

# ADED 161C : Dental Materials-DA

Study of the composition and properties of materials used in dentistry. Lab sessions emphasize practice in manipulation of various materials.

**Credits** 3

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 2

## **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.