South Plains College-Reese Campus

Course Syllabus

COURSE: **RADR 1360 Practicum – Radiologic Technology/Science-Radiographer**
SEMESTER: **Summer 2017**
TIMES: **TR 8:00 am to 3:30 pm**
INSTRUCTOR: **Erica Castillo**
OFFICE: **RC 512H**
OFFICE HOURS: **MTWR, 9:00-12:00 & by appointment**
OFFICE PHONE: **806-716-4628**
E-MAIL: **ecastillo@southplainscollege.edu**
FACEBOOK: The radiologic technology program has a Facebook page at **www.facebook.com/spcradiologictechnologyprogram**. In addition to the South Plains college websites, this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the radiologic technology program's Facebook page is not mandatory, nor are personal Facebook accounts in order to access this page.
BlackBoard: Blackboard is an e-education platform designed to enable educational innovations everywhere by connecting people and technology. This education tool will be used in this course throughout the semester.

"South Plains College improves each student's life."

GENERAL COURSE INFORMATION

COURSE DESCRIPTION

This course consists of practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Direct supervision is provided by the clinical professional.

PURPOSE

This course will provide the student an opportunity to reinforce radiographic didactic learning, perfect technical skills and complete the required clinical radiographic competences to meet graduation requirements.

STUDENT LEARNING OUTCOMES

The Student will:

1. Participate as a healthcare team member within the assigned clinical education setting.
2. Perform a variety of radiographic procedures to produce images for diagnostic purposes.
3. Assess radiographic images for diagnostic quality.
4. Provide basic patient care.
5. Provide optimal radiation protection.

COURSE OBJECTIVES

The student will:

1. Assist in providing basic health care to the patient in the radiology department. (F6,15;C9,11,14)
2. Protect the patient from all unnecessary radiation, using the appropriate radiation protection procedures. (F6,8,12,16,17;C11,15,16,18,19,20)

3. Follow appropriate radiation protection procedures for the patient and occupational workers. (F6,8,12,16,17;C11,15,16,18,19,20)
4. Participate in radiographic procedures to achieve competency in the assigned discipline. (F1,5,6,7,8,9,16;C1,3,4,5,9,18)
5. Assist in the daily operation of the radiology department, to include (but not limited to): patient transportation, image processing, office and clerical duties as required. (F1,2,5,6,8,11,12,13,15;C4,9,15,18)

EVALUATION METHOD

Students are expected to maintain a grade average of C (75) in all Radiography classes in order to progress appropriately through the Radiography Program. Satisfactory completion of this course will assure the competency of the student in the assigned clinical area and provide correlation of classroom instruction with the clinical setting. This information will be reinforced through interactions with Radiologists, staff radiographers, and patients in the clinical sites. In addition, the Radiology department in-service programs are available to the students. Image analysis is conducted in the clinical setting and the classroom setting.

The student should make every effort to complete 25% of the total required clinical competencies by the end of this course. This includes routine and portable procedures in the following categories:
Abdominal, Thorax, Upper Extremities/Shoulder Girdle, Lower Extremities/Pelvic Girdle, Spine, Urinary, Gastrointestinal System, Nervous System, Special procedures, as well as the areas of equipment maintenance.

If during the semester the student is having difficulty accomplishing the appropriate procedures, it may be necessary to reassign the student in order for him/her to complete the required number of procedures.

GRADING CRITERIA FOR RADIOGRAPHIC PROFICIENCY

1) Was the student available at the time of request?
2) Did the student properly interpret the request?
3) Did the student properly prepare the room for the procedure?
4) Did the student correctly identify the patient?
5) Did the student correctly identify himself/herself?
6) Did the student conduct himself/herself in a professional manner?
7) Did the student obtain patient history and explain the procedure to the patient?
8) Did the student ask the female patient if there was a possibility she could be pregnant?
9) Did the student give proper dressing instructions?
10) Did the student safely transport the patient to and from the x-ray table?
11) Did the student effectively communicate instructions to the patient?
12) Did the student demonstrate proper patient care while attending the patient?
13) Did the student use the correct SID?
14) Did the student position the patient correctly?
15) Did the student use the correct central ray orientation and angle?
16) Did the student collimate correctly?
17) Did the student use the appropriate film size and orientation?
18) Did the student use the correct marker and place it appropriately?
19) Did the student properly shield the patient when possible?
20) Did the student correctly shield himself/herself and others from unnecessary radiation exposure?
21) Did the student use the technical factors appropriate for the procedure being completed?
22) Did the student complete the correct projections for the procedure?
23) Did the student demonstrate the desired anatomy on the processed radiograph?
24) Did the student produce a diagnostic study?

If a radiograph does not display a side marker, the radiograph will be repeated and no competency will be given to the student. Marking the radiograph with a Sharpie is not allowed. Computerized/digital images must display a side marker.

In the event the marker is not evident on the radiograph, the radiograph will be repeated. Annotating the images post processing will not be allowed by the student. If the supervising technologist prefers the image to not be repeated the technologist must initial the radiograph with their personal initials. The student will not receive a competency for any exam that needs repeating because of not being marked with a lead marker evident on the initial radiograph.

ACADEMIC INTEGRITY

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

Cheating - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to quizzes of whatever length, final examinations, daily reports, term papers, clinical data entry, clinical attendance, and clinical performance.

Plagiarism - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

If found cheating or plagiarizing, the student's future in this program will be based on the decisions from the Allied Health Departmental Director's Committee.

SCANS and FOUNDATION SKILLS

These are identified for specific course objectives. A complete list explaining these skills is attached to the back of the syllabus for your information. Refer also to Course Objectives. SCANS and Foundation skills attached.

SPECIFIC COURSE INFORMATION

TEXT AND MATERIALS

There is no required text for this course. Any previously acquired textbooks may be used as reference sources as needed.

UNIFORMS

The student must follow the guidelines found outlined in the Program's student handbook. Any deviation from these guidelines may result in the student being asked to leave the clinical setting to correct the infraction and/or dropped from the clinical portion of the program. If the student must leave to correct the problem, the total time away from the clinical site will be included in the missed clinical time.

COMMUNICATION POLICY

Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC" email systems and Remind ®. The instructor will not initiate communication using private email accounts. **Students are encouraged to check SPC email on a daily basis.**

STUDENT CONDUCT

Students in this class are expected to abide by the standards of student conduct as defined in the SPC Student Guide.

SPECIAL REQUIREMENTS

Cell Phones are to be turned **OFF** and kept with *personal belongings* during the scheduled Program clinical education. The student will be sent home for the remainder of the day if found carrying and/or using a cell phone at the clinical education site. Personal phone calls can be made while on break or at lunch. In case of emergencies, you may be contacted at your assigned department.

ATTENDANCE POLICY

Clinical attendance is extremely important to the student radiographer's education. It is during this time that valuable experience is gained that is necessary for the development of radiographic skills. Missed clinical time, for whatever reason, compromises that educational experience. Being a health care provider requires commitment and professionalism, which is partially demonstrated by the student's attendance and punctuality in this course. Obviously, there are circumstances that will prevent attendance, such as in the case of illness or extreme emergency. Excessive absenteeism, regardless of the reason, makes it impossible to meet all the objectives of this course satisfactorily.

STUDENT SUPERVISION

The student will be assigned to various areas as part of the clinical education process. It is imperative that staff radiographers supervise students during their learning experiences.

A qualified radiographer must **directly** supervise the student by reviewing the procedure in relation to the student's achievement level; evaluating the condition of the patient in relation to the student's knowledge; by being present during the performance of the procedure; and reviewing and approving the procedure. Any time during the student performance that a repeat of an unsatisfactory radiograph is taken, there must be a qualified radiographer present per JRCERT recommendations. **

Indirect supervision indicates that a qualified radiographer is immediately available to assist students regardless of the level of the student achievement. The qualified radiographer should be in the near vicinity of where the procedure is being performed. This applies to **all** areas where ionizing radiation is in use (surgery, portables, trauma, etc.)

Any reassignment of the student must be cleared with the Clinical Coordinator. If this procedure is ignored, notation regarding the incident will be made in the student's file and a possible grade penalty may be imposed if this is a recurring problem. It is therefore imperative that the students remain in the primary area of assignment.

****If it becomes necessary to repeat ANY radiograph, a qualified staff radiographer must directly supervise the student. The radiographer must initial the Repeat form at the time of the repeat. THERE ARE NO EXCEPTIONS.**

CLINICAL ATTENDANCE

Students will adhere to the following clinical attendance policies. It is the responsibility of the student to become familiar with these policies. Ignorance of these policies will not be accepted as an excuse.

- **Clinical attendance is mandatory.** This class meets in the clinical affiliates as assigned. Attendance hours accrue throughout the Program in order to verify completion of the requirements of the Program of Radiologic Technology.
- Punctuality is a necessity in the healthcare setting. The student is required to arrive at the clinical site a few minutes early to be fully prepared to begin the day at 8 am. Clinical hours are from **8:00am to 3:30pm.**
- The student is required to be present in the assigned area for a total of **14 hours per week**. At the end of the semester, the student will have completed **105 clinical hours**.
- **The number of allowed missed clinical time will be 14 hours for this semester to maintain a "C" average**. Missed clinical time due to tardiness, extended lunches, leaving early, funeral leave, doctor appointments, errands and so forth will be added to the total time missed and should be reflected in the time clock. All missed clinical time will jeopardize the final clinical grade.
- Any absences in excess of **7 hours** during the semester will result in a conference with the faculty to sign a warning form that acknowledges hours missed.
- If excessive absenteeism jeopardizes a student's position in this course and the Program, the student has the option of requesting a committee review of their case. The student must submit a written request for committee consideration. The committee's decision will be final.
- **Missed clinical hours ARE NOT eligible for make-up.**
- Special considerations for missed clinical hours will be made on a case-by-case basis by the faculty.
- Students are allowed to clock in up to 7 minutes late and still considered to be "on time."
- Clock in's MUST be done in the facility.
- Students are not allowed to "work through lunch" and/or come in early or stay late to accrue time or compensate for being absent.
- ***In the event that any clinical time has to be missed, the student is required to call their clinical site and speak to someone personally (no voicemail), e-mail the clinical instructor (SPC e-mail) and clock in as a SICK DAY in DataArc.*** This call, e-mail and clock in should be made as close to the assigned start time and no later than one hour after the assigned time. **Failure to do so will result in a NO CALL NO SHOW.**
- If the student incurs **2 No Call No Shows**, it will result in a conference with the faculty to sign a warning form that acknowledges the 2 No Call No Shows and will result in the student being placed on clinical probation.
- **If a student incurs 3 No Call No Shows, the student will be dismissed from the program.**
- The Clinical Coordinator must also be emailed the day the student radiographer leaves a facility early. Failure to do so will also result in a NO CALL NO SHOW.
- If a student shows up to a clinical site without their proper clinical uniform (scrubs, markers, student badge, and/or dosimeter badge), they must clock out and get the missing items and then return to the clinical site where they can clock back in. NO EXCEPTIONS!
- Due to insurance and scheduling considerations, the student is not to decide his/her own schedule. This will be scheduled by the Clinical Coordinator.
- ***The clinical schedule may change throughout the semester to compensate patient load, student competency, schedule conflicts, and facility requests. The student will be given as much notice as possible to these changes.***
- Additional attendance and absenteeism policies for South Plains College can be found in the student handbook and the general catalog of SPC.

GRADING POLICY

Grade	Criteria	Yes (Y) No (N)
A	Missed clinical time did not exceed **8 hours** (Fall, Spring) or **7 hours** (Summer)	
	Student completed a **minimum of 20** of the ARRT required clinical competencies	
	Student received a passing clinical evaluation average of **4.0 to 5.0**	
	All clinical documentation submitted **on time each** assigned due date	
B	Missed clinical time did not exceed **16 hours** (Fall, Spring) or **10** hours (summer)	
	Student completed a **minimum of 15** of the ARRT required clinical competencies	
	Student received a passing clinical evaluation of **3.0 to 4.0**	
	Clinical documentation submitted **late** on **1-2** assigned due dates (Fall, Spring) or **1** assigned due date (Summer)	
C	Missed clinical time did not exceed **24 hours** (Fall, Spring) or **14** hours (summer)	
	Student completed a **minimum of 10** of the ARRT required clinical competencies	
	Student received a passing clinical evaluation of **2.0 to 3.0**	
	Clinical documentation submitted **late** on **3-4** assigned due dates (Fall, Spring) **2** assigned due dates (Summer)	
F	Missed clinical time exceeded **24 hours** (Fall, Spring) or **14 hours** (summer)	
	Student failed to complete a **minimum of 5** of the ARRT required clinical competencies	
	Student received a failing clinical evaluation of **less than 2.0**	
	Clinical documentation submitted **late** on all assigned due dates	

*A student must meet all criteria in the category to receive that grade. If one criteria is not meet, the final grade will be determined by the lowest category it falls under.

A *"C" or better* must be maintained in all **radiologic technology courses.** Failure to do so will result in the student being dropped from the program.

Failure of a clinical education course will result in the student being withdrawn from the Program. The possibility of the student repeating the clinical course may be an option that will be addressed on a case by case circumstance.

If a student wishes to appeal a Clinical course grade, his or her appeal will be presented to the Allied Health Committee.

COMPETENCIES TO BE COMPLETED BY THE END OF THE PROGRAM:

GENERAL PATIENT CARE

- CPR (Certified)
- Vital signs (Blood Pressure, Temperature, Pulse, Respiration, Pulse Oximetry)
- Sterile & Medical Aseptic Technique
- Venipuncture
- Transfer of Patient
- Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)

THORAX

- Routine Chest (2v)
- Chest (Wheelchair or stretcher)
- Ribs
- Chest lateral decubitus*
- Sternum*
- Upper airway (soft-tissue neck)*

UPPER EXTREMITIES

- Thumb or finger
- Hand
- Wrist
- Forearm
- Elbow
- Humerus
- Shoulder
- Trauma: Shoulder or Humerus (Scapular Y, Transthoracic or Axial)
- Clavicle
- Scapula*
- AC joints*
- Trauma: Upper Extremity (Non-Shoulder)

LOWER EXTREMITIES

- Toes*
- Foot
- Ankle
- Knee
- Tibia-Fibula
- Femur
- Trauma: Lower Extremity
- Patella*
- Calcaneus *

HEAD – Student must do **<u>at least one</u>** procedure from this section

- Skull*
- Paranasal Sinuses*
- Facial bones*
- Orbits*
- Zygomatic arches*
- Nasal bones*

- Mandible *
- Temporomandibular Joints*

SPINE & PELVIS

- Cervical Spine
- Thoracic Spine
- Lumbar Spine
- Cross-Table (Horizontal Beam) Lateral Spine
- Pelvis
- Hip
- Cross-Table (Horizontal Beam) Lateral hip
- Sacrum and/or Coccyx*
- Scoliosis Series*
- Sacroiliac Joints*

ABDOMEN

- Abdomen Supine (KUB)
- Abdomen Upright
- Abdomen Decubitus *
- Intravenous Urography*

FLUOROSCOPY STUDIES - Student must do Upper GI or Contrast enema, plus at least one other procedure from this section

- Upper GI Series (Single or Double Contrast)*
- Contrast Enema (Single or Double Contrast)*
- Small Bowel Series*
- Esophagus*
- Cystography/Cystourethrography*
- ERCP*
- Myelography*
- Arthrography *
- Hysterosalpingography*

MOBILE C-ARM STUDIES

- C-Arm Procedure (Requiring Manipulation to Obtain More Than one Projection)
- Surgical C-Arm Procedure (Requiring Manipulation Around a Sterile Field)

MOBILE RADIOGRAPHIC STUDIES

- Chest
- Abdomen
- Orthopedic

PEDIATRICS (Age 6 or Younger)

- Chest Routine
- Upper Extremity*
- Lower Extremity*
- Abdomen*
- Mobile Study*

GERIATRIC PATIENT – (Physically or Cognitively Impaired as a Result of Aging)

- Chest Routine
- Upper Extremity
- Lower Extremity

**** Indicates exam as an Elective***

CLINICAL RECORDS

DATAARC

The student is responsible for maintaining electronic clinical records, which is DataArc, for the documentation of clinical time, experience evaluations, competencies and repeat record.

CLINICAL RECORDS

The student is responsible for maintaining their own clinical records necessary for the documentation of clinical time, experience (procedures), competencies and repeat records. **All DataArc documents are due by 8:00 am on the Monday after the scheduled rotation ends.** The following documentation must be provided by the scheduled time:

- ✓ **Time Clock** – Due at the **END OF EACH ROTATION**
- ✓ **Procedure Log** - Due at the **END OF EACH ROTATION**
- ✓ **Evaluation/Sign off** – Due at the **END OF EACH ROTATION**
- ✓ **Competencies** – Due at the **END OF EACH ROTATION**
- ✓ **Repeat Record**– Checked at the **END OF THE SEMESTER**

Failure to submit these forms prevents documentation of required evaluation, clinical time, experience and competency and will jeopardize the student's grade. Total disregard to Program Clinical paperwork guidelines will result in a warning, suspension, or dismissal.

TIME CLOCK

The ***Time Clock*** provides a record of time spent at each assigned clinical education setting and will be due at the **end of each rotation**. The student MUST clock in and out using a computer **IN** the facility. If a cell phone is the only means to clock in, the clock in must occur once the student has entered the facility. ****In the event of a missed clock in or clock out, the student must email the Clinical Coordinator with the missed clock in/out time. On the following class day, the student must then see the Clinical Coordinator to sign their missed clock in/out sheet.****

PROCEDURE LOG

The ***Procedure Log*** documents the radiographic procedures experienced by the student and should reflect all experiences seen during any given assigned day. A procedure log should be done for every day that the student is at clinicals. The procedure log will be due at the **end of each rotation**. Care should be taken in completing this log so as to reflect not only experiences in which the student assisted another technologist, but **also** the procedures done unassisted and completed as competencies.

EVALUATIONS

Evaluations are to be completed by the clinical site technologist(s) that the student has been working with. These are due at the **end of each rotation**. The student must sign off (review) on the completed evaluation. If the student does not

sign off on the evaluation by the due date, the evaluation will be late. The student may also type in their own comments in the *Student Response Comment* section, before signing off on the evaluation.

CLINICAL COMPETENCIES

The ***Clinical Competency Record*** will be reviewed during the semester as indicated by the Clinical Coordinator and turned in at the **end of each rotation**. See the grading rubric for the amount of competencies needed.

CLINICAL REPEAT RECORD

The ***Clinical Repeat Record*** is completed in the procedure log area. If a repeat is done, you must mark it for that exam. This document provides information that will help the student improve in areas of deficiency. The form is reviewed by the Clinical Coordinator at the **end of each semester**.

Running a weekly report in all categories will keep the student on track to avoid being late in any of those areas

ACCOMMODATIONS

DISABILITIES STATEMENT

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland Student Health & Wellness Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

DIVERSITY STATEMENT

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

COURSE OUTLINE

CLINICAL ROTATION - ROUTINE RADIOGRAPHY

The student will:

1. Interact with patients, peers and hospital staff in a professional manner. (F15;C9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image in their attire, attitude and conduct. (F14,16,17)
4. Effectively communicate with patients and staff in a professional manner. (F5,6;C5-8,14)
5. Assist in the medical care of the patients while in the radiology department. (C11)

6. 6. Be competent in the correct use of the radiographic equipment and accessories used in the assigned clinical affiliate: (F2,6;C3)
7. 7. Select the proper equipment for a specific radiographic exam. (F13;C3,18,19)
8. Protect the patient, himself/herself and other staff members from unnecessary radiation exposure, using shields, distance, collimation and optimal exposure factors. (F13,17;C3,11,18,19)
9. Identify, orally and/or in writing, and perform, with the supervision of a radiographer, the radiographic projections employed in routine radiography, according to departmental protocol.
10. Position the patient and equipment, and select the appropriate technical factors for the required projections. This will include, but is not limited to the following anatomical regions: (F2,6,10,13; C1,3,4,9,15,18,19)

    - ✓ Upper extremities and shoulder girdle
    - ✓ Lower extremities and pelvic girdle
    - ✓ Thoracic cage
    - ✓ Chest
    - ✓ Abdomen
    - ✓ GI & Urinary
    - ✓ Spinal column
    - ✓ Skull

11. Identify and correct any positioning and/or technical error on processed radiographs, with the supervision of a radiographer. (F9;C3,12,13,16-20)
12. Identify and correct common processor and radiographic equipment problems. (F1,3,8,9;C5-8,15,16,18-20)
13. Assist in the work flow of the department by transporting patients, processing images, and performing clerical duties as required. However, these duties should not occupy the major portion of the student's clinical time.(F1,2,5,6,8,9,13,17;C1,4-9,11-15,18,19)

CLINICAL ROTATION - FLUOROSCOPIC PROCEDURES

The student will:

1. Interact with patients, peers and hospital staff in a professional manner. (F15;C9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image in their attire, attitude and conduct. (F14,16,17;C11)
4. Effectively communicate with patients and staff in a professional manner. (F5,6;C5-8,14)
5. Assist the radiologist by performing the following procedures as they pertain to fluoroscopic examinations:(F11,13;C1,3,9,11,15,18,19)

    - ✓ Setting fluoroscopic technical factors.
    - ✓ Assisting in the positioning of the patient.
    - ✓ Administering contrast media, as is required of the procedure, with orders from the physician and with the supervision of a registered technologist.
    - ✓ Proper placement of the image receptor for spot filming.
    - ✓ Assisting in the care of the patient as required.
    - ✓ Protect the patient from unnecessary radiation exposure.
    - ✓ Protect himself/herself and other health workers from unnecessary radiation exposure.

6. Identify, orally and/or in writing, and perform any overhead projections required following the fluoroscopic procedure (to include equipment positioning, patient positioning, and selection of technical factors). (F2,6,10,13; C1,3,4,9,15,18,19)

SURGERY & PORTABLE RADIOGRAPHY

The student will:

1. Interact with patients, peers and hospital staff in a professional manner. (F15;C9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image in their attire, attitude and conduct. (F14,16,17;C11)
4. Effectively communicate with patients and staff in a professional manner. (F5,6;C5-8,14)
5. Utilize radiation protection procedures necessary in surgical and portable radiography (i.e. Lead aprons and a minimum of 6 feet between the x-ray tube and personnel); and instruct hospital personnel in radiation protection procedures, when necessary. (F13,17;C3,10-12, 15,18,19)
6. Properly enter a surgical suite with knowledge of the sterile area, with attention to appropriate attire for oneself and appropriate preparation of the radiographic equipment to be used. (F13;C3,5,11,15,18,19)
7. Conduct the requested radiographic exam within a sterile environment, without contaminating the surgical field. (F13;C15,18,19)
8. Describe, orally and/or in writing, the responsibilities of the radiographer, perform the procedure under the supervision of a radiographer, and assist the surgeon with any fluoroscopic requirements of the procedure. This will include, but is not limited to: (F2,6,11-13;C3,15,18,19)

    - ✓ Operative cholangiograms
    - ✓ Retrograde pyelograms
    - ✓ Orthopedic procedures
    - ✓ ERCP assistance
    - ✓ Post-operative extremity films
    - ✓ Recovery room radiography
    - ✓ Spinal laminectomies
    - ✓ Pacemaker insertions
    - ✓ Operation of c-arm equipment

9. Identify, orally and/or in writing, and perform the portable procedures with the supervision of a radiographer, by correctly positioning the patient and equipment, and selecting the appropriate technical factors according to the departmental protocol. This will include, but is not limited to the following anatomical regions: (F2,6,13;C3, 15,18,19)

    A. Upper extremities and shoulder girdle
    B. Lower extremities and pelvic girdle
    C. Chest
    D. Abdomen
    E. Spinal column
    F. Skull

10. Identify orally and correct any positioning and/or technical errors on the processed portable radiograph and make corrections with the supervision of a radiographer. (F13;C15,18,19)

PEDIATRIC RADIOGRAPHY

The student will:

1. Adjust routine procedures to accommodate pediatric patients, including the positioning of the patient, adjusting equipment and selecting technical factors as appropriate. (F7,8,13;C3,5,15,16,18,19)
2. Perform procedures specific to pediatric patients, to include, but not limited to: (F11-13;C15,18,19)

    - ✓ Bone age radiographic exams

- ✓ Long bone radiographic exams
- ✓ Scoliosis radiographic exams
- ✓ Congenital hip malformation radiographic exams
- ✓ Skeletal survey radiographic exams

3. Select appropriate devices to assist in the radiography of pediatric patients, to include, but not limited to: (F8,13;C3,15,18,19)

    - ✓ Radiation protection devices
    - ✓ Immobilization devices

SPECIAL PROCEDURES

The student will:

1. Interact and effectively communicate with patients, peers and hospital staff in a professional manner. (F5,15;C5-8, 9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image with appropriate attire, attitude and conduct. (F14,16,17;C11)
4. Identify, orally and/or in writing, the required scout films, contrast media, special equipment, (i.e. Injectors, sterile trays, guide wires, catheters, etc.), patient preparation, patient position and emergency procedure for any special procedure routinely done in that department. This will include, but is not limited to: (F5,6,9-17;C1,3-9,11-20)

    - ✓ Myelography
    - ✓ Arthrography
    - ✓ Venography
    - ✓ Arteriography

5. Prepare the special procedures suite or room, by setting up the necessary equipment and instruments for any special procedure routinely done in that department. This will include, but is not limited to: (F5,6,9,10,13-17;C1,3-9,11-20)

    - ✓ Myelography
    - ✓ Arthrography
    - ✓ Venography
    - ✓ Arteriography

6. Describe, orally and/or in writing, and perform, with the supervision of a radiographer and according to departmental protocol, any special procedure routinely done in that department. Assist the radiographer and/or physician with any of these procedures. This will include, but is not limited to: (F5,6,9,10,13-17;C1,3-9,11-20)

    - ✓ Myelography
    - ✓ Arthrography
    - ✓ Venography
    - ✓ Arteriography

7. Assist the radiographer and/or physician with the care of the patient while in the special procedures suite/room. (F5,6,13,15;C1,3,5-7,9,11-20)

FOUNDATION SKILLS

BASIC SKILLS–Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks

F-1 Reading–locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
F-2 Writing–communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
F-3 Arithmetic–performs basic computations; uses basic numerical concepts such as whole numbers, etc.
F-4 Mathematics–approaches practical problems by choosing appropriately from a variety of mathematical techniques.
F-5 Listening–receives, attends to, interprets, and responds to verbal messages and other cues.
F-6 Speaking–organizes ideas and communicates orally.

THINKING SKILLS–Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason

F-7 Creative Thinking–generates new ideas.
F-8 Decision-Making–specifies goals and constraints, generate alternatives, consider risks, evaluate and chooses best alternative.
F-9 Problem Solving–recognizes problems, devises and implements plan of action.
F-10 Seeing Things in the Mind's Eye–organizes and processes symbols, pictures, graphs, objects, and other information.
F-11 Knowing How to Learn–uses efficient learning techniques to acquire and apply new knowledge and skills.
F-12 Reasoning–discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

PERSONAL QUALITIES–Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty

F-13 Responsibility–exerts a high level of effort and perseveres towards goal attainment.
F-14 Self-Esteem–believes in own self-worth and maintains a positive view of self.
F-15 Sociability–demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.
F-16 Self-Management–assesses self accurately, sets personal goals, monitors progress and exhibits self-control.
F-17 Integrity/Honesty–chooses ethical courses of action.

SCANS COMPETENCIES

C-1 **TIME** - Selects goal - relevant activities, ranks them, allocates time, prepares and follows schedules.
C-2 **MONEY** - Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.
C-3 **MATERIALS AND FACILITIES** - Acquires, stores, allocates, and uses materials or space efficiently.
C-4 **HUMAN RESOURCES** - Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

INFORMATION - Acquires and Uses Information

C-5 Acquires and evaluates information.
C-6 Organizes and maintains information.
C-7 Interprets and communicates information.
C-8 Uses computers to process information.

INTERPERSONAL–Works with Others

C-9 Participates as a member of a team and contributes to group effort.
C-10 Teaches others new skills.
C-11 Serves Clients/Customers–works to satisfy customer's expectations.
C-12 Exercises Leadership–communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
C-13 Negotiates-works toward agreements involving exchanges of resources; resolves divergent interests.
C-14 Works With Diversity–works well with men and women from diverse backgrounds.

SYSTEMS–Understands Complex Interrelationships

C-15 Understands Systems–knows how social, organizational, and technological systems work and operates effectively with them.
C-16 Monitors and Corrects Performance–distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.
C-17 Improves or Designs Systems–suggests modifications to existing systems and develops new or alternative systems to improve performance.

TECHNOLOGY–Works with a Variety of Technologies

C-18 Selects Technology–chooses procedures, tools, or equipment, including computers and related technologies.
C-19 Applies Technology to Task–understands overall intent and proper procedures for setup and operation of equipment.
C-20 Maintains and Troubleshoots Equipment–prevents, identifies, or solves problems with equipment, including computers and other technologies.

I have received a copy of the RADR 1360 course syllabus. I have read and understand the contents of this syllabus.

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Signature

_____
Printed Name

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Date