

# DHY 114 Dental Materials

## Course Abstract

If you need accommodations due to a disability, contact Disability Services in Edison Hall Room 100, 732.906.2546.

To foster a productive learning environment, the College requires that all students adhere to the Code of Student Conduct which is published in the college catalog and website.

**Course ID and Name:** DHY 114 Dental Materials

**Department:** Dental Hygiene

Course Instructor: TBD

**Prerequisites:** DHY 102, 105, 107

**Course Time:**

**Course Description:**

A study of the chemical and physical properties of those materials most commonly used in dental practice. Included are lectures on the materials and techniques used by dental hygienists who are providing expanded function services as outlined in the New Jersey Board of Dentistry Statute and Regulations: 13:30 - 1A.2. Student performance of basic laboratory and operatory procedures related to general dentistry and expanded functions for auxiliaries is an integral part of the course.

**General Education Status:**

**Credits:** 2 **Lecture Hours:** 1 **Lab Hours:** 2 **Practicum Hours:** 0 **Recitation Hours:** 0

**Learning Outcomes:**

1. Describe restorative materials and fixed and removable prosthetics used to repair and replace tooth structure **C2**
2. Identify and describe the physical and biological conditions in the oral cavity which influence the selection of a dental material. **C2, C3, C4, PC1, PC2, PC3**
3. Explain the general physical and chemical properties of the most commonly used materials in preventive and restorative dentistry. **C3**
4. Demonstrates proper measuring and mixing of alginate impression material as well as proper loading of impression tray, seating tray, and removing tray. **C2, C4, C7, PC2, PC4**
5. Describe, understand and perform the proper sequence for placing, carving and polishing a dental amalgam. **C1, C2, C3, C7, PC2, PC3, PC4**
6. Demonstrates the proper mixing techniques as well as the placement techniques for dental cements and temporary restorations. **C1, C2, C3, C7, PC2, PC3, PC4**

## Course Objectives:

Upon completion of the course and laboratory sessions, the student will be able to:

1. Identify and describe the physical and biological conditions in the oral cavity which influence the selection of a dental material. **C2, C3, C4, PC1, PC2, PC**
2. Describe restorative materials and fixed and removable prosthetics used to repair and replace tooth structure **C3**
3. Explain the general physical and chemical properties of the most commonly used materials in preventive and restorative dentistry. **C3**
4. Describe the procedure and perform each of the following functions according to the criteria presented. **C4, HP1, HP3, PC4**
  - A. Mix alginate and take an impression
  - B. Take a bite registration with wax and polyvinylsiloxane
  - C. Mix gypsum products
  - D. Pour and trim a study model
  - E. Place and remove a rubber dam\*
  - F. Place and remove a matrix, wedge and retainer \*
  - G. Mix and place cements for luting, and temporary restorations\*
  - H. Mix amalgam, place in cavity preparation and polish\*
  - I. Polish amalgam restorations
  - J. Fabricate an athletic mouth guard
  - K. Place retraction cord\*
  - L. Fabricate temporary crowns\*
  - M. Construct a bleaching tray
  - N. Place a temporary sedative filling\*

**\*These functions will be taught to laboratory competence. Additional training will be required to reach clinical competency.**