

## **Course Description**

### **DES 1200 | Dental Radiology | 2 credits**

An introduction to the fundamentals of radiology science as applied to dentistry.

Special emphasis will be given to radiation physics, hazards, biological effects, and protection and control methods. Also, included are radiographic interpretation, and proper techniques for exposing, processing and mounting of radiographs.

## **Course Competencies**

### **Competency 1:**

The student will demonstrate the knowledge and comprehension of the historical development of dental radiography by:

- a) Discussing the chronological development of radiography
- b) Identifying the discoverers and their contributions to radiography.
- c) Explaining the uses of dental radiographs

### **Learning Outcomes**

- Communication
- Numbers / Data
- Critical Thinking
- Information Literacy
- Cultural / Global Perspective
- Computer / Technology Usage
- Aesthetic / Creative Activities
- Ethical issues

### **Competency 2:**

The student will demonstrate the knowledge, comprehension and evaluation of intraoral and extraoral radiographic projections by:

- a) Comparing and contrasting the different types of intraoral and extraoral radiographic projections.
- b) Identifying the purposes of the different types of radiographic projections.

### **Learning Outcomes**

- Communication
- Numbers / Data
- Critical Thinking

- Information Literacy
- Cultural / Global Perspective
- Computer / Technology Usage
- Aesthetic / Creative Activities
- Ethical issues

### **Competency 3:**

The student will demonstrate the knowledge, comprehension and evaluation of the principles of paralleling and bisecting techniques by:

- a) Explaining the principles of paralleling and bisecting techniques.
- b) Comparing and contrasting the similarities and differences of the paralleling and bisecting techniques.

#### Learning Outcomes

- Communication
- Numbers / Data
- Critical Thinking
- Information Literacy
- Cultural / Global Perspective
- Computer / Technology Usage
- Aesthetic / Creative Activities
- Ethical issues

### **Competency 4:**

The student will demonstrate the knowledge, comprehension and application of infection control within dentistry by:

- a) Discussing the various film types and sizes.
- b) Describing the part/whole structure and chemistry of an x-ray film and cassette.
- c) Discussing the formation of the latent image

#### Learning Outcomes

- Communication
- Numbers / Data
- Critical Thinking
- Information Literacy
- Cultural / Global Perspective
- Computer / Technology Usage
- Aesthetic / Creative Activities
- Ethical issues