. Appropriate laboratory procedures will be taught during each lab session.

Completed projects will be evaluated by the students and an instructor during the lab period. Summary sheets must be turned in to the instructors before the end of class.

Students are expected to READ the laboratory manual before class. Street clothes may be worn during lab sessions scheduled in Lab 30. Clinic attire is to be worn during all clinical laboratory sessions.

Learning Materials:


Additional readings and handouts may be provided by each lecturer. It will be the students’ responsibility to read the material.

Remediation Policy: A student who earns a grade of “F” must retake the course in the summer session. A grade of “C” must be attained in order to pass the remedial course. All exams will be essay.