

Virginia Western Community College
DNH 130
Oral Radiology for the Dental Hygienist

Prerequisites

- Algebra I
- Biology
- Chemistry
- College BIO 141, BIO 142, and SDV 101

Course Description

Introduces the practical study and application of dental radiology. Presents aspects of chemistry, biology, and anatomy that correlate to dental radiography. Encompasses knowledge of technique, treatment and interpretation.

Studies radiation physics, biology, safety, and exposure techniques for intra- and extra-oral radiographic surveys. Laboratory provides practice in exposure, processing methods, mounting, and interpretation of normal and specific pathological findings.

Semester Credits: 3 Lecture hours: 2 Lab/Clinical/Internship Hours: 3

Required Materials

- Iannucci, Joen M. and Howerton, Laura Jansen. Dental Radiography Principles and Techniques. 5th Edition. Elsevier, 2017. **ISBN: 978-0-323-29742-4**
- Iannucci, Joen M. and Howerton, Laura Jansen Dental Radiography, A Workbook and Laboratory Manual. 5th Edition. Elsevier, 2017. **ISBN: 978-0-323-29749-3**
- Virginia Western Community College Dental Hygiene Student Guidelines & Procedures Manual [2018-2019](#)

Course Outcomes

Upon completion of this course, the student will be able to accomplish the following objectives with at least 77% competency:

1. List the uses of radiographs in dentistry and discuss techniques for exposing intraoral and extra-oral dental films including advantages and disadvantages.
2. Discuss the physics of fabricating x-ray energy and relate that to how it affects the radiographic image and radiation exposure to the patient.
3. List the types and effects of radiation to humans and different types of tissues and explain how it occurs on a cellular level.
4. List the steps to take before, during and after exposure to reduce the amount of radiation to patients.
5. Identify normal anatomy and interpret specific pathological conditions on radiographs of the oral cavity.
6. Acquire competency in different radiographic exposure techniques (bisecting, paralleling and occlusal).
7. Distinguish specific radiographic landmarks as taught in class.
8. Mount radiographic exposures in proper anatomic position
9. Recognize specific pathology as taught in class.
10. Relate the different descriptive radiographic terms as they relate to pathology.

Topical Description

Studies radiation physics, biology, safety, and exposure techniques for intra-and extra-oral radiographic surveys. Laboratory provides practice in exposure, processing methods, mounting, and interpretation of normal findings.

Notes to instructors

- **Lecture Instructor** is only instructor for lecture no need for additional instructions
- **Lab Instructors:** Faculty will introduce and demonstrate radiograph techniques/ requirements.