McLennan COMMUNITY COLLEGE

WACO, TEXAS

COURSE SYLLABUS

AND

INSTRUCTOR PLAN

Basic Radiographic Procedures Lab

RADRL 1311_01

Deborah Quinn BSHS, RT(R)

NOTE: This is a 16-week course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website on any changes to these guidelines.

Course Description:
Introduces radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy and related pathology. This class is a two-way interactive video class in format.

Prerequisites and/or Corequisites:

(Concurrent enrollment with RADR 1311)

Course Notes and Instructor Recommendations:
All cell phones, pagers, or other electronic devices must be turned off during class. You may check your messages during breaks or between classes. ***Laptop computers may be used to facilitate note taking or to view classroom visuals that are posted on BrightSpace, but must be turned off or put in sleep mode during tests.*** No other use of the lap top will be tolerated during class. If at any time during class you create a distraction to the Instructor or your classmates, you will be asked to leave the class.

Instructor Information:

Instructor Name: Deborah Quinn
MCC E-mail: dquinn@mclennan.edu
Office Phone Number: 254-299-8305
Office Location: CSC C-117
Office/Teacher Conference Hours: Posted
Other Instruction Information: Available at other times with appointment

Required Text & Materials:
Title: Textbook of Radiographic Positioning and Related Anatomy
Author: Lampignano, John P., Kendrick, Leslie E.
Edition: 10th
Publisher: Mosby-Elsevier
ISBN: 978-0-323-95367-2
Title: Textbook of Radiographic Positioning and Related Anatomy Workbook (2021)
Author: Lampignano, John P., Kendrick, Leslie E.
Edition: 10th

Publisher: Mosby-Elsevier
ISBN: 978-0-323-69423-0

MCC Bookstore Website: http://www.mclennan.edu/bookstore/

Methods of Teaching and Learning:

Lecture, discussion groups, group projects, lab exercises, portfolio, written reports/papers, exams, quizzes, simulations, workbook exercises power point presentations.

Course Objectives and/or Competencies:

The student will define radiographic positioning terms; manipulate equipment properly; position and align anatomical structure and equipment; and evaluate images of proper demonstration of anatomy and pathology. Students will demonstrate understanding of procedures related to radiography of the course outline.

After completion of all lectures, presentations, homework and reading assignments the student will be able to:

1. Relate and demonstrate positioning nomenclature.
2. Perform in order all steps for positioning of various parts of the body.
3. On given radiographs, utilize proper evaluation criteria to determine if a film is acceptable or unacceptable. If unacceptable, give major reason why it is not.

4. Identify structures or radiographs as shown in all positions.
5. Provide proper radiation protection for all projection taken.
6. State the most common film size and proper placement of film for all exams.

7. Demonstrate proper central ray location for all exams.
8. Employ proper breathing technique on all positions and exams.,
9. Choose proper degree of angulation and direction of central ray for various exams.

UNIT 1 Learning Objectives

Introduction to Radiographic Principles, Positioning, Procedures and Terminology

At the completion of this unit, the student should be able to:
1. List and discuss patient care consideration relevant to positioning.
2. List the three primary exposure factors.
3. List specific methods of reducing patient radiation exposure.
4. Explain the 10-day rule.
5. List the three primary principles of radiation protection.
6. Define and demonstrate the anatomic position.
7. Define terms related to body planes.
8. Given diagrams, identify body planes.
9. Given topographic landmarks, list the corresponding vertebrae.
10. List and describe the characteristics of each of the four major body types.
11. Given diagrams, identify the body type illustrated.
12. Define terms related to general positioning.
13. Define and demonstrate given terms related to relative body position, and body movement.
14. List the three general principles of positioning.
15. List and discuss the six primary elements in radiographic positioning.

UNIT 2 Learning Objectives
Chest and Upper Airway

At the completion of this unit, the student should be able to:
1. List and describe the anatomy of the chest and upper airway.
2. Given drawings and radiographs, locate anatomic structures and landmarks.
3. Explain the rationale for each projection.
4. Explain the patient preparation required for each examination.
5. Describe the positioning used to visualize anatomic structures of the chest and upper airway.
6. List or identify the central ray location and the extent of the field necessary for each projection.
7. Explain the protective measures that should be taken for each examination.
8. Recommend the technical factors for producing an acceptable radiograph for each projection.
9. State the patient instructions for each projection.
10. Given radiographs, evaluate positioning and technical factors.
11. Describe modifications of procedures for atypical or impaired patients to better demonstrate he anatomic area of interest. **F02, C05**

UNIT 3 Learning Objectives
Abdomen

At the completion of this unit, the student should be able to:

1. List and describe the soft tissue and bony anatomy of the abdomen.
2. Identify the quadrant in which abdominal organs are located.
3. Given drawings and radiographs, locate anatomic structures and landmarks.
4. Explain the rationale for each projection.
5. Explain the patient preparation required for each examination.
6. Describe the positioning used to visualize anatomic structures of the abdomen.
7. List or identify the central ray location and the extent of the field necessary for each projection.
8. Differentiate between the positioning and centering factors for an acute abdomen series and routine supine and upright abdomen.
9. Explain the protective measures that should be taken for each examination.
10. Recommend the technical factors for producing an acceptable radiograph for each projection.
11. State the patient instructions for each projection.
12. Given radiographs, evaluate positioning and technical factors.
13. Describe modifications of procedures for atypical or impaired patients to better demonstrate the anatomic area of interest.

UNIT 4 Learning Objectives
Upper Limb and Shoulder Girdle

At the completion of this unit, the student should be able to:
1. List and describe the anatomy of the upper limb and shoulder girdle.
2. Given drawings and radiographs, locate anatomic structures and landmarks.
3. Explain the rationale for each projection.
4. Explain the patient preparation required for each examination.
5. Describe the positioning used to visualize anatomic structures in the upper limb and shoulder girdle.
6. List or identify the central ray location and the extent of the field necessary for each projection.
7. Explain the protective measures that should be taken for each examination.
8. Recommend the technical factors for producing an acceptable radiograph for each projection.
9. State the patient instructions for each projection.
10. Given radiographs, evaluate positioning and technical factors.
11. Describe modifications of procedures for atypical or impaired patients to better demonstrate the anatomic area of interest.

UNIT 5 Learning Objectives
Lower Limb and Pelvis

At the completion of this unit, the student should be able to:
1. List and describe the bony anatomy of the lower limb and pelvis.
2. Given drawings and radiographs, locate anatomic structures and landmarks.
3. Explain the rationale for each projection.
4. Explain the patient preparation required for each examination.
5. Describe the positioning used to visualize anatomic structures in the lower limb and pelvis.
6. List or identify the central ray location and the extent of the field necessary for each projection.
7. Explain the protective measures that should be taken for each projection.
8. Recommend the technical factors for producing an acceptable radiograph for each projection.
9. State the patient instructions for each projection.
10. Given radiographs, evaluate positioning and technical factors for radiographs of the lower limb and pelvis.

RADR L Schedule Fall 2021 Basic Radiographic Procedures lab
Instructor reserves the right to modify schedule as needed.
Lab Challenges for a grade will be added when schedule allows

Course Outline or Schedule:

RADRL 1311.21

Dates	Topic	Material to Cover* - (Bontrager Pocket Guide and TextBook)	
Week 1	**Radiology Equipment**	**Lab Orientation**	8/23
		Explanation of Lab Evaluation Exam Sheets	
	General Body Positions	**anterior v. posterior, lateral, supine vs. prone**	
		tube angle cephalic v. caudal	
		upright wall unit v. table	
		patient position obl. Table vs. wall unit	
		Control Panel	
Week 2	**Chest**	**PA Upright & Lateral Upright**	8/30
		AP Lordotic	
		AP Supine (Stretcher Chest)	
		AP Upright (Wheelchair Chest)	
Week 3	**Chest & Upper Airway**	**Lateral Decubitus**	9/7
		Oblique Chest	

		AP Soft Tissue Neck	
		Lateral Soft Tissue Neck	
Week 4	**Abdomen**	***AP Supine "KUB" Abdomen, Upright, Decubitis***	9/13
Week 5	**Lab Exam**	**Chest 2 V Abdomen 2 V**	9/20
Week 6	**Upper Limb**	**Finger/Thumb**	9/27
		Hand - PA, Lateral & Oblique	
		Wrist - PA, Oblique, Lateral	
		Wrist - PA Ulnar Deviation	
		Carpal Canal	
Week 7	**Upper Limb**	**Forearm - AP & Lateral**	10/4
		Elbow - AP & Lateral	
		Elbow - External & Internal Oblique	
		Elbow - AP Partial Flexion	
		Axial Elbow (trauma-Coyle)	
Week 8	**Humerus & Shoulder**	**Humerus - AP & Lateral (non-trauma)**	10/11
		Humerus - AP Neutral (trauma)	
		Transthoracic Lateral Humerus (trauma)	
		Shoulder - AP Internal & External Rotation	
		Scapula - AP & Lateral	
Week 9	**Humerus & Shoulder**	**Scapy-Y Trauma**	10/18
		Shoulder - Inferosuperior Axial (Lawrence)	
		Glenoid Fossa (Grashey)	
		Clavicle - AP	
		Clavicle - AP Angle & PA Angle	
		Acromioclavicular Joints - (with/without weights)	
Week 10	**Lower Limb**	**Toes - AP, Oblique & Lateral**	10/25
		Foot - AP, AP Axial, Medial	
		Foot - Lateral (mediolateral & lateromedial)	
		Sesamoids Tangential	
		Weight Bearing AP & Lateral	
		Calcaneus - Axial & Lateral	
Week 11	**Lower Limb**	**Ankle - AP, AP Mortise, Oblique & Lateral**	11/1
		Ankle - AP Stress Studies	

		Tib/Fib - AP, Lateral	
		Distal Femur - AP, Lateral	
Week 12	**Knee**	**Knee, AP, Lateral, Obliques (medial & lateral)**	11/8
		Camp Coventry, Homblad, Modified Homblad	
		Patella-PA, Lateral, Settegast	
		Patella-Merchant, Inferior superior	
Week 13	**Femur & Pelvis**	**Pelvis - AP, Frog Lateral (Modified Cleaves)**	11/15
		Pelvis - Inlet & Outlet	
		Judet Acetabulum	
		Unilateral Hip & Frog Lateral (non-trauma)	
		Hip - Cross Table Lateral	
		Hip-Clements-Nakayama	
		***according to ARRT guidelines**	
Week 14		**Thanksgiving week no lab**	11/22
Week 15	**Final Lab Challenge**	**Lab Challenge over any basic procedure from the semester**	11/29

Course Outline

A. Introduction to Radiographic Principles, Positioning, Procedures and Terminology.
B. Chest and Upper Airway
C. Abdomen
D. Upper Limb and Shoulder Girdle
E. Lower Limb and Pelvis

This instructor reserves the right to modify schedule as needed with reasonable notification.

Course Grading Information:

Your grade in this course will be based upon your performance in the following areas:

TASK	PERCENTAGE OF COURSE GRADE

1. Lab Challenge 100%
   The grade for this class is a portion of RADR 1311 and is weighted at 30% of the grades for that class.

TOTAL 100% = COURSE GRADE

The course grade will be applied to the following scale:

90% - 100% A
80% - 89% B
75% - 79% C
60% - 74% D
59% or less F

REMEMBER: This is an RT course -- C is the minimum acceptable grade

Throughout the course, grades will be available in BrightSpace. All grades are automatically rounded up to the nearest whole number. At the end of the course the adjusted grade will be recorded in letter style which will be the letter grade that is posted in WebAdvisor.

Lab Attendance/Absences/Tardiness:

Lab is a time for students to enhance classroom positioning procedures in a hands on environment. Due to time constraints, it is imperative that students make every effort to attend their assigned lab time. If a student must be absent from lab, a makeup time must be scheduled within one week of the absence, otherwise, a 10 point deduction will be deducted from the final lab grade. They student may contact their lab instructor to reschedule, or upon obtain permission from another lab instructor to attend another scheduled lab session that is covering the same basic content. This must be taken care of within one week of the absence. Lab make-up times are at the discretion of the lab instructor and the Procedures instructor. Points will still be deducted even though a makeup time has been arranged. Failing to makeup a lab within the allotted time or at all will result in a 10 point deduction from their final lab grade.
Absence from lab will affect the students' grade in the following manner.

- 2-point deduction from the final lab grade for each late arrival to lab
- 5-point deduction for each absence that is rescheduled.
- 10-point deduction for each absence that is not made up or rescheduled.

Performance Goal, Expectation, and Requirements

The Radiologic Technology program coursework is designed to provide students with a structured comprehensive curriculum that prepares them for a career as a

professional health care provider. It is imperative that students develop and maintain a strong knowledge base of all course material and competencies to be successful.

Therefore, the program has established a performance goal for all coursework and assessments in all RADR courses of an 80% or higher. Students that do not achieve the minimum grade of 80% will be required to complete an activity of remediation assigned by the instructor of the course immediately following. The activity requirements will vary as they will be customized according to factors such as the students' needs, the purpose of the assignment, its content, etc., and the instructor will maintain all records of completion. Students that fail to complete the required remediation activities will receive an "Incomplete" ("I") grade for the course, regardless of overall passing grade point average, until all work is submitted. An "Incomplete" ("I") in any course must be resolved prior to the start of the following semester or the resulting grade will convert to an "F" and the student will not pass the course.

Student Behavioral Expectations or Conduct Policy:

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity. Students in this program are adults and are expected to act appropriately. Behavior that is disrespectful or disruptive will not be tolerated; the student will be asked to leave the class. Each occurrence will be documented and may result in counseling from the instructor and program director. If inappropriate behavior continues, a report will be filed with the Grievance Committee in Student Development.

Smoking Cessation – Electronic Vapor Products

Use of electronic smoking cessation devices are prohibited in the classroom or the building. E-Cig/Vapor devices can only be used outside the building.

Privacy and Confidentiality

Official college communications sent by e-mail are subject to public information, privacy, and records-retention requirements and to other policies and procedures.

MCC Attendance Policy:

Regular and punctual attendance is expected of all students, and a complete record of attendance will be kept by the instructor for the entire length of each course.

Students are counted absent from class meetings missed, beginning with the first official day of classes. Students are responsible for all material presented or assigned for a course and will be held accountable for such materials in the determination of course grades. In the case of online and hybrid courses, attendance will be determined in terms of participation, as described by in the course syllabus.

Class Tardy/Late:

Is defined by the instructor of this class as any time past the originally scheduled time class is to begin. When class has officially begun and the doors to the classroom will be locked. Once that has occurred, a student arriving after the scheduled start time will not be allowed classroom access until the first break of the morning usually 50 minutes after class begins. Habitual tardiness indicates a lack of discipline and will cause the student to miss valuable classroom material making it very difficult to succeed in the program.

Class breaks:

Students will be allowed to take a brief break at an approximate 50 minute intervals. Leaving while class is in session is disruptive to others. Since the doors will be locked at the beginning of class, students who leave during class will not be allowed to return until the official break time or when class is over. It is strongly advised to take care of any personal matters before class or wait until the official break time. Should you have an emergent situation and need to leave during class, please gather your belongings quietly and leave since you will not be allowed class access until the next break or until class is over. Special circumstances need to be discussed with the professor.

Click Here for the MCC Attendance/Absences Policy
(https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

McLennan COMMUNITY COLLEGE

ACADEMIC RESOURCES/POLICIES

Student Support/Resources:
MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at http://www.mclennan.edu/campus-resource-guide/

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:
Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html to find out more about the emergency grant. The application can be found at https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf.

Minimum Technical Skills:
Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:
In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

Minimum System Rquirements to Utilize MCC's D2L|Brightspace:
Go to https://www.mclennan.edu/center-for-teaching-and-learning/Faculty%20and%20Staff%20Commons/requirements.html for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Email Policy:
McLennan Community College would like to remind you of the policy (http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

Instructional Uses of Email:
Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:
The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

Forwarding Emails:
You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

MCC Academic Integrity Statement:
Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating.

Accommodations/ADA Statement:
Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu
254-299-8122
Room 319, Student Services Center

Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting http://www.lighthouse-services.com/mclennan/.

Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.