

# ADED 162C : Dental Materials for Dental Hygiene

An introduction to the composition and properties of dental materials with emphasis on materials currently utilized in dental and dental hygiene treatments. Lab sessions are coordinated with lectures to provide practice in manipulation of materials with emphasis on impression taking and preparation of study casts.

**Credits** 3

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 2

**Prerequisite Courses**

ADED 100C

ADED 113C

ADED 136C

ADED 140C

**Corequisite Courses**

ADED 103C

ADED 114C

ADED 126C

**Learning Outcomes**

- Determine considerations when selecting dental materials to be used in the mouth.
- Define the properties of dental materials for preventive measures or as direct restorative materials.
- Define the properties of the dental materials used as indirect restorative materials that aid in restoring the oral cavity to optimum health.
- Fabricate a study model demonstrating proper and accurate use of gypsum products.
- Demonstrate the correct procedure when using alginate material to take an impression.
- Compare and contrast alginate, agar hydrocolloid, rubber base impression material, impression compound, and zinc oxide eugenol impression material.
- Explain the various types of waxes and their uses in dentistry.
- Compare and contrast the various materials used as luting agents, liners, and bases.
- Explain the composition of periodontal dressings and demonstrate the manipulation and application of the material on a dentex model.
- Explain the composition, uses, and polymerization process of heat and cold cured resins.
- Describe the fabrication and care of a denture.
- Compare and contrast direct esthetic restorative materials including composite, glass ionomers, enamel adhesives, and dentin bonding agents.
- Describe the composition and uses of the restorative material amalgam.
- Demonstrate the correct procedure for fabricating athletic mouth guards and whitening trays.