

Dental Radiology Interpretation

Dental Hygiene 4000
ETSU-Dental Hygiene Program
Summer 2020

Instructor: Dr. Charles Faust
Office #80
423-439-4499
Office Hours Posted on Office Door

Course Meeting Time:
Section 001: Tuesday 1:00 - 2:45
Section 002: Thursday 1:00 - 2:45

Entry Level Skills and/or Prerequisites:
Satisfactory completion of DHYG 2170 & 2171
(Dental Radiography Lecture and Lab) and the
first year curriculum.

Required Texts: M.J. Kasle, An Atlas of Dental Radiographic
Anatomy, 4th Edition, Saunders

Course Purpose and Description: This purpose of this course is
to provide the dental hygiene student with experience in the
identification and interpretation of intra and extra-oral dental
radiographs. The course includes the evaluation of BWX, FMX,
and Panoramic radiographs for anatomic landmarks, caries,
periodontal disease, anomalies, pathology, and dental materials.

Evaluation Criteria: Laboratory exercises will involve
evaluation of FMX, BWX, and Panoramic radiographs for the
laboratory period's daily slide presentation. The first half of
class will be spent viewing slides, and then the student will
evaluate radiographs for the day's subject matter. These
evaluations will result in a final 'lab exercise' grade. One
practical examination will be given during the semester and
there will be a comprehensive final examination.

Lab exercises	15%
Exam # 1	45%
Final Exam	40%

Attendance: Attendance is mandatory. Unexcused absences will
result in a **"0"** in the 15% lab exercise category.

<u>Grading Scale:</u>	95-100	A
	92-94	A-
	89-91	B+
	86-88	B
	83-85	B-
	80-82	C+
	77-79	C
	74-76	C-
	71-73	D+
	68-70	D
	0-67	F

Foundational Competencies:

I. 1. Prepare graduates with the knowledge and clinical competency necessary to provide dental hygiene care.

IV. 2. Students will apply the dental hygiene process of care model: assessment, planning, implementation, and evaluation.

Learning Activities: This course involves a daily review of all of the various radiographic findings a dental hygienist must be able to identify in their daily practice. The course involves showing the student the anatomic landmarks, pathology, and dental materials visible on periapicals and panoramic radiographs. There will be multiple slides with the different landmarks, pathology, and materials and students will be quizzed (non-graded) during the course period to see if they are able to identify the areas being covered in class. At the end of each period, the last 30 minutes to an hour will involve students pairing up with a partner to go through x-rays provided by the instructor and look for the items covered in class that day. The instructor will float around the room to help with identification as well as to point out items of interest for all to see. This is an interactive class and your participation in these activities is critical to success in the course.

Tentative Schedule (Subject to change)

Week 1	Review maxillary and mandibular anatomic landmarks, and begin FMX evaluation
Week 2	Review anatomic landmarks and complete FMX evaluation
Week 3	Review Pan landmarks
Week 4	Continue Pan and evaluation of processing errors
Week 5	Caries interpretation

Week 6	<u>Exam #1</u>
Week 7	Periodontal Disease Interpretation
Week 8	Dental Materials
Week 9	Continue with materials
Week 10	Pulp and developmental disturbances, dental anomalies
Week 11	Radiographic interpretation of oral pathology
Week 12	Oral Pathology continued and review for final
Week 13	<u>Final Exam</u>

Behavioral Objectives

Upon completion of this laboratory course, the student will be able to:

1. Identify the anatomic structures on periapical radiographs, bitewing radiographs, and panoramic radiographs.
2. Evaluate FMX, BWX, and Panoramic radiographs using the ETSU evaluation forms.
3. Distinguish between normal and abnormal radiographic appearance of developing and mature teeth and their supporting structures.
4. Recognize dental caries and be familiar with common errors in interpretation.
5. Identify radiographic anomalies which may be misinterpreted as caries.
6. Identify common processing errors.
7. Identify the limitations and benefits of the different types of radiographs in periodontal diagnosis.
8. Recognize radiographic changes associated with early, moderate, and advanced stages of periodontal disease.
9. Identify contributing factors to periodontal disease such as calculus, restorations, root proximity, and malposition of teeth.
10. Identify periodontal disease on radiographs in lab exercises.
11. Identify various dental materials located on radiographs.
12. Distinguish between the different types of dental materials seen on radiographs.
13. Identify the radiographic appearance of common dental anomalies, oral pathology, and pulpal disturbances.