Dental Materials

Course Information

Developers: Dental Hygiene State Curriculum Committee

Bobette Maier, Colby Community College; Rhonda Weatherbie, Flint Hills Technical College; Cheryl Bosiljevac, Flint Hills Technical College; Tony Kim, Manhattan Area Technical College; Cheryl Seitz, Manhattan Area Technical College; Kylie Austin, Manhattan Area Technical College; Margaret LoGiudice, Johnson County Community College; Terry Callihan, Johnson County Community College; Lenora Clark, Johnson County Community College.

Developed Date: 10/29/2013

KBOR Facilitators: Rita Johnson/Shirley Antes/April Henry

Credit Hours: 2

Description

This course is designed to provide students with a knowledge base of the science and physical properties of dental materials. Through laboratory exercises, students will have hands-on experience with dental materials used in dental hygiene and dentistry while applying their knowledge of dental material sciences.

Competencies

1. Describe the basic physical and mechanical properties of dental biomaterials.
2. Demonstrate proficiency in using given dental materials within the dental hygienists scope of practice.
3. Apply fundamental clinical dental hygiene services involving the selection, manipulation and care of specific dental biomaterials on clients.
4. Contrast and compare physical properties, proper mixing techniques, and application of impression materials.
5. Demonstrate proper technique in mixing gypsum material, fabricating study models/bite registrations and mixing cements, base, and liners.
6. Contrast and compare the types, uses and clinical care of direct and indirect esthetic materials.
7. Utilize proper technique for placement of pit and fissure sealants to clinical competency.
8. Discuss and describe the use of bleaching biomaterials in the scope of dental hygiene practice.
9. Explain the need for and demonstrate proper technique for fabrication of a custom bleach tray and an athletic mouth guard to clinical competence.
10. Discuss and describe metals/amalgam in dentistry in the scope of dental hygiene practice.