

Course Title: Dental Radiography/ Lab

Course Number: DH 109

Number of Credits: 2

Semester and Year: Fall 2012 **Beginning Date:** August 30, 2012 for 16 weeks.

Required Textbooks:

Haring & Lind. *Dental Radiography Principles & Techniques*. Edition: 3rd. Publisher: Saunders.
Year : 2006. ISBN: 0-7216-5596-3. Required

Dodd. *Dental Radiography Course Manual*. Publisher: NTC Year: 2010. Required

Name of Instructor: Bobette S. Maier RDH

Office Location: Ferguson 501

Scheduled (office hours): M 10:00-11:00, T 3:00-4:00, W 10:00-11:00

Telephone (office): 758.460-5449

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Course placement: First year dental hygiene student

Course Pre/Co-requisites: Please refer to your student manual

Rationale: The student will learn in this lab how to expose safe dental radiographs on dental hygiene patients. The student will learn how to interpret radiographic landmarks of dental images along with dental concerns on the radiograph.

Course Description:

Discusses and applies basic principles of the nature, effects, generation, control, and use of dental x-rays. Radiation safety, operation of equipment, film placement, exposure, processing, mounting, and interpreting dental x-rays are demonstrated and applied. Attainment of correct x-ray taking techniques on mannequins and clinical patients.

Course Outline:

Lab 1:

Tour Radiography area

Demo Infection Control in ops and darkroom

Infection Control in the operatory check-off demo

Will be tested week of 9.12

Infection Control in the darkroom check-off demo

Will be tested week of 9.19

Demonstrate room set including manikin set up

Lab 2:

Demo BWX

Lab 3:

Students practice BWX films individually

Students practice mounting using textbook, textbook CD and x-ray films provided

Students' assignment: Watch grading criteria DVD

Lab 4:

Infection Control in op. observations

Students practice BWX films individually

Students to practice mounting using textbook, textbook CD and x-ray films provided

Lab 5:

Infection Control in Darkroom observation

Introduction to Parallel technique

Demonstration of anterior projections

Students continue practicing mounting

Lab 6:

Demonstration of posterior projections using parallel technique

Students continue practicing mounting films

Students to sterilize film holders for practice of film placement for next lab (must wear clinical attire)

Lab 7:

Bisecting technique demonstration

Students start practicing film placement on peers

Lab 8:

Demonstration of duplicating activity

Students practice FMX and film placement on peers

Lab 9:

Stepwedge demonstration

Students to start grading FMX

Darkroom activities assigned

Bisecting activity due

Lab 10

½ class FP observations on a peer. 65% is needed to pass

Failure to pass this observation requires mediation with an instructor, and a redo as scheduled per instructor. This must be done on a different peer on the opposite side of the mouth from the original attempt. This is to be done until passed a zero is recorded.

Students practice anatomical landmarks using textbook and films provided

Students continue working on graded FMX

Stepwedge activity due

Lab 11:

2nd ½ class FP on a peer

Continue work on graded FMX

Continue work on learning anatomical landmarks

Students fill out a permanent clinical MH if not already completed

Lab 12:

Demonstration of vertical BWX, occlusal films and 5 #1 anterior films

Students continue on graded FMX

Students continue learning anatomical landmarks

Lab 13:

Discuss preparing patients' record

Discuss how to requisition

Where to find forms ect.

Begin graded peer radiographs

Continue with graded FMX if not completed

Students start completing the anatomical landmarks check-off with instructor. Students must identify all landmarks with minimal guidance. Guidance is defined as the discussion of the function or definition of a landmark. If the student is unable to identify ¼ of the landmarks the observation must be redone.

Lab 14:

Demo alternative film holders

Students continue peer FMX

Continue anatomical Landmarks check off

Vertical BWX ect activity due

Lab 15:

Students finish peer FMX

Students finish alternative film holders

Check-off due

Course Learning Objectives:

To learn about radiography equipment and how it works

To learn proper infection control in the radiography room and dark room

To learn how to expose safe radiographs on your hygiene patient

To learn how to develop dental radiographs correctly.

To learn how to duplicate dental radiographs

To learn how to mount dental radiographs

To learn anatomical landmarks and detect possible problems that the patient has on a radiograph

Objectives Assessed:

NTC Dental Radiography Lab Progress Sheet

Student Name _____

College _____

Instructor Signature/ Date _____

*** Note: Earned scores are rounded earned points and total points are not rounded**

Lab activities Pass/fail

- | | | | |
|--------------------------------------|-----------|----------------------------------|-----------|
| • Infection control darkroom..... | pass/fail | • Infection control operatory... | pass/fail |
| • Darkroom Testing | pass/fail | • Anatomical Land. PAs | pass/fail |
| • Duplicating..... | pass/fail | • Anatomical Land. Pan | pass/fail |
| • Occl., vertical, & #1 PA's..... | pass/fail | | |
| • Step wedge... | pass/fail | | |
| • Other available film holders | pass/fail | | |

***FP remediation if necessary**
Date _____

Remediation dates

*Remediation must be done with an instructor whenever a minimum competency is not earned

Graded activities	Max. Score	Min. Score	Earned Score	Max. points	Earned points
• Mannequin BWX	100	65	_____	x .30	_____
Redo.	65		_____		
• Mannequin BWX	100	65	_____	x .30	_____
Redo.	65		_____		
• Mannequin BWX	100	65	_____	x .40	_____
Redo.	65		_____		
• Mannequin FMX PA's	100	65	_____	x .40	_____
Redo.	65		_____		
• Peer FMX	100	65	_____	x .40	_____
• Film Placement	100	65	_____	x .10	_____
• Redo.	65		_____		
• Affective	100	65	_____	x .10	_____

CA

Course Competencies: The learning outcomes and competencies detailed in this syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Competency Project for this course.

- Demonstrate ethical and professional behavior with patients and coworkers
- Expose intraoral radiographs with emphasis on the paralleling technique
- Discuss x-ray films and factors affecting radiographic film quality
- Discuss the dental darkroom and demonstrate x-ray processing techniques
- Identify properties of radiation physics and concepts dealing with radiation biology
- Identify errors in technique and processing of films and how to correct them
- Discuss panoramic radiography
- Process and demonstrate proper radiation health, safety and protection procedures on a patient
- Identify normal anatomical landmarks using panoramic, periapical, bitewing, and occlusal films
- Discuss patient management techniques and how to handle special patient problems

Method of Instruction: This is a lab hands on course exposing films on hector

Meeting Times and Locations: Lecture Monday 2:00-2:50 pm – ITV Lab: Ferguson room 501
Lab : Ferguson 501: Section 2 8:00-11:00, Section 1 12:00-3:00

Assessment of Learning Information

Method of Evaluation:

Description of items included in final

Your grade will be based on you being able to demonstrate all competencies at a minimum level of C on performance-based tasks in order to pass the course. You may be required to demonstrate the competencies through class discussions, Blackboard discussions, a quiz covering each unit topic, demonstration of practical techniques, and a final exam.

Submission of Class Work

Because it is vital that you can demonstrate each of the competencies outlined in this course, we must stay on track with timelines for assignments. Assignments must be submitted on the date they are due. However, if you have special circumstances or have problems with an assignment, please inform me immediately. I am here to help you, but you need to communicate your needs to me as they arise.

Lecture – 50% of total grade. A minimum of 75% must be achieved in the lecture portion to pass this course.

Blackboard submissions

Quizzes 6 – 8-10 point quizzes, no retakes

Tests, 2 – 40-50 point tests, no retakes

Final exam, 45-0 questions, no retakes

Laboratory – 50% of total grade. A minimum of 65% must be achieved in the laboratory portion to pass this course.

- 3 – Graded BW films – mannequin
- 1 – Graded FMX PA's – mannequin
- 1 – Film placement observation
- 1 – Graded BWX – Peer
- 1 – Graded FMX PA's – Peer
- Completion of all exercises

All requirements and grading sheets for the above lab activities is found in your course manual

A	100-95	B-	86-84
A-	94-92	C+	83-80
B+	91-89	C	79-75
B	88-87		

Core Ability Statement

Core Abilities are broad outcomes or skills that every graduate of an NTC program is expected to achieve. These skills go beyond the context of a specific course or program and are the skills employers tell us they expect employees to have. For you to meet these demands, NTC has identified 7 Core Abilities that are important in every area of learning. In this course we will focus on:

- Communicate effectively.
- Act responsibly.
- Work productively.
- Work cooperatively.
- Demonstrate integrity.
- Think critically and creatively.
- Develop global awareness.

Performance-Based Learning

You as a learner are the most important part of instruction. As a result, performance-based tasks will identify what you must be able to do as a result of your learning. The tasks you are asked to do will determine how you can show that you have learned these skills. This performance-based course is designed around 10 competencies. Your grade will be based on your performance of all of those competencies according to the criteria outlined in your learning plans.

Program Outcomes

The competencies as listed in this syllabus for this course are to help you obtain the skills and knowledge required to obtain the type of position you desire upon completion of the program. There is a direct link between this course and the overall program. This course will prepare you to expose periapical, bitewing and Panoramic films. You will also learn to determine the need for radiographs and to recognize diagnostic films. Along with these skills you will attain the knowledge of the

physics and safety measures required while exposing your patients to x-ray. The skills and knowledge attained will allow you to take x-rays on your NTC clinical patients, pass your practical exam and to take diagnostic x-rays while out in practice. Please refer to your orientation manual for the Dental Hygienist program outcomes.

Supplies:

- Colored lab scrubs
- Clinical attire
- Protective eyewear
- Film holders
- Stapler
- Calculator
- Silver pencil
- 5 clear plastic sleeve covers

Guidelines to help you succeed in this class:

A student must demonstrate a satisfactory and safe performance level during each clinical/laboratory course throughout each semester. A student who is deemed unsafe during a clinical/laboratory course will not continue in the program.

Competency	Criteria
Satisfactory	Patterns of behavior that demonstrates consistent progress toward fulfillment of the course competencies and objectives.
Unsatisfactory	Patterns of behavior that fail to meet the course competencies and objectives.
Unsafe	Behavior that jeopardizes or is potentially harmful to patient, fellow classmates, faculty, staff and self. Unsafe behavior can be either commission or omission of acts.

Academic Integrity

I am most interested in the knowledge and skills that you are developing to ensure that you are employable and successful upon graduation from this program. Employers will expect you to be honest, demonstrating ethical/professional behavior, adhering to work policies/procedures, respecting people and property, and taking appropriate action in connection with ethical dilemmas. I expect the same in this course. Thus, any type of cheating or plagiarism will not be accepted and will result in a F for that assignment.

Attendance:

You are required to be in class for all class periods. If you are ill or have another legitimate reason for not being in class, please call your instructor and lab instructor prior to your absence. We will then discuss any make up work you must complete because of your absence. Remember that you *must* demonstrate *all* competencies in order to pass the class. Please be here so that you are successful!

Academic Integrity

Colby Community College defines academic integrity as learning that leads to the development of knowledge and/or skills without any form of cheating or plagiarism. This learning requires respect for Colby's institutional values of quality, service and integrity. All Colby Community College students, faculty, staff, and administrators are responsible for upholding academic integrity.

Cheating is giving, receiving, or using unauthorized help on individual and group academic exercises such as papers, quizzes, tests, and presentations through any delivery system in any learning environment. This includes impersonating another student, sharing content without authorization, fabricating data, and altering academic documents, including records, with or without the use of personal and college electronic devices.

Plagiarism is representing or turning in someone else's work without proper citation of the source. This includes unacknowledged paraphrase, quotation, or complete use of someone else's work in any form. It also includes citing work that is not used and taking credit for a group project without contributing to it.

The following procedure will be used for students who violate the policy:

- First Offense – Student will receive a zero for the assignment and the student will be reported to the Dean of Academic Affairs.
- Second Offense – The student will be reported to the Dean of Academic Affairs and removed from the class.
- Third Offense – The student will be reported to the Dean of Academic Affairs and dismissed from the college.

Any questions about this policy may be referred to the Dean of Academic Affairs.

Make-up work

The most important thing in this course is your success. Please act responsibly by attending each session of class. If you must miss a class, please call or e-mail your instructor to set up a meeting time so that you can receive the material that you missed and set a reasonable make-up work timeline so that you will not fall behind and can continue to be successful in the course.

Special Needs/ADA Accommodations

If you have a documented disability and believe that you could benefit from academic accommodations, please visit the Student Success Center or call (785)460-5510.

NTC Policies

Students with questions regarding affirmative action, equal opportunity, harassment, computer use or information about any other NTC policies may refer to the current NTC catalog or student handbook available in Student Services or at this website: <http://www.ntc.edu/about/policies.htm>

CCC Policies

Students with questions regarding affirmative action, equal opportunity, harassment, computer use or information about any other CCC policies may refer to the current CCC catalog or student handbook.