

**Course Objectives/Course Outline**  
**Spokane Community College**

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**Course Title:** *Dental Restorative Techniques Lab*

**Prefix and Course Number:** DENT 117

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**Course Learning Outcomes:**

**By the end of this course, a student should be able to:**

1. Identify the role of the dental assistant through demonstration of knowledge safety of handling of materials, mixing techniques including fulcrum, properties of materials, caries detectors, cements, bases and liners, varnish, etchant and final restorative materials understanding the importance of a matrix band.
2. Use dental nomenclature relating to dental chairside equipment and procedures orally and in writing.
3. Define and spell terminology used in this unit.
4. Identify when and where to use personal protective equipment prior to, during and after treatment following OSHA/WISHA standards.
5. Be familiar with Washington State Department of Health Scope of Practice as related to chairside procedures allowable in Washington State for placement of cements, bases and liners.
6. Demonstrate professional interpersonal communication both verbal and nonverbal with instructors and peers.

**Course Outline:**

**Safety and Handling of Materials:**

- 1) Prepare all materials according to manufacturers' instructions. Use quantitative skills to obtain desired consistency.
- 2) Manipulate cements, bases, cavity liners and varnishes obtaining a clinically useful product, preventing contamination and waste with maximum asepsis.
- 3) Demonstrate the principles of effective instrument grasp and fulcrum.
- 4) Demonstrate correct dispensing and disposing of dental materials.

**Diagnostic Aids:**

- 1) Identify and demonstrate caries detectors
- 2) Understand the importance of radiographs and a clinical examination for caries detection.

**Cements, Bases and Liners:**

- 1) Prepare and manipulate the following materials following manufactures instructions, describe the composition, use, mixing and setting times, advantages/disadvantages, strength and demonstrate proper handling and disposal.
  - i) Zinc Oxide Eugenol Cements
  - ii) Zinc Phosphate Cement
  - iii) Polycarboxylate Cement
  - iv) Glass Ionomer Cements
  - v) Compomer Cements
  - vi) Varnish
  - vii) Calcium Hydroxide

**Final Restorative Materials:**

- 1) Prepare and manipulate the following materials following manufactures instructions, describe the composition, use, mixing and setting times, advantages/disadvantages, strength and demonstrate proper handling and disposal.
  - a) Etching and Bonding Systems

- i) Placement of etch and bond
- ii) 1, 2, 3 step bonding systems
- b) Amalgam
  - i) Composition
  - ii) Safety Standards
  - iii) Trituration
  - iv) Handling
- c) Composite
  - i) Types: Macro, Micro, Hybrid, Nano
  - ii) Fillers
  - iii) Shades and shade guides
  - iv) Curing lights

**Matrix Band:**

1. Identify a tofflemire matrix band and retainer.
2. Assemble the tofflemier and place on a typodont