

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number: DNA 110**

**Credits: 3**

**Course Title: Dental Materials**

**Course Description (including lecture hours, lab hours, total contacts)**

Studies the materials utilized in the laboratory aspect of dentistry as support in treatment. Emphasis is placed on the characteristics, manipulation, economical control, storage, and delivery of materials. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

**General Course Purpose**

DNA 110 prepares the students for employment in that they will be successful in completing the laboratory work that is required by the dentist in treating the patients.

**Course Prerequisites/Corequisites**

Prerequisite: Completion of Pre-Dental Assisting Career Studies Certificate  
Prerequisites or Corequisites: DNA 100 and DNA 109

**Course Objectives**

Upon completing the course, the student will be able to:

- a. Understand the progress made through the years in order to provide higher quality dental materials used in the treatment of dental diseases and disorders
- b. Determine the role of the various agencies involved in this progress
- c. Define the dental assistant's role in the manipulations and delivery of materials during dental treatment
- d. Describe the various kinds of dental materials that are used as medicaments and restoratives and auxiliary materials used in dental treatment
- e. Understand the predictable life of restorations and the kinds of activities that will prolong the life of that material in the patient's mouth
- f. Compare the various materials as to strength, viscosity and the ability to withstand stresses as well as temperature changes in the oral cavity
- g. Identify and operate equipment associated with the manipulation of each material
- h. Mix and transport materials correctly

**Major Topics to be Included**

- a. Characteristics of materials
- b. Gypsum products
- c. Impression materials
- d. The dental waxes
- e. The synthetic resins
- f. Cements, liners and bases
- g. Restoratives
- h. Enamel and dentin adhesives
- i. Athletic mouth protectors

**Effective Date of Course Content Summary (Month, Date Year):** February 12, 2009