



Course Description

DES2100L | Dental Material and Specialties Lab | 1.00 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:

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

Learning Outcomes

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities
- Describe how natural systems function and recognize the impact of humans on the environment

Competency 2: The student will demonstrate knowledge, comprehension, and application of the use of alginate impressions and study models by:

1. Describing factors for the selection of an impression tray
2. Preparing an impression tray with rope wax
3. Demonstrating proper mixing, loading, seating, and removal of a tray to obtain an acceptable alginate impression
4. Listing the criteria for an acceptable alginate impression
5. Demonstrating how to disinfect an alginate impression

Learning Outcomes

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities
- Describe how natural systems function and recognize the impact of humans on the environment

Competency 3: The student will demonstrate knowledge, comprehension, and application of the use of taking of a bite registration by:

1. Describing the procedure and disinfection steps used for taking a bite registration with wax
2. Identifying the limitations of using a bite wax in the mouth
3. Demonstrating how to take an accurate bite registration using wax
4. Demonstrating how to take a bite registration using an elastomeric material
5. Explaining the patient instructions when taking a bite registration

Learning Outcomes

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities
- Describe how natural systems function and recognize the impact of humans on the environment

Competency 4: The student will demonstrate knowledge, comprehension, and application of the placement of a rubber dam by:

1. Identifying the names of the dental dam armamentarium
2. Demonstrating proficiency in the application of a dental dam on a typodont
3. Listing the steps for placement and removal of a dental dam
4. Discussing the indications and contraindications for using a dental dam on a patient

Learning Outcomes

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities
- Describe how natural systems function and recognize the impact of humans on the environment