

## **Course Description**

**DES 2100L | DENTAL MATERIAL AND SPECIALTIES LAB | 1 credit**

This course introduces the dental hygiene student to the chemical and physical properties, manipulation and uses of dental materials. Laboratory experiences include manipulation and application of dental materials used in a dental practice.

## **Course Competencies**

### **Competency 1:**

The student will demonstrate knowledge, comprehension, and application of the use of infection control and safety in the dental office when handling dental materials by:

- a. Identifying the types of personal protective equipment used in a dental operatory and laboratory setting.
- b. Recalling methods used to prevent cross-contamination during the handling and distribution of dental materials and supplies.
- c. Listing office and laboratory housekeeping practices that contribute to infection control and personal and patient safety.
- d. Describing effective ways to manage contamination caused by aerosols and splatter during patient treatment.

### **Learning Outcomes**

- \*Learning outcome 1\* Communication
- \*Learning outcome 2\* Numbers / Data
- \*Learning outcome 1\* Critical Thinking
- \*Learning outcome 2\* Information Literacy
- \*Learning outcome 1\* Environmental Responsibility
- \*Learning outcome 2\* Computer / Technology Usage
- \*Learning outcome 1\* Aesthetic / Creative Activities

### **Competency 2:**

The student will demonstrate knowledge, comprehension, and application of the use of alginate impressions and study models by:

- a. Describing factors for the selection of an impression tray.
- b. Preparing an impression tray with rope wax.
- c. Demonstrating proper mixing, loading, seating, and removal of a tray to obtain an acceptable alginate impression.

- d. Listing the criteria for an acceptable alginate impression.
- e. Demonstrating how to disinfect an alginate impression.

#### Learning Outcomes

- \*Learning outcome 1\* Communication
- \*Learning outcome 2\* Numbers / Data
- \*Learning outcome 1\* Critical Thinking
- \*Learning outcome 2\* Information Literacy
- \*Learning outcome 1\* Environmental Responsibility
- \*Learning outcome 2\* Computer / Technology Usage
- \*Learning outcome 1\* Aesthetic / Creative Activities
- ...

#### **Competency 3:**

The student will demonstrate knowledge, comprehension, and application of the use of taking of a bite registration by:

- a. Describing the procedure and disinfection steps used for taking a bite registration with wax.
- b. Identifying the limitations of using a bite wax in the mouth.
- c. Demonstrating how to take an accurate bite registration using wax.
- d. Demonstrating how to take a bite registration using an elastomeric material.
- e. Explaining the patient instructions when taking a bite registration.

#### Learning Outcomes

- \*Learning outcome 1\* Communication
- \*Learning outcome 2\* Numbers / Data
- \*Learning outcome 1\* Critical Thinking
- \*Learning outcome 2\* Information Literacy
- \*Learning outcome 1\* Environmental Responsibility
- \*Learning outcome 2\* Computer / Technology Usage
- \*Learning outcome 1\* Aesthetic / Creative Activities
- ...

#### **Competency 4:**

The student will demonstrate knowledge, comprehension, and application of the placement of a rubber dam by:

- a. Identifying the names of the dental dam armamentarium.
- b. Demonstrating proficiency in the application of a dental dam on a typodont.
- c. Listing the steps for placement and removal of a dental dam.

- d. Discussing the indications and contraindications for using a dental dam on a patient.

Learning Outcomes

- \*Learning outcome 1\* Communication
- \*Learning outcome 2\* Numbers / Data
- \*Learning outcome 1\* Critical Thinking
- \*Learning outcome 2\* Information Literacy
- \*Learning outcome 1\* Environmental Responsibility
- \*Learning outcome 2\* Computer / Technology Usage
- \*Learning outcome 1\* Aesthetic / Creative Activities
- ...