COMMON COURSE OUTLINE: Course discipline/number/title: DH 2530: Principles of Dental Hygiene III

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 2 hours lecture and 2 hours lab
3. Prerequisites (Course discipline/number): DH 1510, DH 1520
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

A continuation of Principles of Dental Hygiene II, with an emphasis on advanced dental hygiene skills and applied auxiliary skills. This course will familiarize the dental hygiene student with the properties and uses of various dental materials. The focus will be on composition, chemistry, and clinical application of commonly used materials in dentistry.

B. DATE LAST REVISED (Month, year): August, 2011

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Nonsurgical Periodontal Therapy
2. Sonic, Ultrasonic and Specialized Hand Instruments and Techniques
3. Site Specific Antimicrobials and Subgingival Irrigation
4. Removal of Periodontal Dressings and Sutures
5. Structure and Properties of a Variety of Dental Materials
6. Making Alginate Impressions and Gypsum Study Models
7. Treating Hypersensitive Dentin
8. Placing/Removing Dental Dam
9. Polishing Dental Amalgams

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Integrate theoretical principles of dental hygiene with their clinical application.
2. Demonstrate the use of sonic and ultrasonic instruments in scaling, root planning and periodontal debridement.
   a) Discuss and demonstrate root planning and periodontal debridement.
   b) Demonstrate alternative grasps and fulcrums.
   c) Discuss and demonstrate professional, subgingival irrigation.
   d) Discuss indications for various site specific anti-microbials and antibiotics in periodontal therapy.
   e) Demonstrate placement of Arestin in a simulation.
   f) Discuss the instruments used in home subgingival irrigation.
3. Discuss the use of air abrasive polishing devices
4. Discuss and demonstrate root planning and periodontal debridement.
5. Discuss the use of Curvette curettes and files.
7. Demonstrate suture removal in a simulation.
8. Identify physical and biological conditions which must be considered before using any material in dentistry.
10. Identify the uses and types of impression materials frequently used in dentistry.
11. Demonstrate the technique for making alginate impressions.
12. Discuss the characteristics and uses for gypsum products.
13. Demonstrate pouring and trimming study models.
14. Discuss the uses and types of synthetic resins used in dentistry.
15. Demonstrate the placement of pit and fissure sealants.
16. Outline the science of metals and their use in dentistry.
17. Discuss the structure, properties, and manipulation of dental amalgam.
18. Discuss the rationale for amalgam polishing and overhang removal.
19. Demonstrate the techniques for amalgam polishing.
20. Describe the dental casting procedure.
21. Differentiate among dental cements, their properties, and their uses.
22. Explain the uses, compositions, properties, characteristics, as well as effects of technique variations on the properties of the materials discussed.
23. Explain precautions which may have to be taken during instrumentation on various dental materials.
D. **LEARNING OUTCOMES (GENERAL) Continued:** The student will be able to:
   24. Discuss the role of the dental hygienist in the application and maintenance of dental materials.
   25. Discuss the factors which contribute to tooth hypersensitivity.
   26. Discuss methods for treating hypersensitive teeth.
   27. Demonstrate placement and removal of dental rubber dam.

E. **LEARNING OUTCOMES (MNTC):** NA

F. **METHODS FOR EVALUATION OF STUDENT LEARNING:**
   1. Classroom participation and scripting
   2. Quizzes
   3. Mid-term and final examinations
   4. Successful completion of Process Evaluations with a minimum score of 80% on each evaluation

G. **RCTC CORE OUTCOME(S) ADDRESSED:**
   - Communication
   - Critical Thinking
   - Civic Responsibility
   - Personal/Professional Accountability
   - Global Awareness/Diversity
   - Aesthetic Response

H. **SPECIAL INFORMATION (if any):**
   This course will be taught by classroom lecture, discussion, demonstration and hands-on experience in the laboratory setting.