Common Course Outline for: DENH 1150 Dental Radiology

A. Course Description
1. Credits: 4
2. Hours/Week: Lecture 3 hours; Lab/Clinic 2 hours
3. Prerequisites: Acceptance in Dental Hygiene Program; DENH 1112,
4. Co-requisites: DENH 1142, DENH 1143
5. MnTC Goals: Goal 2: Critical Thinking

Theory, techniques and procedures for exposing and processing dental radiographs; interpretation of dental radiographs, radiation safety, and practical application in dental radiography lab and clinical setting.

B. Date Last Revised: January 2016

C. Outline of Major Content Areas
1. History of dental radiology
2. Radiographic Equipment and Dental film
3. Film Processing
4. Radiation Safety
5. Radiation Physics
6. Radiographic techniques
7. Radiology Quality Control
8. Interpretation of dental radiographs/images
9. Digital Imaging
10. Three-Dimensional Digital Imaging
11. Patient relations and education
12. Legal issues and regulations
13. Mounting and Viewing both film and images

D. Course Learning Outcomes
Upon successful completion of this course, the student will be able to:
1. Describe the historical development of radiology in dentistry.
2. Identify the dental films/images used in intra-oral and extra-oral dental radiography.
3. Identify the correct placement and arrangement of intra-oral radiographic surveys.
4. Identify factors and principles in the imaging of diagnostically acceptable dental films/images.
5. Identify typical images of anatomic structures as recorded in bite-wing and periodical dental films/images.
6. Relate radiology with diagnosis and treatment planning,
7. Follow all precautions to maintain as aseptic radiology clinic environment.
8. Identify all radiographic errors and their specific method of correction.
9. Discuss radiology of the Special Needs Client.
10. Understand the physics of dental radiology.
11. Understand the biological effects of radiation and the necessary safety precautions that must be followed in the dental setting for both federal and state regulations.
12. Demonstrate correct techniques basics and exposure for both film and imaging of intra-oral radiographs.
14. Interpret both normal conditions and pathology on the dental radiograph.
15. Accept responsibility in providing ethical and competent care in the dental radiology clinical setting.
16. Meet the Professional Portfolio requirements.

E. Methods for Assessing Student Learning
Attendance is mandatory in all lectures, labs and clinical sessions.
  Lecture/lab/clinical requirements:
  1. Classroom and Online assignments/worksheets
  2. Exams (6)
  3. Cumulative Review Exam
  4. Lab competency exams and requirements
  5. Final Exam

F. Special Information: None.