

## LABETTE COMMUNITY COLLEGE BRIEF SYLLABUS

### **SPECIAL NOTE:**

This brief syllabus is not intended to be a legal contract. A full syllabus will be distributed to students at the first class session.

### **TEXT AND SUPPLEMENTARY MATERIALS USED IN THE COURSE (if any):**

Please check with the LCC bookstore <http://www.labette.edu/bookstore> for the required texts for this class.

**COURSE NUMBER:** DNAS 138

**COURSE TITLE:** DENTAL RADIOLOGY II

**SEMESTER CREDIT HOURS:** 1

**DEPARTMENT:** Dental Assistant

**DIVISION:** Health Science

**PREREQUISITES:** DNAS 118 Dental Radiology I

**REVISION DATE:** November 2014

### **COURSE DESCRIPTION:**

Students will gain radiographic interpretation knowledge, including: identification of restorations, dental materials, caries, diseases of the dental pulp and soft tissues. This course also includes a review of radiation protection and quality assurance in the dental office.

### **COURSE OUTCOMES AND COMPETENCIES:**

**Students who successfully complete this course will be able to:**

1. Identify and discuss radiation protection and associated concepts and quality assurance procedures.
  - Describe in detail the basics of patient protection.
  - Describe the importance of film handling and processing after patient exposure to x-rays.
  - Discuss the ALARA concept.
  - State the MPD for occupational workers in dental practices regarding radiation.
  - Describe quality control tests specific to dental x-ray equipment, supplies and film processing.
  - Describe various logs that are kept to ensure processing solutions are effective.

2. Demonstrate a working knowledge of the terminology and importance of radiographic interpretation.

- Define the roles of the dentist and dental auxiliary in the interpretation of dental radiographs.
- Discuss the difference between interpretation and diagnosis.
- Describe how radiographic interpretation can be used to educate the patient about the importance and use of dental radiographs.
- Define the terms radiograph, x-ray, radiolucent and radiopaque.
- Differentiate between radiograph and x-ray.
- Identify radiopaque and radiolucent lesions on a radiograph in terms of appearance, location and size.

3. Identify restorations, dental materials and foreign objects.

- Discuss the importance of interpreting radiographs while the patient is present.
- Identify the radiographic appearance of dental materials such as amalgam, post and core, porcelain, composite, base materials, pins, silver points, RPD's, dentures, ortho bands, brackets and wires, retainers, implants, and various other dental materials.
- Identify the radiographic appearance of non-dental materials such as jewelry, eyeglasses, etc.

4. Interpret dental caries.

- Explain why caries appears radiolucent on a dental radiograph.
- Discuss the factors that may influence the radiographic interpretation of dental caries.
- Identify and describe the radiographic appearance of the following: incipient, moderate, advanced and severe interproximal and occlusal caries.
- Identify and describe the radiographic appearance of the following: buccal, lingual, root surface, recurrent and rampant caries.

5. Interpret periodontal disease.

- Describe the healthy periodontium.
- State and recognize the differences among mild, moderate, and severe bone loss.
- Discuss and recognize the difference between localized and generalized bone loss.
- Discuss and recognize each of the four case types of perio disease on dental radiographs.
- Recognize and describe the radiographic appearance of calculus.

6. Interpret trauma, pulpal and periapical lesions.

- Describe and identify radiographic appearance of crown, root and jaw fractures.
- Describe and identify radiographic appearance of an avulsion.
- Describe and identify the radiographic appearance of a cyst and abscess.
- Describe and identify the radiographic appearance of internal and external resorption.