School of Radiography
Bradford Regional Medical Center
Clinical Plan of Education

Philosophy of Clinical Education

The role of the radiographer has grown in complexity with the development of more sophisticated procedures and equipment in the field of radiology. It is the philosophy of the program to provide the student with the optimum clinical experience and to insure that the student has the opportunity to perform all routine types of radiographic procedures in the appropriate proportions. Furthermore, the philosophy of the program is to provide demonstration, supervision, observation, counseling, and evaluation in the clinical setting whereby the student will effectively:

- Apply knowledge of the principles of radiation protection for the patient, themselves and others.
- Apply knowledge of anatomy, positioning, and radiographic technique to accurately demonstrate anatomical structures on a radiograph.
- Determine exposure factors to achieve optimum radiographic technique with a minimum of radiation exposure to the patient.
- Examine radiographs for the purpose of evaluating technique, positioning, and other pertinent technical and pathological qualities
- Exercise discretion and judgment in performance of medical imaging procedures.
- Provide patient care that is essential to the radiographic procedures.
- Establish interpersonal communications with the patient and other members of the health care team.

The primary goal of the School of Radiography's **Clinical Plan of Education** is to design a program whereby the student will be able to correlate clinical experience with the didactic portion of the program. This correlation is based upon a solid foundation of fundamental principles and procedures to lead the student to develop superior performance and knowledge and become a well-rounded, proficient radiographer.

TRAINING THE TRAINERS

The Clinical Coordinator in cooperation with the Program Director, arranges for the supervision of the student in all clinical rotation settings. Supervision of student performance is provided for by ARRT certified radiographers in a one-to-one ration. In preparation, the Program Director and Clinical Coordinator provide in-service education to supervising technologists instructing them in the schools methods of competency based education. The technologists are instructed in:

1. Role of the supervising technologists to demonstrate, assist, and instruct the student in accomplishing the required behavioral objectives of the individual rotation assignments.
2. Approximate performance level of a student during different stages of the program.
3. Need for constructive evaluation of the student clinical performance in the areas of:
    a. required views/projections
    b. proper image receptor type and size and use of markers
    c. coning and collimation
    d. technique selection and adjustment
    e. equipment manipulation
    f. correct positioning and central ray alignment
    g. radiation protection practices

h. patient comfort and safety
i. interpersonal skills
j. professional skills, grooming, and appearance

4. Methods available to communicate areas of weakness to the student in a constructive and remedial manner
5. Need to communicate a student's unsatisfactory clinical performance to the school officials.

SUPERVISION OF STUDENTS IN THE CLINICAL SETTING

This policy shall be followed in order to provide appropriate supervision for students during their 24 month program cycle. Clinical competence is a major goal of the program but never as the expense of quality radiological services and appropriate care to all patients. Also, it is essential to ensure adequate radiation protection for the patient, the student, and all other medical personnel.

Supervisory and/or staff technologists shall assume responsibility for patient care during all phases of student education. Students may assist staff radiographers and even independently care for patients but ARRT certified radiographers must be immediately available to assist as needed. Certified technologists must be prepared to recognize a student's capabilities and limitations and support their competency based training accordingly.

STAFF TECHNOLOGIST RESPONSIBILITIES FOR STUDENTS IN THE CLINICAL ASSIGNMENT

Staff radiographers will provide either direct or indirect supervision for the student during the clinical education phase of the program. A portion of a staff radiographers time may be spent supervising student clinical education and evaluation.

The staff radiographer will:

1. Provide direct or indirect supervision of the student in accordance with the clinical education policy titled Supervision of the Student in Clinical Education.
2. Assume full responsibility for patient care and comfort and instruct the student in methods of patient care.
3. Explain and demonstrate proper usage of radiographic imaging equipment and accessories including radiation protection devices.
4. Instruct the student in the proper method or procedure to be followed for each radiographic examination performed in the area of the clinical assignment.
5. Instruct and guide the student in the preparation and proper handling of contrast media and any drugs which may be required for a specific procedure.
6. Instruct and guide the student as to the proper method or procedure for assisting the radiologist during a specific examination.
7. Use effective communication to facilitate a positive staff-student rapport and create a positive learning environment in the clinical setting.
8. Guide the student in the correct use of oral and written medical communication.
9. Guide the student in the election of exposure factors which can be used to obtain diagnostic quality radiographs with minimum radiation exposure.
10. Instruct the student in the correct way to modify standard procedures to accommodate the patient condition and/or other variables.
11. Instruct the student in the correct method of body mechanics
12. Guide the student in the correct method of processing radiographs
13. Instruct the student in the proper way to adapt exposure factors for various patient conditions, equipment, accessories, and contrast media to maintain appropriate radiographic quality.

14. Guide the student in evaluating radiographic images for appropriate positioning and image quality.
15. Instruct the student in the proper way to evaluate the performance of radiographic systems and inform the student in the safe limits of equipment operation.
16. Guide the student in reporting equipment malfunctions to the proper authority.
17. Guide the student in the performance of quality control testing as needed.
18. Instruct the student as to the various ways to recognize emergency patient conditions, summon help, and initiate first aid and basic life support.
19. Guide the student in recognizing human anatomy, function, and pathology on the radiographic image.
20. Upon request of the Program Direction and Clinical Coordinator, evaluate the students' performance in the clinical area of assignment.

CLINICAL EDUCATION OBJECTIVES

The student will:

1. Perform and/or assist the radiographer with the radiographic procedure(s) assigned to that room. Level of supervision: Clinical Instructor or staff radiographer depending upon the level of clinical competency that student has achieved.
2. Be able to:
    a. evaluate each requisition
    b. demonstrate proper physical facilities readiness
    c. demonstrate proper patient-radiographer relationship
    d. demonstrate correct positioning skills
    e. manipulate equipment effectively
    f. show evidence of radiation protection
3. be able to evaluate the radiographic image for:
    a. anatomical parts
    b. proper alignment
    c. radiographic technique
    d. film identification
    e. evidence for radiation protection

CLIINICAL PERFORMANCE OBJECTIVES

By the end of the clinical week #1, the student must be able to:

1. Explain the division of didactic and clinical breakdown of the program
2. Dial the emergency number (8211)
3. Explain the purpose of the film badge and apply knowledge of the principles of radiation protection to the patient, self, and others.
4. Explain the procedures for gaining clinical expertise.
5. Identify key individuals of the program and department.

By the end of clinical week #2, the student must be able to:

1. Explain all program policies.
2. Interact with patients providing them with essential courtesy and demonstrating ethical conduct.
3. Call patients out of the waiting area and dressing rooms for radiographic procedures.

By the end of clinical week #3, the student must be able to:

1. Select proper patient form a work list.
2. By inspecting the requisition, be able to determine where the patient is located before beginning the examination

3. Demonstrate proficiency on operating locks on the overhead tube and operate bucky in the assigned room.
4. Log all exams on tally sheet according to prescribed area.
5. Satisfactorily perform their assigned responsibilities for the linen, classroom, dressing rooms, and assigned areas.
6. Demonstrate professional behavior at all times regardless of where they are.

By the end of clinical week #4, the student must be able to:

1. Select various Ma, time, and KV factors for the assigned room
2. Assemble fluoroscopic equipment if in assigned area and adjust table to upright position.
3. Adjust distance indicators on overhead tube for table top, bucky, and erect work.
4. Choose correct exam tag for selected procedure and be able to add and delete exam tags.
5. Trace the paper flow of the department

By the end of clinical week #5, the student should be able to:

1. Demonstrate the knowledge of positioning and directional terms.
2. Demonstrate understanding of clinical performance protocol, especially daily tally sheets and the procedure for laboratory testing.

By the end of clinical week #6, the student should be able to:

1. Name the bones of the hand, wrist, and forearm.
2. Assist the radiologist in fluoroscopy, most specifically by:
    a. handing the patient barium for an upper GI series
    b. clamping and unclamping the barium enema tube
    c. assisting the patient in assuming patient positions and offering them physical comfort

STUDENT RADIOGRAPHERS CLINICAL AND ADMINISTRATIVE DUTIES

Under the guidance of the Program Director, department administration and staff radiographer the student will perform radiographic procedures and technical duties according to the progress of their clinical competency.

Clinical Duties

The student will produce radiographs for the practice of clinical proficiency by:

1. Positioning the patient for various examinations according to their clinical competency level.
2. Selecting proper technical factors on individual patients based on their clinical competency level.
3. Transferring patients from the waiting area to the radiographic room.
4. Selecting and operating the equipment as required for various examinations according to their clinical competency level.
5. Providing radiation protection according to the standards.
6. Assisting the staff radiographer in preparing contrast media and medications.
7. Being responsible to the Clinical Instructor and/or staff radiographers in performance of routine and special radiographic procedures.
8. Using sterile techniques when needed.

Administrative Duties

The student will perform the following administrative duties by:

1. Maintaining order and cleanliness
2. Securing and returning supplies
3. Cooperating with all personnel through proper conduct.
4. Rotating through the department according to the posted schedule.
5. Maintaining ethical patient-student relationships
6. Maintaining accurate examination experience sheets.

HOW A STUDENT BECOMES CLINICALLY COMPETENT

Clinical learning begins in the classroom. In October of the students first year the student begins his/her clinical participation by first assisting a staff radiographer. The student has been shown the radiographic positioning by the didactic instructor and can do the procedure with supervision. Participation moves from observing with radiographic examinations to assisting with them. **As the student gains experience and confidence in various procedures they can gradually move into clinical assessment and have their skills challenged.**

Step #1: PRACTICE

Combines knowledge and clinical skills. Student will say, "I want to practice" and will work to perform the exam without error. In this case the student needs direct supervision. The radiographer is encouraged to stay close by but assist only if necessary.

Step #2: TESTING BEGINS USING THE PAPER

When the student feels confident, the student will say "I want to take a paper". The radiographer must allow the student to proceed with the exam without interfering. If the radiographer observes the student doing something incorrectly, they must intercede so the patient's exam is not compromised. If the radiographer steps in, the student fails the "paper" and the radiographer must grade it and return it to the student. If the student passes, the radiographer grades the "paper" and gives it to the student. The student saves it and, together with another successful "paper", is eligible to take a competency test.

Step #3: COMPETENCY TESTING

After obtaining two papers, the student may request a competency evaluation. The student must present the evaluator the two signed papers. The student will say "I want to take my competency". This is a serious step for the student because failure of this test forces the student to forfeit the papers they earned and start the process again. **When a radiographer passes a student, they are indicating they believe the student has earned the right to perform that exam independently on future patients**. However, the student would at all times in the future, be expected to ask for assistance if needed. Likewise, if a patient requested not to have the student perform their exam, the student must comply with the request without question.

GRADING GUIDELINES FOR CLINICAL COMPETENCY

The evaluator will observe the student performing the procedure. The evaluator will deduct points from the total. Total points will then be subtracted from the total amount available for the examination. All examinations have a maximum of 100 points when they begin. **Passing grade for competency testing is 85 points.**

Students who have not received competency in the requested radiographic procedure shall be under direct supervision. The following points constitute direct supervision.

A. A registered radiographer reviews the request for the radiographic examination to:
   1. Make a decision as to whether or not the student can perform the examination with reasonable success.
   2. Determine that the condition of the patient does not contraindicate performance of the examination by the student.

B. The presence of a qualified radiographer is required.

C. The registered radiographer must review and approve the radiographs prior to dismissal of the patient.

D. A registered radiographer must place his/her initials on the x-ray requisition along with the student's initials following completion of the exam. By doing so the radiographer indicates his/her review of the student's notes or comments.

Provided that the student has achieved competency in the procedure to be done, supervision provided by the registered radiographer may be indirect. This means that the registered radiographer may or may not be present in the radiographic room during the procedure. However, …..

A. A registered radiographer reviews the request for the radiographic examination to:
   1. Make a decision as to whether or not the student can perform the examination with reasonable success.
   2. Determine that the condition of the patient does not contraindicate independent performance of the examination by the student.

B. **The presence of the registered radiographer is required under the following conditions**:
   1. A repeat radiograph is being performed
   2. The procedure is being performed on a patient 12 years or younger
   3. The patient requires an injection of a contrast agent.
   4. The patient requests a registered radiographer.
   5. The procedure is a portable, operative procedure, or fluoroscopic.
   6. If the patient or the IR requires holding**. At NO time is a student permitted to hold a patient or IR.**

C. The registered radiographer must review and approve the radiographs prior to dismissal of the patient.

D. A registered radiographer providing indirect supervision for a student must place his/her initials on the x-ray requisition along with the students initials.

REQUEST FOR COMPETENCY EVALUATION

The student may not request a competency evaluation until they have been instructed in the fundamentals of the examination through didactic training. Didactic instruction will be documented in the student file by the responsible procedures instructor.

After obtaining the required amount of supervised staff competency forms, (2 papers), they can request a competency evaluation. The student must present the authorized evaluator the signed staff competency forms (2 papers) and request that they be evaluated for competency. The evaluation will be done on a patient under direct supervision of the evaluator. The evaluator will observe the procedure from room readiness to examination follow up. The evaluator will not participate in the examination unless a gross error has been made. He/she will then direct the student through the error and let the student proceed if they are able. Evaluation will be made after the examination is over and the patient has been discharged.

The evaluator will determine the student grade using the approved grading guidelines. If there are any questions or areas that need clarification, these should be directed to the Program Director or Clinical Coordinator before any grades have been assigned. All staff radiographers and program officials are authorized to conduct competency evaluation. Other individuals may be appointed by the Program Director to perform clinical competency evaluation.

COMPTENCY EVALUATION

Continuous evaluation will be performed once a competency has been achieved for a radiographic procedure

If the student passes the clinical competency, this information will be recorded in the student's file. The student may record the clinical competency on the competency board in the set up area of the diagnostic imaging department. This allows the personnel in the set up area to realize where each student stands in competency.

When a student does not pass a clinical competency evaluation, the evaluator will explain the reason why he/she did not pass. The student will then refer back to the instructor who teaches that procedure for additional review or instruction. The student will then begin the process over again from the practice mode. The student will need to obtain the required number of staff competency forms prior to requesting another competency evaluation for that procedure. A grade of 65% will be recorded as a failed competency grade.

Clinical Evaluation

Clinical evaluations are submitted every three months. Assigned staff will evaluate each student using the student evaluation form. A grade will then be computed by the Clinical Coordinator using the evaluation analysis form. The Clinical Coordinator will review the evaluations with the student and make suggestions in areas in which the student may need to improve. The student will sign and date the evaluation as an indication of receipt of the evaluation, not as an agreement to the evaluation statement. The student evaluation grades will be used in the formation of the student's clinical grade.

Formation of the Clinical Grade

Students will receive a clinical grade at the end of each evaluation period. The clinical grade will be based upon 60% of the clinical evaluation grade and 40% of the average of clinical competency grades received during that evaluation period.

At the end of the second clinical year an overall clinical grade will be determined by the following formula:

33% average of clinical grade up to summer of senior year
34% final competency grades
33% senior summer clinical grade

All clinical grades will be recorded on the student transcript sheet.

FINAL COMP OUT

After the completion of all competencies the student will bring his/her comp book to the Program Director or Clinical Coordinator on Friday of the week that the last competency was completed. The student may then schedule their final comp out. The final competency test date will be made by the Program Director and the Clinical Coordinator. Final examinations will be done under simulated conditions. All of their criteria used in competency evaluation will remain the same. After successful completion of the student's final comp out, final clinical grades are recorded in the students file and they are considered to be clinically done with the program. If the competency attempt was unsuccessful, an explanation of the errors and how to correct those errors will be addressed. They will reschedule their comp out and begin the process again.

CLINICAL ASSIGNMENTS

The purpose of clinical assignments in the School of Radiography is to allow the student to apply theoretical principles of radiography, patient care, and departmental procedures, to practical experience. Students will have the status of learner wand will not replace departmental personnel. While in the diagnostic imaging department, the student is required to observe the regulations imposed by the facility on its employees in connection with patient welfare. The student is directly responsible to the staff member assigned to the clinical area to which the student is assigned. Should any operational or personality problems arise, a settlement on this level is preferred. If the matter cannot be resolved the Program Director should be consulted. If the student needs further aid in solving the problem he/she may state the problem to the Advisory Committee as directed in the policy on student appeal.

REGULATIONS GOVERNING CLINICAL ASSIGNEMENTS

1. The student will be supervised in the clinical area by the clinical instructor and by the technical staff and is ultimately responsible to the radiologist in charge.
2. Clinical assignments are posted on the bulletin board in the set-up area of the diagnostic imaging department.
3. Students are expected to report promptly at designated times to the staff radiographers in their assigned areas.
4. Students will be assigned a 30 minute lunch by the Clinical Instructor or the person in charge.
5. Students must remain at their assigned clinical areas and may not leave the department without permission by the supervising technologist.
6. Students will be evaluated on a regular basis to determine progress in clinical performance, professional judgment, organization and ethics.
7. Students will perform in the clinical area under direct or indirect supervision of a registered radiographer depending on their level of competency.
8. All repeat radiographs are to be performed under direct supervision.
9. A student shall not be scheduled a clinical assignment or academic instruction in excess of 40 hours per week or ten hours per day.
10. Students are not required to attend clinicals on weekend, over nights or holidays. However, if a student is interested they need to discuss this with school officials.

ROOM ROTATION FOR THE STUDENT

Students will rotate through the following assignments every two weeks in their freshman year.

Room 1
Room 2/set ups
Room 4
Room 6

Freshman will now have the opportunity to rotate to Dr. Bhayani's office on Tuesdays and Wednesdays. Currently he is the only site still using a darkroom and for this reason has learning value for the students. Freshman students will be assigned a one week rotation to the front office/file room and transport services during the first or second semester.

Students will rotate through the following assignments every week in their second year

Room 1
Room 4
Room 6/angio
Float- Surgery/Portables

Senior students will rotate through CR, MRI, and US after didactic instruction has been completed. Senior students will also be assigned a one week rotation to second shift (3-11) after the fourth semester. Senior students may request and assignment to Nuclear Medicine and lithotripsy for observation purposes.

Rotations will be in such a way that the student has an opportunity to work with every radiographer in the department, participate in a variety of examinations and learn the necessary ancillary functions of a modern radiology department. The student schedule will be posted at the set up area. Any changes will be made only with the approval of the Clinical Coordinator and/or the Program Director.

The technologist and student technologist assigned to a room are responsible for keeping items in the room stocked such as linen, contrast agents, syringes, etc. Items that require stocking will vary from room to room but each student will be instructed on items required in each individual room. Periodic room checks will be made to insure a complete and accurate stock of all rooms.

CLINICAL SCHOLARSHIP

The Bradford Hospital Auxiliary provides a scholarship for outstanding clinical skills to a senior student in August of the senior year. This scholarship will be awarded to the student based upon the highest average of clinical grades received through April of the senior year.

CLINICAL PROBATION

Purpose: To inform the student of unacceptable clinical performance due to:

1. Failure to meet clinical performance objectives
2. Behavior unacceptable by the program or diagnostic imaging department
3. Excessive absenteeism or tardiness.
4. Negligence.
5. Failure to follow established program policies.

Method: warning- each infraction will be dealt with using a written statement describing the problem. The student will see and sign each statement. **Probation**- when three documented warning, either for similar or different infractions are issued to one student the student will be placed on clinical probation. **Probationary period is three months.**

RE-EVALUATION

The Advisory Committee will meet at the end of this three month period to review the student's record. The committee at this time will recommend one of the following:

1. To continue probation
2. To reinstate the student
3. To dismiss the student

DISMISSAL

Any further infractions or warnings to a student on clinical probation can result in dismissal. A dismissal may be appealed to the Advisory Committee.

IMMEDIATE DISMISSAL

Any serious infraction of department or program policy will result in immediate expulsion or probation as decided by the Advisory Committee.

Patient Care Criteria

The student:

1. Prepared the x-ray room prior to the patients arrival by logging into the system and selecting the patient. The room was neat and organized and equipped with accessories needed to perform the exam. The student focused on the patient and did not leave the room during the exam.
2. Must comply with AIDET which means they must:
    a. Acknowledge (in a private setting) they have the correct patient by asking them name and DOB.
    b. Introduce themselves to the patient and acknowledge they are a student
    c. Describe the expected duration of the exam to the patient
    d. Explain to the patient what will occur during and throughout the exam
    e. Thank the patient when the exam is complete
3. Escorted the patient safely into the x-ray room making sure their gown is fastened properly, their modesty was protected and they wore something on their feet. Their belongings were secured.
4. Obtained and recorded pertinent medical history and explained what would occur during the exam. Assistance was solicited form the patient by providing clear instructions. Did the patient hear and understand the instruction?
5. Recognized and adapted to the patient's physical limitations (including the need for assistance) so the patient was as comfortable as possible.
6. Upon exam completion, returned belongings, answered patient questions, explained the results reporting process, escorted the patient from the room and guided them to their next destination. Students are expected to walk patients to elevators, exits or other hospital departments as needed.

Technique Selection

The student**:**

1. Selected the correct body region from anatomically programmed radiography to obtain a guide to primary exposure factors for the exam.
2. Elected to modify the APR technique. Adjustments to standard techniques must result in x-ray exposures that fall within the EI for the site.
3. Parked the x-ray tube at the required SID. If the exam requires the table or upright bucky, the tube must be parked in detent and the CR centered to the IR.
4. Observed the post-processed image to make certain the EI is within acceptable range. If it's not, the student should be able to explain why it was not in range. Practices related to repeating images when EI's are out of range are site specific. **Failing the student for EI's that are too high or low is at the discretion of the RT. However, each site is expected to be consistent in how they make those decisions.**
5. Employed proper collimation and lead blockers to minimize the effects of scatter radiation and increase radiographic contrast.
6. Demonstrated and understanding of when and how to employ immobilization devices/techniques, cones, stationary grids, lead blockers etc. as prescribed by their positioning manuals and consistent with department policy and ALARA.

Radiation Protection

The student:

1. Provided the needed immobilization and clear instructions to the patient to hold still and suspend respirations. Aside from images done with purposeful patient motion (ie. breathing techniques) radiographs should be free of patient motion.
2. Provided lead shielding for protection of gonads and other radiosensitive organs/tissues but did not obstruct the view of important anatomical structures.
3. Collimated properly for each view or projection to limit the amount of tissue exposed. As a general rule, each image should demonstrate a small collimated border around the entire anatomy of interest unless the entire IR must be used to prevent clipping of needed anatomy.
4. Directly observed the patient through the lead window during all exposures. Since all x-ray equipment provides and audible indication of exposure, there is no reason to look anywhere but at the patient.
5. Explained how various factors such as AEC, positioning, conventional mAs/kVp selections, grids, collimation, patient factors etc., affected the resulting EI. Can the student explain conceptually, how a change in factor(s) would likely change the EI?
6. Performed all required views without repeating any radiographs. In most circumstances, repeating a view/projection results in the failure of a clinical test.

Image Analysis

The student:

1. Logged on the system, selected the correct patient and exam. Some departments require checks related to accession number and other patient information to make sure the right patient is selected.
2. Properly bar coded the IR by selecting the correct histogram after each exposure. The imaging plate was processed correctly. (CR systems)
3. Demonstrated skills needed to identify lead markers within the FOV, annotate images, adjust the FOV, and label radiographs in compliance with department protocols. All radiographs must be approved by an R.T. prior to sending to PACS.
4. Answered questions from the R.T. describing the quality of each image considering its positioning, centering, presence of lead markers, collimation, noise, EI targets, and shielding.
5. Described actions which would or could improve image quality.
6. Correctly identified various anatomical structures viewed on each radiograph when asked to do so by the R.T.

CLINICAL OBJECTIVES

Upon completion of the students clinical rotation in the outpatient department, he/she shall be able to demonstrate knowledge, skills, and understanding in the following areas:

I Patient Care and Safety
II Radiographic Procedures
III Radiographic Technique
IV Radiation Protection
V Radiographic Equipment and Accessories

An acceptable level of competency has been achieved when the student is able to:

I Patient Care and Safety

A. Safely transport and transfer patients
B. Check for correct patient identification
C. Correctly care for patients with infectious disease
D. Provide safe storage for patient's personal possessions which may be removed temporarily during a radiographic procedure
E. Communicate with patients in a concerned and professional manner
F. Explain and instruct patients regarding procedures to be performed
G. Provide patients modesty and comfort by using blankets, pas, sponges, etc.
H. Practice good medical asepsis to prevent the spread of diseases by: using correct hand washing procedures after each patient and clean equipment between cases

II Radiographic Procedures

A. Perform fluoroscopic and radiographic studies and evaluate from the standpoint of:
    1. Radiographic and diagnostic quality
    2. Accuracy of interpretation of the request
    3. Correct positioning of anatomical parts
    4. Correct use of markers and identification information
    5. Correct collimation
    6. Correct identification of radiographic exposure factors

III Radiographic Technique

A. Select the proper technical factors for routine situations and make appropriate adjustments for the non-routine examination:
The factors to be selected or arranged in varying patters of use include
    1. Kilovoltage
    2. Automatic exposure density adjustments
    3. Selection of appropriate automatic exposure fields
    4. Milliamperage
    5. Time

IV Radiation Protection

A. Provide radiation protection for patients and personnel by utilizing lead aprons, gloves, screens, collimation, patient restraints, filters, and employing correct technical factors to eliminate repeats
B. Provide protection from possible electrical hazards by routinely inspecting electrical wiring.

V Radiographic Equipment and Accessories

A. Describe the type of x ray tube and machine used by listing the:

1. Manufacturer
2. Focal spot size
3. Heat capacity of tube (rating chart)
4. Generator size and type (mA, kVp, mfg)
5. Current phase (single or multi)
6. Type rectification
7. Special features of the various radiographic/fluoroscopic units (i.e. video tape records, 100mm, spot film cameras, cine, spot film devices, etc.)

B. Properly use the various image recording devices (i.e. cine, 100mm. spot cameras, video tape recorders)

C. Prepare contrast agents (barium sulfate and iodinated compounds) for various prescribed studies

D. Know and understand various examination preparation procedures and the importance of a well prepared patient for specific contrast studies

E. properly use upright bucky

F. Properly utilize processing equipment and accessories

REQUIRED COMPETENCIES (78)

3 Staff competency forms required

EXTREMITY GROUP

Thumb	Shoulder (Non-Trauma)	OsCalcis
Finger	Shoulder (Trauma)	Lower Leg
Hand	Clavicle	Knee
Forearm	Patella	Femur
Elbow	Toe	Hip (Non-Trauma)
Humerus	Foot	Hip (Trauma)
Wrist	Ankle	

ABDOMEN/THORAX/CONTRAST GROUP

Chest		
Pediatric Chest (age 6 or less)	Surgical Abdomen	Small bowel Series
Chest- Room 2	Abdomen	Barium Enema- Single
Wheel Chair Chest	C-Arm (line plcmt., GB,	Barium Enema- Double
Cart Chest	and orthopedic)	UGI Series
Ribs	Portable (abdomen, chest,	IVP
Decubitus Abdomen*	orthopedic)	

SPINE GROUP

Pelvis	Bone Density
Cervical Spine	
Thoracic Spine	
Lumbar Spine	
Sacrum/Coccyx	
SI Joints	
Soft Tissue Neck***	

SKULL GROUP

Skull***
Sinuses
Facial Bones***
Mandible***
Orbits***
Nasal Bones
Cross Lateral Cervical Spine***

SPECIAL COMPETENCY GROUP

After didactic instruction competency may be attained at student discretion. No staff competency forms required prior to competency attempt.

Geriatric Chest (75 or older)**
Geriatric Upper Extremity (75 or older)**
Geriatric Lower Extremity (75 or older) **
Pediatric Portable (6 or younger)**
Pediatric Abdomen (6 or younger)**
Pediatric Upper Extremity (6 or younger)**
Pediatric Lower Extremity (6 or younger)**
US
MRI
Trauma Upper Extremity (any age patient)**
Trauma Lower Extremity (any age patient)**
CT Head CT Chest CT Neck
CT Abdomen/Pelvis CT Sinuses
Retrograde
Cystogram/Voiding Cystourethrogram
Interventional Procedure: Venogram, Arthrogram, Myelogram, Hysterosalpingogram, ect.

COMPETENCIES PERFOREMD UNDER SIMULATED CONDITIONS

Vital Signs	Skull	Facial Bones	Soft Tissue Neck
Venipuncture	Orbits	Mandible	CPR administration
SI Joints	Cross Lateral Cervical Spine		Oxygen Administration

*Student can automatically be awarded competency if they pass Double Contrast Barium Enema competency.

**Student must document competency in the exam ordered prior to performing this competency

***After June 1st of a student's 2nd year, they may request simulated testing for the "paper". The competency testing should be done on a patient.

● Exams that require only 1 paper and the competency test are IVP, single/double contrast barium enemas, soft tissue neck, cross table cervical spine, skull, facial bones, mandible, and orbits.

Grading Guidelines for Competency Evaluations:

Film size	Incorrect size	-3 points
	LW vs CW	-3 points
Distance	Per inch	-1 point
Patient Position	Slight error	-3 points
	Choppy movements	-3 points
Central ray	Entrance/exit	-3 points
Tube angulation	No angle	-6 points
	0-5 degrees off	-2 points
	6-10 degrees off	-4 points
	over 10 degrees off	-6 points
Snaps, metal, jewelry	In desired anatomy	-5 points
	In any anatomy	-2 points
Radiation protection	Inadequate	-6 points
Breathing instructions	Incorrect	-6 points
Markers	None used	-6 points
	Mismarked	-6 points
	Coned off	-3 points
Patient ID	Name band checked	-6 points
	Repeat name back	-6 points
Collimation	None	-6 points
	Inadequate	-3 points
Technique	Slight error	-3 points
Evaluation of requisition	Inadequate	-5 points
Failure to observe patient during exposure		-3 points
Failure to assist patient as needed		-6 points
Failure to prepare radiographic room		-5 points
Patient Safety Error		-5 points

AUTOMATIC FAILURE: (-16pts for each of the following)

1. Procedure was terminated by the evaluator
2. Assistance was required and/or given
3. Gross violation in radiation protection practice
4. Repeat film was required

	Chest		T shoulder		T Upper		SI Joints		Port Abd
	Chest RM 2		Clavicle		T Lower		ST Neck*		Port Ortho
	Cart Chest		Ribs		Peds Upper		IVP*		Peds Port
	WC Chest		Toes		Peds Lower		UGI		CT Brain
	Child Chest		Foot		Nasal Bones		Small Bowel		CT Sinuses
	KUB		OsCalsis		Sinuses		Single BE*		CT Abd/Pel
	Surg Ab		Ankle		Skull*		Double BE*		CT Chest
	Finger		Lower Leg		Facial Bones*		Surg Ab Decub		CT Neck
	Thumb		Knee		Mandible*		Cystogram		Bone Density
	Hand		Patella		Orbits*		Retrograde		Ultrasound
	Wrist		Femur		C Spine		Special		MRI
	Forearm		NT Hip		X table C Spine*		C-Arm LP		Vitals
	Elbow		T Hip		T Spine		C-Arm Ortho		CPR
	Humerus		Pelvis		L Spine		C-Arm GB		O2 Admin
	NT Shoulder		Peds Abd		Sacrum Coccyx		Port CXR		Venipuncture
	Geriatric Chest		Geriatric Upper		Geriatric Lower				

Clinical Chart given to students so they can track papers and comps

STUDENT:_____ MONTH:_____

	O	A	I	TOTAL
FINGER				
THUMB				
HAND				
WRIST				
FOREARM				
ELBOW				
HUMERUS				
SHOULDER- NT				
SHOULDER- T				
SCAPULA				
CLAVICLE				
TOE				
FOOT				
OS CALCIS				
ANKLE				
LOWER LEG				
KNEE				
PATELLA				
FEMUR				
HIP- NT				
HIP- T				
ABDOMEN- FLAT				
SURGICAL ABDOMEN				
ESOPHAGRAM				
UGI SERIES				
SMALL BOWEL				
BARIUM ENEMA- SINGLE				
BARIUM ENEMA- DOUBLE				
VCUG				
I.V.P.				

STUDENT:_____ MONTH:_____

	O	A	I	TOTAL
SKULL				
SINUSES				
ORBITS				
FACIAL BONES				
NASAL BONES				
MANDIBLE				
TMJ'S				
SOFT TISSUE NECK				
CHEST 1 VIEW				
CHEST 2 VIEW				
CART CHEST				
WC CHEST				
RIBS				
CERVICAL SPINE				
THORACIC SPINE				
LUMBAR SPINE				
PELVIS				
SACRUM & COCCYX				
SCOLIOSIS STUDY				
CROSS LATERAL C-SPINE				
SI JOINTS				
PORTABLE CHEST				
PORTABLE KUB				
OTHER PORTABLES				
C-ARM				
RETROGRADE				
ERCP				

STUDENT:_____ MONTH:_____

	O	A	I	TOTAL
MISC FLUOROSCOPY				
CATH LAB				
HYSTEROSALPINGOGRAM				
MYELOGRAM				
ARTHROGRAM				
BONE DENSITY				
CT PROCEDURES				
US PROCEDURES				
NM PROCEDURES				
MRI PROCEDURES				
BIOPSY PROCEDURE				
BONE AGE				
BONE LENGTH				
SKELETAL SURVEY				
MONTHLY TOTAL				
PEDIATRIC TOTAL				

BRMC School of Radiography

Clinical Evaluation Form

Student Name: _____ Room Assignment: _____

Category	Rating	Comments
1. Recalls Required Views - Demonstrates knowledge		
2. Selects Proper Image Receptor and Film markers - Selects correct image receptor size/film type - Correctly positions all markers (R, L, decub, etc.) - Selects proper exam tag		
3. Coning and Collimation - Collimates to proper image receptor size, aligns tube to film but doesn't over collimate - Adds cone for improved quality		
4. Technique Selection and Adjustments - Correctly selects table top, table bucky or upright bucky - Correctly selects center or outer chamber(s) if AEC is used - Measures patients when needed, uses calipers as intended - Adjusts programmed techniques depending on patient size and/or pathology		
5. Equipment Manipulation - Always utilizes correct button to unlock vertical , longitudinal and transverse tube locks. Never "hunts" and "pecks". - Always inserts and removes cassettes properly from holders, bucky trays. Aligns tube to IR.		
6. Correctly Positions Patient, Central Ray and Film - Works efficiently, avoiding repositioning of patient or IR		
7. Radiation Protection Practices - Checks for pregnancy and LMP on females of child bearing age - Shields appropriately according to view or projection		
8. Patient Safety and Comfort - Communicates instructions during all aspects of the exam - Talks with patient in a concerned, professional manner and listens to responses - Keeps patient draped for modesty		
9. Interpersonal Skills - Always accepts suggestions without making excuses and/or becoming defensive - Anticipates needs while assisting staff, other students, and/or doctors - Follows instructions and avoids repeat errors		
10. Professional Skills - Looks professional; well groomed, fresh uniform and clean white shoes - Remains in assigned room and keep assigned room clean and well stocked		
11. Behavior - Helpful, mature considerate, honest, responsible, motivated, cooperative and pleasant		

Rating Scale: 0= Unacceptable (F) 1=Needs Major Improvement (D) 2=Needs Minor Improvement (C) 3= Acceptable/Good (B) 4= Excellent (A)

Technologist Signature _____ **Date**: _____

Dear Technologist,

Thank you for taking a few minutes to assess our student's progress in the clinical setting. To complete the survey form on the reverse side:

For categories 1 thru 8: Please rate the student as though you are comparing their clinical performs and skills to those of an entry level technologist. A rating of "4" (excellent) indicates to us that you feel the student demonstrates a level of skill and competence we might expect a graduate, entry level technologist to possess. We will not be surprised if our freshman students receive ratings of "0" and "1" in some categories

For categories 9, 10, and 11: Rate the student at the level you feel they deserve. These categories focus less on technical skulls and more on personal and professional attributes. Additional comments you wish to add are certainly welcome ratings will be reviewed with the students but your privacy will be protected.

Thank you

Jeanne and Laura

How do you feel about this revised format? We would appreciate your comments

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

School of Radiography

Bradford Regional Medical Center

STAFF COMPETENCY FORM

_____	_____	_____
Student	**Date Performed**	**X-Ray Number**

Exam Done: _____

Technique and Distance used and CM Measurements: _____

_____

For Staff Technologist to complete:

1. Thoroughly review request; check pt ID and order			
2. Have room and equipment ready			
3. Practice good pt technologist relationship			
4. Demonstrate experience in doing the exam			
5. Demonstrate knowledge of how to use equipment			
6. Show evidence of radiation protection			
7. Position each projection properly			
8. Align the part of the film correctly			
9. Measure: use chart; make proper adjustments for distance, grid, pathology			
10. Use correct lead marker(s) on the correct side in the FOV			
11. Collimate properly to the area			
12. Complete paperwork and release patient			
If film was repeated explain why:			

I, _____ feel this student is competent to do
Staff Signature

_____. _____
Date

School of Radiography

STUDENT VACATION REQUEST

STUDENT NAME:_____

HOURS _____

_____

STUDENT SIGNATURE

DATE:

_____

DATES REQUESTED

_____

_____

_____

_____

_____

_____

_____

_____

Chest Exam Room 2; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

PA CHEST Room 2

_____ Evaluation of requisition
_____ CR directed to midpoint of IR at the level of T7
_____ Top of film 1" above top of shoulders
_____ Arms away from body
_____ Shoulders relaxed and rolled forward
_____ MSP centered to IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

LATERAL CHEST Room 2

_____ Top of IR 1" above top of shoulders
_____ Arms raised above head
_____ CR directed to midpoint of IR at the level of T7
_____ Mid-axillary line centered 2" behind the longitudinal center of film
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

GRADE: _____ PASS: _____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Chest Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

PA CHEST

_____ Evaluation of requisition
_____ 14 X 17 LW (CW for larger patients) in chest board
_____ CR directed to midpoint of IR at the level of T7
_____ Top of film 1" above top of shoulders
_____ Arms away from body
_____ Shoulders relaxed and rolled forward
_____ MSP centered to IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

LATERAL CHEST

_____ 14 x 17 LW in chest board
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Arms raised above head
_____ Mid-axillary line centered 2" behind the longitudinal center of IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Chest Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

AP CHEST IN WHEELCHAIR

_____ Evaluation of requisition
_____ 14 x 17 LW (CW for larger patients) with a grid
_____ Place patient AP erect in wheelchair
_____ Cassette is placed behind patient's back
_____ Place pillow between back of cassette and wheelchair back if needed
_____ MSP straight and centered to IR
_____ Top of IR 1" above top of shoulders
_____ Head straight and chin lifted up
_____ CR directed to midpoint of IR at the level of T7
_____ Arms away from body
_____ All metal and plastic removed
_____ Breathing instructions on inspiration
_____ Appropriate speed

LATERAL CHEST

_____ 14 x 17 LW in chest board
_____ Remove arm rests if possible
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Arms raised above head
_____ Mid-axillary line centered 2" behind the longitudinal center of the IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Chest Exam (Cart); Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

AP CHEST ON CART

_____ Evaluation of requisition
_____ 14 x 17 LW (CW for larger patient) with a grid
_____ Patient sitting erect on cart
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Arms away from body
_____ Shoulders relaxed and rolled forward
_____ MSP centered to IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

LATERAL CHEST

_____ 14 x 17 LW in chest board
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Arms raised above head
_____ Mid-axillary line centered 2" behind the longitudinal center of IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Chest Exam (Child); Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

PA CHILD CHEST

_____ Evaluation of requisition
_____ 10 x 12 CW in Pigg-O–Stat, IR holder stand, or wall bucky
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Child properly placed in Pigg-O-Stat, on table or at wall bucky
_____ MSP centered to IR
_____ All metal and plastic removed
_____ Proper markers
_____ Observed respiration to make exposure on full inspiration
_____ Appropriate speed

LATERAL CHILD CHEST

_____ 10 X 12 LW in Pigg-O-Stat, IR holder stand, or wall bucky
_____ CR directed to midpoint of IR at the level of T7
_____ Rotate child in Pigg-O-Stat to place in true lateral position
_____ Mid-axillary line centered to the longitudinal center of IR
_____ All metal and plastic removed
_____ Proper markers
_____ Observed respiration to make exposure on full inspiration
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Chest Exam (Geriatric; age 75 or older) Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

PA GERIATRIC CHEST

_____ Evaluation of requisition
_____ 14 x 17 LW (CW for larger patient) with a grid
_____ Patient sitting erect on cart
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Arms away from body
_____ Shoulders relaxed and rolled forward
_____ MSP centered to IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

LATERAL GERIATRIC CHEST

_____ 14 x 17 LW in chest board
_____ CR directed to midpoint of IR at the level of T7
_____ Top of IR 1" above top of shoulders
_____ Arms raised above head
_____ Mid-axillary line centered 2" behind the longitudinal center of IR
_____ All metal and plastic removed
_____ Head straight and chin lifted up
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Ribs Exam; Clinical Competency Test

Student: _____ Exam #:_____

Date: _____ Evaluator/Clinical Site: _____/_____

RIBS UPPER

_____ Evaluation of requisition
_____ 14 X 17 LW in chest board or use room 2
_____ 72" SID or 48" SID
_____ Top of IR 1 ½" above top of shoulders
_____ Arms away from body
_____ Patient centered midway between the MSP and the lateral border of the affected side
_____ CR directed perpendicular to midpoint of IR at the level of T7
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

RIBS LOWER

_____ 10 X 12 at chest board or use room 2
_____ 72" SID or 48" SID
_____ Place patient in the erect AP position if possible
_____ Arms away from body
_____ Patient centered midway between the MSP and the lateral border of the affected side
_____ CR perpendicular at the level of T12
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

RIBS OBLIQUE

_____ 14 X 17 cassette at chest board or use room 2
_____ 72" SID or 48" SID
_____ Arms away from body
_____ Top of cassette 1 ½" above shoulders
_____ Rotate patient 45 degrees, centered to a point midway between the MSP and the lateral border of the body
_____ CR is directed perpendicular to the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Abdomen Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

ABDOMEN

_____ Evaluation of requisition
_____ 14 X 17 LW in table bucky
_____ CR directed to midpoint of IR
_____ Center IR to iliac crests
_____ Arms away from body
_____ Patient centered to IR, MSP straight
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Pediatric Abdomen Exam- Age 6 and under; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

ABDOMEN

_____ Evaluation of requisition
_____ 14 X 17 LW in table bucky
_____ CR directed to midpoint of IR
_____ Center IR to iliac crests
_____ Arms away from body
_____ Patient centered to IR, MSP straight
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

GRADE: _____ **PASS:_____** **FAIL:_____**

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Surgical Abdomen Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical Site: _____/_____

SURGICAL ABDOMEN - PA CHEST

_____ 14 x 17 LW (CW for large patients) in chest board
_____ CR perpendicular to T7
_____ Arms away from body
_____ Shoulders relaxed and rolled forward
_____ MSP centered to IR
_____ Head straight and chin lifted up
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on inspiration
_____ Appropriate speed

SURGICAL ABDOMEN – AP ERECT

_____ 14 x 17 at chest board
_____ 48" or 72" SID
_____ CR centered to midpoint of IR
_____ Center to a point 2" above iliac crests
_____ MSP straight
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions an expiration
_____ Appropriate speed

SURGICAL ABDOMEN – AP SUPINE

_____ Evaluation of requisition
_____ 14 x 17 LW table bucky
_____ CR centered to midpoint of IR
_____ Center IR to iliac crest
_____ Arms away from body
_____ Patient centered to IR, MSP straight
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions, suspend respiration
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Pediatric Upper Extremity-Age 6 and under Exam; Clinical Competency Test

Student: _____ Exam # _____

Exam Type: _____

Date: _____ Evaluator/Clinical site: _____/_____

AP View

_____ Evaluation of requisition
_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for AP view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

Lateral View

_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for lateral view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Pediatric Lower Extremity-Age 6 and under Exam; Clinical Competency Test

Student: _____ Exam # _____

Exam Type: _____

Date: _____ Evaluator/Clinical site: _____/_____

AP View

_____ Evaluation of requisition
_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for AP view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

Lateral View

_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for lateral view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph

Geriatric Upper Extremity-Age 75 or older Exam; Clinical Competency Test

Student: _____ Exam # _____

Exam Type: _____

Date: _____ Evaluator/Clinical site: _____/_____

AP View

_____ Evaluation of requisition
_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for AP view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

Lateral View

_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for lateral view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph

Geriatric Lower Extremity-Age 75 or older Exam; Clinical Competency Test

Student: _____ Exam # _____

Exam Type: _____

Date: _____ Evaluator/Clinical site: _____/_____

AP View

_____ Evaluation of requisition
_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for AP view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

Lateral View

_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for lateral view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph

Trauma Upper Extremity Exam; Clinical Competency Test

Student: _____ Exam # _____

Exam Type: _____

Date: _____ Evaluator/Clinical Site: _____/_____

AP TRAUMA EXTREMITY

_____ Evaluation of requisition
_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for AP view
_____ CR directed perpendicular to mid point of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper Markers
_____ Appropriate speed

LATERAL TRAUMA EXTREMITY

_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for lateral view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Trauma Lower Extremity Exam; Clinical Competency Test

Student: _____ Exam # _____

Exam Type: _____

Date: _____ Evaluator/Clinical Site: _____/_____

AP TRAUMA EXTREMITY

_____ Evaluation of requisition
_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for AP view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper Markers
_____ Appropriate speed

LATERAL TRAUMA EXTREMITY

_____ IR placed under extremity correctly
_____ Adhered to proper positioning criteria for lateral view
_____ CR directed perpendicular to midpoint of IR
_____ Proper use of positioning aids
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Thumb Exam; Clinical Competency Test

Student: _____ Exam# _____

Date: _____ Evaluator/Clinical site: _____/_____

AP THUMB

_____ Evaluation of requisition
_____ Patient seated at the end of table
_____ Internally rotate hand until posterior surface of thumb is on IR
_____ Hold back other fingers
_____ CR directed perpendicular to midpoint of IR through the 1st metacarpal joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

OBLIQUE THUMB

_____ Patient seated at end of table
_____ Rotate hand so surface of thumb is at a 45 degree angle to IR
_____ CR directed perpendicular to midpoint of IR through the 1st metacarpal joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL THUMB

_____ Patient seated at end of table
_____ Rotate thumb until in a lateral position
_____ CR directed perpendicular to midpoint of IR through the 1st metacarpal joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Finger Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/ Clinical site: _____/_____

PA FINGER

_____ Patient seated at end of table
_____ Pronate hand and spread fingers
_____ CR directed perpendicular to the PIP joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

PA INTERNAL OBLIQUE FINGER

_____ Patient seated at end of table
_____ Finger forms 45 degree angle with plane of IR
_____ Proper use of positioning aids (optional)
_____ CR directed perpendicular to the PIP joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

PA EXTERNAL OBLIQUE FINGER

_____ Patient seated at end of table, hand wrist and forearm on table
_____ Finger forms 45 degree angle with plane of IR
_____ Proper use of positioning aids (optional)
_____ CR perpendicular to the PIP joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL FINGER

_____ Patient seated at end of table, hand wrist and forearm on table
_____ Index and middle finger-hand rests on radial side
_____ Ring and little finger-hand rests on ulnar side
_____ CR perpendicular to the PIP joint
_____ Proper use of positioning aids (especially lateral view)
_____ All metal and plastic removed
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Hand Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PA HAND

_____ Hand, wrist, and forearm on table, elbow flexed 90 degrees
_____ CR perpendicular to midpoint of the IR, through 3rd metacarpophalangeal
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

PA OBLIQUE HAND

_____ Hand, wrist, and forearm on table. Elbow flexed 90 degrees
_____ Palm of hand forms 45 degree angle with plane of film. Fingers are straight.
_____ CR directed perpendicular to midpoint of the IR through the 3rd metacarpophalangeal joint
_____ Proper use of positioning aids (optional)
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL HAND

_____ Hand wrist and forearm on table, elbow flexed 90 degrees
_____ Hand resting on ulnar side with fingers fanned
_____ Shoulder and elbow in same plane
_____ CR directed perpendicular to midpoint of the IR at the level of the 2nd metacarpophalangeal joint
_____ Proper use of positioning aids (optional)
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Wrist Exam; Clinical Competency Test

Student: _____ Exam# _____

Date: _____ Evaluator/Clinical site: _____/_____

PA WRIST

_____ Evaluation of requisition
_____ Hand, wrist, and forearm on table, elbow flexed 90 degrees.
_____ Hand in loose fist
_____ CR directed perpendicular to the midpoint of the IR at the level of the mid-carpals
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

PA OBLIQUE WRIST – ULNAR FLEXION

_____ Hand, wrist, and forearm on table. Elbow flexed 90 degrees.
_____ Rotate wrist until it forms a 45 degree angle with plane of IR
_____ Wrist deviated to ulnar side
_____ CR directed perpendicular to the midpoint of the IR at the level of the mid-carpals
_____ Proper use of positioning aids (optional)
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL WRIST

_____ Hand, wrist, and forearm on table
_____ Hand resting on ulnar side
_____ Shoulder and elbow in same plane, elbow bent 90 degrees
_____ CR directed perpendicular to the midpoint of the IR at the level of the mid-carpals
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

NAVICULAR

_____ Hand, wrist, and forearm on table
_____ Hand and IR elevated on the finger end 20 degrees
_____ Ulnar deviate the wrist
_____ CR perpendicular to the midpoint of the IR at the level of the scaphoid bone
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed**.**

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Forearm Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP FOREARM

_____ Hand, wrist, and forearm on table
_____ Hand supinated, humeral epicondyles parallel to IR
_____ Shoulder and elbow in same plane
_____ Mid shaft of forearm centered to IR
_____ CR directed perpendicular to midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL FOREARM

_____ Hand, wrist, and forearm on table
_____ Shoulder and elbow in same plane
_____ Forearm resting on ulnar side, elbow flexed 90 degrees
_____ Center mid-shaft of forearm midpoint of IR
_____ CR directed perpendicular to midpoint of IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Elbow Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP ELBOW

_____ Evaluation of requisition
_____ Forearm, elbow, and humerus on table, shoulder and elbow in same plane
_____ Hand supinated, humeral epicondyles parallel to IR
_____ Elbow centered to midpoint of IR section
_____ CR directed perpendicular to elbow joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

INTERNAL OBLIQUE ELBOW

_____ Forearm, elbow, humerus on table, shoulder and elbow in same plane
_____ Hand rotated internally, humeral condyles form a 45 degree angle to the plane of the IR
_____ CR directed perpendicular to elbow joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

EXTERNAL OBLIQUE ELBOW

_____ Forearm, elbow, and humerus on table, shoulder and elbow in same plane
_____ Hand rotated laterally with palm outward, humeral condyles form an 45 degree angle to plane of IR
_____ CR directed to elbow joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL ELBOW

_____ Forearm, elbow, and humerus on table, shoulder and elbow in same plane
_____ Elbow bent 90 degrees
_____ Hand resting on ulnar side
_____ Elbow centered to midpoint of the IR
_____ CR directed perpendicular to elbow joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient**.**

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed**.**

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Humerus Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP HUMERUS

_____ Evaluation of requisition
_____ 14 x 17 IR
_____ Hand supinated, humeral epicondyles parallel to IR
_____ Mid shaft of humerus centered to IR
_____ CR directed perpendicular to the mid shaft of the humerus
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

LATERAL HUMERUS

_____ 14 x 17 IR
_____ Back of hand on hip or thigh so humeral epicondyles are perpendicular to film
_____ Mid shaft of humerus centered to IR
_____ CR directed perpendicular to the mid shaft of the humerus
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

LATERAL HUMERUS-TRANSTHORACIC

_____ Place patient with lateral surface of the affected arm against upright bucky
_____ Raised uninjured arm over patients head to elevate uninjured shoulder
_____ Top of IR 1" above the to of affected shoulder
_____ CR directed horizontal to the midpoint of the IR at the level of the neck of the humerus
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing technique
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Shoulder Exam; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP SHOULDER-EXTERNAL ROTATION

_____ 10 x 12 IR in table bucky or upright bucky
_____ Hand supinated, humeral epicondyles parallel to IR
_____ Center the coracoid process to the midpoint of IR
_____ CR directed perpendicular to the midpoint of the IR at a level 1" below the coracoid process
_____ Head turned away from side being examined
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

AP SHOULDER-INTERNAL ROTATION

_____ 10 x 12 IR in table bucky or upright bucky
_____ Hand internally rotated, humeral epicondyles perpendicular to the IR
_____ CR directed perpendicular to the midpoint of the IR at a level 1" below the coracoid process
_____ Head turned away from side being examined
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

SHOULDER AXILLARY VIEW

_____ Affected arm abducted to form right angle with long axis of body
_____ Humerus in external rotation with head turned away from side being examined
_____ CR directed horizontal through axilla to the region of the acromioclavicular articulation
_____ All metal and plastic removed
_____ Proper markers
_____ Extension cylinder (if available)
_____ Suspended respiration
_____ Appropriate speed

SHOULDER SCAPULAR "Y" POSITION

_____ Patients anterior or posterior surface against table or upright bucky
_____ Torso is rotated approximately 45 degrees
_____ Arm adjusted to have posterior surface of scapula perpendicular to IR
_____ CR directed to the center of IR
_____ Suspend respiration
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Shoulder Trauma; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

TRAUMA SHOULDER AP

_____ Evaluation of requisition
_____ 10 x 12 IR in bucky or use slip on grid
_____ CR directed perpendicular to the midpoint of the IR at a level 1" below the coracoid process
_____ Head turned away from the side being examined
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

TRAUMA SHOULDER SCAPULAR Y

_____ 10 x 12 IR in bucky or use slip-on grid
_____ Patient placed in a 45-60 degree oblique position, LPO or RPO
_____ Arm placed across body
_____ Scapulohumeral joint centered to the midpoint of the IR
_____ CR directed to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

TRAUMA SHOULDER-TRANSTHORACIC

_____ 10 x 12 IR in chest board.
_____ Place patient with the lateral surface of the affected arm against upright bucky
_____ Raise uninjured arm over patients head to elevate uninjured shoulder
_____ Top of IR 1" above the top of the affected shoulder
_____ CR directed perpendicular at the level of the humeral neck
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing technique
_____ Appropriate speed

GRADE: _____ PASS:_____ FAIL:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

AP Clavicle; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP CLAVICLE

_____ 10 x 12 in table bucky or upright bucky
_____ Shoulder in same plane
_____ CR directed perpendicular to midpoint of IR at the mid-clavicle
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended at the end of expiration
_____ Appropriate speed

AP AXIAL CLAVICLE

_____ 10 x 12 in table bucky
_____ Shoulders in same plane
_____ CR directed 15-30 degrees cephalic to the midpoint of the IR at the mid-clavicle
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended at the end of inspiration
_____ Appropriate speed

GRADE:_____ PASS: _____ FAIL: _____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Toes; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP TOES

_____ 10 x 12 table top IR
_____ Knee bent, foot flat
_____ Center the metatarsophalangeal joint of great toe or PIP of toes 2-5 to the midpoint of the IR
_____ CR directed perpendicular to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

OBLIQUE TOES

_____ 10 x 12 table top IR
_____ Rotate toe to side closest to IR until plantar surface of foot forms a 45 degree w/ the plane of the IR
_____ Center metatarsophalangeal joint of great toe or PIP of toes 2-5 to the midpoint of the IR
_____ All metal and plastic removed
_____ Appropriate speed

LATERAL TOES

_____ 10 x 12 table top IR
_____ Patient lies on side, tape other toes out of the way of the affected toe
_____ Center metatarsophalangeal joint of great toe or PIP of toes 2-5 to midpoint of the IR
_____ CR directed perpendicular to midpoint of the IR
_____ All metal and plastic removed
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**: _____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Foot; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP FOOT

_____ 10 x 12 table top IR
_____ Patient supine or sitting with knee flexed
_____ Plantar surface of foot resting firmly on IR
_____ Center base of third metatarsal to midpoint of IR
_____ CR directed 10 degrees cephalic to the midpoint of IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

INTERNAL OBLIQUE FOOT

_____ 10x12 table top IR
_____ Patient supine or sitting upright with knee flexed
_____ Rotate the foot medially until the plantar surface forms an angle of 30 degrees to the IR
_____ CR directed perpendicular to the base of the 3rd metatarsal
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

EXTERNAL OBLIQUE FOOT

_____ 10x12 table top IR
_____ Patient supine or sitting upright with knee flexed
_____ Rotate the foot laterally until the plantar surface forms and angle of 30 degrees to the IR
_____ CR directed perpendicular to the base of the 3rd metatarsal
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL FOOT

_____ 10 x 12 table top IR
_____ Patient in lateral recumbent position
_____ Place lateral side of the foot on table and adjust to true lateral position. Dorsiflex ankle
_____ CR perpendicular to the base of the 3rd metatarsal
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Oscalsis; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP AXIAL OSCALSIS

_____ 10 x 12 table top
_____ Patient supine on table affected leg extended
_____ Toes dorsiflexed until planter surface of foot is perpendicular to table
_____ CR directed 40 degrees cephalad to enter at the level of the base of the 3rd metatarsal
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL OSCALSIS

_____ 10 x 12 table top
_____ Patient lies on affected side
_____ Place lateral aspect of affected foot in contact with IR, dorsiflex ankle
_____ Center mid-calcaneus to center of IR
_____ CR directed perpendicular to midpoint of IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENT:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Ankle; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP ANKLE

_____ Evaluation of requisition
_____ 10 x 12 table top
_____ Patient supine or sitting, affected leg extended
_____ Flex foot and ankle to place long axis of foot in vertical position
_____ Center ankle joint to midpoint of IR
_____ CR directed perpendicular to midpoint of the IR at the level of the ankle joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

INTERNAL OBLIQUE ANKLE- MORTISE JOINT

_____ 10 x 12 table top
_____ Patient supine or sitting, affected leg extended
_____ Dorsiflex foot and rotate leg medially 15-20 degrees
_____ Ankle joint centered to midpoint of IR
_____ CR directed perpendicular to the IR at the level of the ankle joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

EXTERNAL OBLIQUE ANKLE

_____ 10X12 table top
_____ Patient supine or sitting, affected leg extended
_____ Dorsiflex foot and rotate leg laterally 45 degrees
_____ Ankle joint centered to midpoint of IR
_____ CR directed perpendicular to the IR at the level of the ankle joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL ANKLE

_____ 10 x 12 table top
_____ Patient lies on affected side
_____ Place foot in lateral position with ankle dorsiflexed
_____ Ankle joint centered to midpoint of the IR
_____ CR directed perpendicular to the IR at the level of the ankle joint
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed**.**

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Lower Leg; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP LOWER LEG

_____ Evaluation of requisition
_____ 14 x 17 IR, diagonal, table top
_____ Patient supine, affected leg extended in true AP position
_____ Center mid shaft of tibia to midpoint of the IR
_____ CR directed to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

INTERNAL OBLIQUE

_____ 14X17 IR, diagonal, table top
_____ Patient supine, affected leg extended and rotated medially 45 degrees
_____ Center mid shaft of tibia to midpoint of the IR
_____ CR directed to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL LOWER LEG

_____ 14 x 17 cassette, diagonal, table top
_____ Patient lies on affected side
_____ Place knee and foot in lateral position
_____ Center mid shaft of tibia to midpoint of the IR
_____ CR directed perpendicular to midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Knee; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP KNEE

_____ Evaluation of requisition
_____ 10 x 12 in table bucky
_____ Patient supine or sitting with leg extended
_____ Femoral epicondyles parallel to IR
_____ Center knee joint to midpoint of IR (approx. ½ inch below the apex of the patella)
_____ CR directed 5-7 degrees cephalic to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

INTERNAL OBLIQUE KNEE

_____ 10x12 in table bucky
_____ Patient supine or sitting with leg extended
_____ Rotate knee medially 45 degrees
_____ Center knee joint to midpoint of IR (approx. ½ inch below the aped of the patella)
_____ CR directed 5-7 degree cephalic to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

EXTERNAL OBLIQUE KNEE

_____ 10x12 in table bucky
_____ Patient supine or sitting with leg extended
_____ Rotate knee laterally 45 degrees
_____ Center knee joint to midpoint of IR (approx. ½ inch below the aped of the patella)
_____ CR directed 5-7 degree cephalic to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

LATERAL KNEE

_____ 10 x 13 in table bucky
_____ 48” SID
_____ Patient lies on affected side with knees bent approx. 20 degrees
_____ Femoral epicondyles perpendicular to IR
_____ Center knee joint to midpoint of IR
_____ CR directed 5-7 degrees cephalic to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**: _____ **FAIL**: _____

Staff Signature : _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Patella; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PATELLA-TANGENTIAL

_____ 10 x 12 table top
_____ Patient prone, knee slowly flexed so the tibia and fibula form a 50-60 degree angle from the table top
_____ Can also be done supine
_____ CR directed perpendicular to the space between the patella and the femoral condyles
_____ All metal and plastic removed
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Femur; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP FEMUR

_____ 14 x 17 film in table bucky
_____ Patient supine, center affected thigh to midline of IR
_____ Internally rotate leg to place femoral epicondyles parallel with the IR
_____ CR directed perpendicular to the midpoint of IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on suspended respiration
_____ Appropriate speed

LATERAL FEMUR

_____ 14 x 17 Cassette in table bucky
_____ Place patient on the affected side, center affected thigh to midpoint of IR
_____ Flex knee 45 degrees and adjust to true lateral position
_____ CR directed perpendicular to midpoint of IR
_____ Proper markers
_____ Breathing instructions on suspended respiration
_____ Appropriate speed

FEMUR-LATERAL HIP

_____ 10 x 12 Cassette in table bucky
_____ Patient supine, affected hip over midline of IR
_____ Flex knee, fully abduct side of interest
_____ CR directed perpendicular through femoral neck to midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instruction on suspended respiration
_____ Appropriate speed

GRADE:_____ **PASS:_____** **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Hip; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

NON-TRAUMA HIP

_____ 10 x 12 film in table bucky, 14 x 17 if history of pervious surgery
_____ Patient supine, center affected hip over midline of IR
_____ Invert toes of affected hip 15 degrees to place along axis of leg parallel with IR
_____ CR is directed through the femoral head to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on suspended respiration
_____ Appropriate speed

FROG LATERAL NON TRAUMA HIP

_____ 10 x 12 IR in table bucky
_____ Patient supine, affected hip over midline of IR
_____ Flex knee, fully abduct side of interest
_____ CR directed perpendicular through femoral neck to midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instruction on suspended respiration
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Hip Trauma; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

TRAUMA HIP

____ 10 x 12 cassette in table bucky, may need 14 x 17 if history of previous surgery
____ Patient supine, center affected hip over midline of IR
____ If possible, invert toes of affected hip 15 degrees to place long axis of leg parallel with plane of IR.
____ CR is directed through the femoral head to the mid point of the IR
____ All metal and plastic removed
____ Proper markers
____ Breathing instructions on suspected respiration
____ Appropriate speed

LATERAL TRAUMA HIP:

____ 10 X 12 grid is placed on film and propped up above the iliac crest.
____ Patient supine, flex unaffected knee and place foot on an elevated support
____ CR directed in a horizontal plane under the flexed knee through the femoral neck to midpoint IR
____ Proper use of positioning landmarks; symphysis pubis and ASIS
____ All metal and plastic removed
____ Proper markers
____ Extension cylinder is attached to collimator.
____ Breathing instructions on suspended respiration
____ Appropriate speed

GRADE: _____ PASS:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Soft Tissue Neck; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

SOFT TISSUE NECK –LATERAL

____ 10 x 12 IR in upright bucky
____ 72" SID
____ Patient erect, MSP parallel to IR
____ CR directed perpendicular to midpoint of IR at the level of the laryngeal prominence
____ All metal and plastic removed
____ Proper markers
____ Breathing instructions, exposure is taken on inspiration
____ Appropriate speed

SOFT TISSUE NECK –AP

____ 10 x 12 cassette in upright bucky
____ 72" SID
____ Patient in AP position, MSP centered to midline of bucky
____ Shoulders to lie in same horizontal plane
____ Extend patient's head to remove mandible from superimposition.
____ CR directed perpendicular to the midpoint of IR at the level of the laryngeal prominence.
____ All metal and plastic removed
____ Proper markers
____ Breathing instructions. Exposure is taken on inspiration.
____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Cervical Spine; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP CERVICAL SPINE

____ 10 x 12 in bucky
____ Patient erect, MSP centered to midline of the IR
____ Raise chin
____ Center C4 to the midpoint of the IR
____ CR directed 15 degrees cephalic through C4
____ All metal and plastic removed
____ Proper markers
____ Appropriate speed

AP OBLIQUE CERVICAL SPINE-LPO

____ 10 x 12 in bucky
____ Patient erect and rotated 45 degrees toward the left side
____ Head remains in line with body or is turned to MSP is parallel with the IR
____ Center C4 to the midpoint of the IR
____ CR is directed 15 degrees cephalic through C4
____ All metal and plastic removed
____ Proper markers
____ Appropriate speed

AP OBLIQUE CERVICAL SPINE-RPO

____ 10 x 12 in bucky
____ Patient erect and rotated 45 degrees toward right side
____ Head remains in line with body or is turned to MSP is parallel with IR
____ Center C4 to the midpoint of the IR
____ CR is directed 15 degrees cephalic through c4
____ All metal and plastic removed
____ Proper markers
____ Appropriate speed

LATERAL CERVICAL SPINE

____ 10 x 12 IR in bucky
____ Patient in lateral erect position, MSP parallel to IR
____ Lift chin to remove rami of mandible from 1st and 2nd cervical bodies
____ Center C4 to the midpoint of the IR
____ CR is perpendicular to the level of C4
____ Use sandbag weights to drop shoulders
____ All metal and plastic removed
____ Proper markers
____ Appropriate speed

OPEN MOUTH CERVICAL SPINE

____ 10 x 12 in placed in bucky
____ Center MSP to midline of the bucky
____ Place arms at the sides and adjust shoulders to lie in same transverse plane.
____ Open mouth wide to place occlusal plane in line with the mastoid tips.
____ CR is directed perpendicular to the midpoint of the open mouth.
____ All metal and plastic removed
____ Proper markers
____ Use extension cylinder cone (if available)
____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Cross Table C-Spine; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CROSS LATERAL C-SPINE

____ 10 x 12 cassette in chest board, or 10 x 12 grid propped up on cart
____ 72’ SID
____ Keep patient in cervical restraint
____ Patient supine in stretcher, maintain immobilization
____ Center C4 to the midpoint of IR
____ CR is directed perpendicular to C4
____ Proper markers
____ Shoulders are lowered
____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Thoracic Spine; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP DORSAL SPINE

_____ 14 x 17 in table bucky
_____ Patient supine, MSP centered to midline of table bucky. Patient may flex knees
_____ Arms along sides, hips and shoulder in same plane.
_____ Place top of IR 1 ½' above shoulders
_____ CR is directed perpendicular to midpoint of the IR at the level of T7
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

LATERAL DORSAL SPINE

____ 14 x 17 in table bucky
____ Patient lies on left side, knees bent for support
____ Arms at right ankles to body, elbows bent
____ Center midaxillary line to the midpoint of the IR
____ All metal and plastic removed
____ Place top of IR 1 ½' above shoulders
____ Place lead blocker behind patient
____ CR is directed perpendicular to the midpoint of the IR
____ All metal and plastic removed
____ Proper markers
____ Breathing instructions, expose during quite breathing
____ Appropriate speed

TWINNING POSITION (SWIMMERS)

____ 10 x 12 in table bucky
____ Patient in true lateral position
____ Arms closest to IR raised above head, elbow bent
____ Depress opposite shoulder and rotate it posteriorly
____ Center midaxillary line to midline of IR
____ CR is directed at the level of T2
____ All metal and plastic removed
____ Proper markers
____ Suspend respiration or expose during quiet breathing
____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Lumbar Spine; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP LUMBAR SPINE

_____ Place 14 x 17 in table bucky
_____ Patient supine, MSP centered to midpoint of the IR, knees may be flexed
_____ Adjust shoulders and hips to lie in same transverse plane
_____ Center film 1" above iliac crest
_____ CR is directed perpendicular to midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

OBLIQUE LUMBAR SPINE LPO

____ Place 14 x 17 in table bucky
____ Rotate MSP 45 degrees to the left side and place the longitudinal plane 2 inches medial to the ASIS.
____ Center L3 to the midpoint of the IR
____ CR is directed perpendicular to the midpoint of the IR
____ All metal and plastic removed
____ Proper markers
____ Suspend respiration
____ Appropriate speed

OBLIQUE LUMBAR SPINE RPO

____ Place 14 x 17 in table bucky
____ Rotate MSP 45 degrees to the right side and place the longitudinal plane 2 inches medial to the ASIS
____ Center L3 to the midpoint of the IR
____ CR is directed perpendicular to the midpoint of the IR
____ All metal and plastic removed
____ Proper markers
____ Suspend respiration
____ Appropriate speed

LATERAL LUMBAR SPINE

____ Place 14 x 17 in table bucky
____ Patient lies on left side, knees bent for stability, arms at right angles, elbows bent
____ Center iliac crest to the midpoint of the IR
____ CR is directed perpendicular to the midpoint of the IR.
____ Place a lead blocker behind patient to reduce scatter
____ All metal and plastic removed
____ Proper markers
____ Suspended respiration
____ Appropriate speed

LATERAL L5-S1 SPOT FILM

____ 10 x 12 in table bucky
____ Patient lies on left side, knees bent for stability, arms at right angles, elbows bent
____ Center 1 to 2 inches posterior to the mid axillary line
____ CR is 5 degrees caudal directed through a point midway between the iliac crest and the ASIS
____ All metal and plastic removed
____ Proper markers
____ Use extension cylinder cone (if available)
____ Suspend respiration
____ Appropriate speed

GRADE: _____ **PASS**:_____ **FALL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Sacrum and Coccyx; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

AP SACRUM

_____ 10 x 12 in table bucky
_____ Patient supine, MSP centered to midline of table bucky, shoulders and hips in the same plane.
_____ CR is directed 15 degrees cephalic to a point midway between the ASIS and the symphysis pubis
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

AP COCCYX

_____ 10x12 in table bucky
_____ Patient supine. MSP centered to the midline of IR, hips and shoulder in the same plane
_____ CR directed 10 degrees caudal to a point 2" superior to the symphysis pubis
_____ All metal and plastic removed
_____ Proper markers
_____ Use extension cylinder (if available)
_____ Suspended respiration
_____ Appropriate speed

LATERAL SACRUM/COCCYX

_____ 10 x 12 in table bucky
_____ Patient lies on left side, knees flexed for stability, arms at right ankles, elbows bent
_____ Place sponge under midriff to make spine parallel to the IR
_____ CR is directed perpendicular 3 ½" posterior to the ASIS
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL:_____**

Staff Signature: _____

COMMENTS

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Pelvis; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PELVIS – AP

____ 14 x 17 in table bucky
____ Patient supine, MSP centered to midline of bucky
____ Rotate ankles internally to place hips in true anatomical position
____ Arms away from body
____ Top of cassette one inch above top iliac crest
____ CR directed perpendicular to midpoint of IR
____ All metal and plastic removed
____ Proper markers
____ Suspend respiration
____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

SI Joints; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

SACROILIAC JOINTS AP

_____ 10 x 12 in table bucky
_____ Patient supine, MSP centered to midline of table bucky
_____ CR is 30 degrees cephalic for males, 35 degrees cephalic for females to a point 3" above the symphysis pubis
_____ All metal and plastic removed
_____ Proper markers
_____ Suspended respiration
_____ Appropriate speed

SACROILIAC JOINTS-OBLIQUE-LPO

_____ 10 x 12 in table bucky
_____ Patient supine, MSP centered to the midline of the table bucky
_____ Elevate right side 25 degrees
_____ CR directed perpendicular to a point 1" medial on the right side at the level of the ASIS
_____ All metal and plastic removed
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Suspended respiration
_____ Appropriate speed

SACROILIAC JOINTS-OBLIQUE-RPO

_____ 10 x 12 in table bucky
_____ Patient supine, MSP centered to the midline of the table bucky
_____ Elevate left side 25 degrees
_____ CR directed perpendicular to a point 1" medial on the left side at the level of the ASIS
_____ All metal and plastic removed
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Suspend respiration
_____ Appropriate speed

GRADE:_____ **PASS:_____** **FAIL:_____**

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Sinuses Series; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

SINUSES – PA CALDWELL
_____ 10 x 12 in bucky
_____ MSP centered to midline of bucky
_____ Place patient PA, resting on the chin and nose
_____ CR directed 15 degrees through the nasion to the midpoint of the IR
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

SINUSES – PA
_____ 10 x 12 in bucky
_____ MSP centered to midline of bucky
_____ Patient in PA position, resting on nose and forehead. OML perpendicular to IR
_____ CR directed perpendicular through the nasion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use of cylinder cone (if available)
_____ Appropriate speed

SINUSES – WATERS
_____ 10 x 12 in bucky
_____ MSP centered and perpendicular to the midline of the bucky
_____ Place patient PA, resting on the chin
_____ OML forms 37 degrees angle to the bucky
_____ CR directed perpendicular to the midpoint of the IR through the acanthion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

SINUSES – LATERAL
_____ 10 x 12 in bucky
_____ Patient erect resting on the affected side
_____ MSP parallel, IOML parallel to transverse axis, interpupillary line perpendicular to bucky
_____ CR directed perpendicular to the midpoint of the IR at the outer canthus of the eye
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL:_____**

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Nasal Bones; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

NASAL BONES – PA

_____ 10 x 12 in bucky
_____ MSP centered to midline of bucky
_____ Patient is PA, resting on nose and forehead. OML perpendicular
_____ CR exits the nasion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

NASAL BONES WATERS

_____ 10 x 12 in bucky
_____ MSP centered and perpendicular to the midline of the bucky
_____ Place patient PA, resting on the extended chin
_____ OML forms 37 degrees angle to the bucky
_____ CR directed perpendicular to the midpoint of the IR through the acanthion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

NASAL BONES LATERAL (RIGHT AND LEFT)

_____ 10 x 12 divided in half, on table top or 10 x 12 IR for each lateral
_____ Place patient in semi prone position
_____ Head resting on ear of affected side
_____ MSP parallel to IR, interpupillary line perpendicular to IR
_____ IOML parallel to transverse axis of the filmIR
_____ CR directed perpendicular to the midpoint of the IR through the nose
_____ All metal and plastic removed
_____ Proper markers
_____ Proper use of a cylinder cone with additional collimation
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL:_____**

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Orbits; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

ORBITS PA CALDWELL

_____ 10 x 12 in bucky
_____ Patient in erect position, MSP centered to midline of bucky
_____ Head resting on forehead and nose. OML perpendicular to IR
_____ CR directed 15 degrees caudal through the nasion to the midline of the IR
_____ Proper markers
_____ Proper use of cylinder cone (if available)
_____ Appropriate speed

ORBITS MODIFIED WATERS

_____ 10 x 12 in bucky
_____ Patient in erect position, MSP perpendicular to bucky
_____ Head resting on nose and chin
_____ CR directed perpendicular to midpoint of IR through acanthion
_____ All metal and plastic removed
_____ Proper markers
_____ Proper use of cylinder cone (if available)
_____ Appropriate speed

ORBITS RIGHT RHESE

_____ 10 x 12 in bucky
_____ Patient in PA position, head resting on right zygoma, nose and chin
_____ MSP rotated 53 degrees to plane of IR. AML perpendicular
_____ CR directed perpendicular to the midpoint of the IR through the lower orbit
_____ All metal and plastic removed
_____ Proper markers
_____ Proper use of cylinder cone (if available)
_____ Appropriate speed

ORBITS LEFT RHESE

_____ 10 x 12 in chest board
_____ Patient in PA position, head resting on left zygoma, nose and chin
_____ MSP rotated 53 degrees to plane of IR. AML perpendicular
_____ CR directed perpendicular to the midpoint of the IR through the lower orbit
_____ All metal and plastic removed
_____ Proper markers
_____ Proper use of cylinder cone (if available)
_____ Appropriate speed

ORBITS LATERAL

_____ 10 x 12 in bucky
_____ Head in true lateral position, MSP parallel, IOML parallel, interpupillary line perpendicular
_____ CR perpendicular to the midpoint of the IR through a point 1 inch posterior to the outer canthus
_____ All metal and plastic removed
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Skull; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

SKULL PA CALDWELL

_____ 10 x 12 in table bucky
_____ Patient PA, head resting on forehead and nose. MSP perpendicular
_____ OML is perpendicular to the bucky
_____ CR directed 15 degrees caudad through the nasion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Suspend respiration
_____ Appropriate speed

SKULL LATERAL RIGHT

_____ 10 x 12 in table bucky
_____ Head resting on right side
_____ MSP parallel IOML parallel to the transverse axis, interpupillary line perpendicular
_____ Top of cassette 1 ½ inch above the vertex of the skull
_____ CR directed perpendicular to a point 2" superior to the EAM
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Appropriate speed

SKULL LATERAL LEFT

_____ 10 x 12 in table bucky
_____ Head resting on left side
_____ MSP parallel, IOML parallel, interpupillary line perpendicular
_____ CR directed perpendicular to a point 2" superior to EAM
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Appropriate speed

SKULL TOWNES

_____ 10 x 12 in table bucky
_____ Place patient supine, MSP centered and perpendicular to midline bucky
_____ Place OML perpendicular to IR
_____ CR directed 30 -37 degrees caudad through the EAM
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Mandible; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

MANDIBLE PA

_____ 10 x 12 in bucky
_____ Patient is PA erect, MSP is perpendicular to plane of IR
_____ Rest patient's forehead and nose on the bucky for rami. Nose and chin for mental point.
_____ CR directed perpendicular thru the lips to the midpoint of the IR
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Proper cylinder cone (if available)
_____ Appropriate speed

MANDIBLE LATERAL

_____ 10 x 12 in bucky
_____ Patient erect with head resting on ear of affected side
_____ MSP and IOML parallel to the IR, interpupillary line perpendicular to the IR
_____ Extend chin to remove rami from the area of the cervical spine
_____ CR directed perpendicular thru the mandible to the midpoint of the IR
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cylinder cone (if available)
_____ Suspend respiration
_____ Appropriate speed

ZANELLI RIGHT

_____ 10 x 12 in bucky
_____ Adjust head so that the MSP forms an angle of 30 degrees with the plane of the IR
_____ CR enters the left mandibular region directed perpendicular to the midpoint of the IR
_____ All metal and plastic removed, remove dentures
_____ Proper use of markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

ZANELLI LEFT

_____ 10 x 12 in bucky
_____ Adjust head so that the MSP forms an angle of 30 degrees with the plane of the IR
_____ CR enters the right mandibular region directed perpendicular to the midpoint of the IR
_____ All metal and plastic removed, remove dentures
_____ Proper use of markers
_____ Use cylinder cone (if available)
_____ Appropriate speed

MANDIBLE EXAGGERATED TOWNES

_____ 10 x 12 in bucky
_____ Place patient supine, arms along sides, shoulder in same plane
_____ Adjust head to place MSP perpendicular
_____ Place OML perpendicular to plain of IR
_____ CR directed 37 degrees caudad exiting the TMJs if the OML is perpendicular
_____ CR directed 44 degrees caudad exiting the TMJs if the IOML is perpendicular
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Facial Bones; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

FACIAL BONES PA CALDWELL

_____ 10 x 12 in bucky
_____ MSP centered to midline of bucky
_____ Patient PA, head resting on forehead and nose. OML perpendicular to the IR.
_____ CR 15 degrees caudad to exit the nasion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cone (if available)
_____ Appropriate speed

FACIAL BONES WATERS

_____ 10 x 12 IR in bucky
_____ MSP centered and perpendicular to the midline of the bucky
_____ Patient is PA with head resting on the chin. OML forms a 37 degree angle to the IR
_____ CR directed perpendicular to the midpoint of the IR through the acanthion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cone (if available)
_____ Appropriate speed

FACIAL BONES MODIFIED WATERS

_____ 10 x 12 in bucky
_____ MSP centered to the midline of the bucky
_____ Place patient PA, head resting on nose and chin. OML forms a 55 degree angle to the IR
_____ CR directed perpendicular to the acanthion
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cone (if available)
_____ Appropriate speed

FACIAL BONES LATERAL

_____ 10x12 in bucky
_____ Affected side towards bucky. MSP, IOML parallel. Interpupillary line perpendicular
_____ CR perpendicular to the IR to enter the malar bone of the side up
_____ All metal and plastic removed, remove dentures
_____ Proper markers
_____ Use cone (if available)
_____ Appropriate speed

FACIAL BONES SMV

_____ 10x12 table top or in wall bucky
_____ Supine with head extended
_____ IOML parallel with the film
_____ CR perpendicular to the IOML
_____ All metal and plastic removed
_____ Proper markers
_____ Use cone (if available)
_____ Appropriate speed
_____ If both zygomatic arches are not opened, May view can be attempted without penalty or exam failure

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

IVP; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

IVP SCOUT

_____ 14 x 17 in table bucky
_____ Patient supine, MSP centered to midline of table bucky
_____ Arms away from body
_____ Center IR to iliac crests and to midpoint of IR
_____ Proper markers
_____ Breathing instruction on expiration
_____ Appropriate speed

IVP SCOUT NEPHROGRAM

_____ 10 x 12 in table bucky
_____ Equipment set to tomographic mode
_____ Fulcrum level selected and set
_____ Patient supine, MSP centered to midline of table bucky, arms away from the body
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

3 TOMOGRAMS POST INJECTION

_____ 10x12 in table bucky
_____ Equipment set to tomographic mode
_____ Fulcrum level selected and set for each cut
_____ Patient supine, MSP centered to midline of table bucky, arms away from the body
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

IVP 5 AND 10 MINUTE IMAGES

_____ 14 x 17 in table bucky
_____ Patient supine, MSP centered to midline of table bucky
_____ IR centered to the level of the iliac crests
_____ CR directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

IVP 15 MINUTE RPO

_____ 14 x 17 in table bucky
_____ Patient supine, MSP centered to midline of table bucky
_____ Elevate patient's left side 30 degrees
_____ Center IR to the level of the iliac crest
_____ CR is directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

IVP 15 MINUTE LPO

_____ 14 x 17 in table bucky
_____ Patient supine, MSP centered to midline of table bucky
_____ Arms away from the body
_____ Elevated patients right side 30 degrees
_____ Center IR to the level of the iliac crest
_____ CR is directed perpendicular to the midpoint of the IR
_____ Breathing instructions on expiration
_____ Appropriate speed

IVP 15 MINUTE PA

_____ 14 x 17 in table bucky
_____ Patient prone, MSP centered to midline of table bucky
_____ Arms away from the body
_____ IR centered to the level of the iliac crest
_____ CR directed perpendicular to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

IVP POST VOID

_____ 14 x 17 in table bucky
_____ Patient supine MSP centered to midline of table bucky
_____ Arms away from body
_____ IR centered to the level of the iliac crest
_____ CR directed perpendicular to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

UGI; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

UGI SCOUT

_____ 14 x 17 in table bucky
_____ Patient supine on table, MSP centered to midline to the IR
_____ Arms away from body, center to iliac crests
_____ CR is directed to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

UGI RAO DRINKERS

_____ 14x17 in table bucky
_____ Patient in the RAO position. MSP forms an angle of 35-40 degrees to the IR
_____ CR perpendicular to T5-T6, top of light at the lips
_____ Proper markers
_____ Instruct when the patient is to start and stop drinking
_____ Appropriate speed

UGI RAO STOMACH

_____ 14x17 in bucky
_____ Patient in the RAO position. MSP forms and angle of 40-70 degrees to the IR
_____ Right arm along side
_____ Center the arc of the ribs to the midpoint of the IR
_____ CR is directed perpendicular to the arc of the ribs
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

UGI PA

_____ 14 x 17 in table bucky
_____ Patient prone, MSP centered to midline of table bucky
_____ Center L2 to the midpoint of the IR
_____ CR is directed perpendicular to the midpoint of the IR
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

UGI RIGHT LATERAL

_____ 14x17 in bucky
_____ Patient in right lateral recumbent position
_____ Center the arc of the ribs to the midpoint of the IR
_____ CR is directed perpendicular to a point midway between the anterior surface of the body and the median coronal plane to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

UGI AP

_____ 14x17 in table bucky
_____ Patient supine on table, center left side of body 1 1/2" lateral to the MSP
_____ Arms away from body
_____ Center the arc of the ribs to the midpoint of the IR
_____ CR directed perpendicular to midpoint of IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Small Bowel; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

SMALL BOWEL SERIES SCOUT

_____ 14 x 17 in table bucky
_____ Patient supine on table, MSP centered to midline of the IR
_____ Arms away from the body
_____ CR perpendicular to iliac crests
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

SMALL BOWEL SERIES TIME DELAYED STUDY

_____ 14 x 17 in table bucky
_____ Patient prone, MSP centered to midline of table bucky
_____ CR perpendicular to the midpoint of the IR, at iliac crests
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

SMALL BOWEL SERIES FLOUROSCOPY ROOM READINESS

_____ Bucky tray moved to the foot of the table, TV monitor ready and properly located, footboard on table
_____ Compression paddle ready and available
_____ Anticipates and meets radiologist's needs and checks images with radiologist
_____ Accurately entered patient's name and information into the digital imager
_____ Was able to accurately send images to PACS

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Single Contrast Barium Enema; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

BE SCOUT

_____ 14 x 17 in table bucky
_____ Patient supine on table, MSP centered to midline of IR, arms away from body
_____ CR is directed to the midpoint of the IR.
_____ All metal and plastic removed
_____ Proper markers
_____ Breathing instruction on expiration
_____ Appropriate speed

BE AP

_____ 14 x 17 in table bucky
_____ Patient supine on table, MSP centered to midline of IR, IR centered to iliac crests
_____ CR directed perpendicular to midpoint of IR
_____ Proper markers
_____ Breathing instruction on expiration
_____ Appropriate speed

BE RPO

_____ 14 x 17 in table bucky
_____ Oblique patient 35-45 degrees to the right
_____ Center IR to the level of the crests
_____ CR directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

BE LPO

_____ 14 x 17 in table bucky
_____ Oblique patient 45 degrees to the left
_____ Center IR to the level of the crests
_____ CR is directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Breathing instruction on expiration
_____ Appropriate speed

BE LATEAL RECTUM

_____ 14x17 in table bucky
_____ Patient lying on left side, shoulders and hips superimposed
_____ Coronal plane passing 2” superior to the symphysis pubis to the midpoint of the IR
_____ CR is directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Suspend respiration
_____ Appropriate speed

BE PA SIGMOID

_____ 14x17 in table bucky
_____ Patient prone on table, MSP centered to IR
_____ CR is directed 30-40 degrees caudal to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

BE POST EVAC

_____ 14 x 17 is table bucky
_____ Patient supine, MSP centered to midline of the IR
_____ Center IR to iliac crest
_____ CR is directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Breathing instructions on expiration
_____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Double Contrast Enema; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

DOUBLE BE SCOUT

____ 14 x 17 IR in table bucky
____ Patient supine on table, MSP centered to midline of IR
____ Center IR to iliac crests, CR is directed to the midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

DOUBLE CONTRAST ENEMA AP

____ 14 x 17 IR in table bucky
____ Patient supine on table, MSP centered to midline of IR
____ CR directed perpendicular to midpoint of IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

DOUBLE BE RPO

_____ 14 x 17 IR in table bucky
_____ Oblique patient 45 degrees to the right
_____ Centered IR to the level of the crests
_____ CR directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Suspend respiration
_____ Appropriate speed

DOUBLE BE LPO

____ 14 x 17 IR in table bucky
____ Oblique patient 45 degrees to the left
____ Center IR to the level of the crests
____ CR is directed perpendicular to the midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

DOUBLE BE LATEAL RECTUM

_____ 14x17 IR in table bucky
_____ Patient lying on left side, shoulders and hips superimposed
_____ Coronal plane passing 2” superior to the symphysis pubis to the midpoint of the IR
_____ CR is directed perpendicular to the midpoint of the IR
_____ Proper markers
_____ Suspend respiration
_____ Appropriate speed

DOUBLE BE PA SIGMOID

____ 14 x 17 IR in table bucky
____ Patient prone on table, MSP centered to IR
____ Center IR to the level of the ASIS
____ CR is directed 30-40 degrees caudal to the midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

DOUBLE BE RIGHT LATERAL DECUBITUS

____ 14 x 17 IR in grid holder
____ Patient is lying on right side, shoulder and hips superimposed
____ Place IR on table top, close to patient's back
____ Center IR to the level of the crests
____ CR directed horizontal to the midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

DOUBLE BE LEFT LATERAL DECUBITUS

____ 14 x 17 IR in grid holder
____ Patient lying on left side, shoulders and hips superimposed
____ Place IR on table top, close to patient's abdomen
____ Centered IR to the level of the crests
____ CR directed horizontal to the midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

DOUBLE BE POST EVAC

____ 14 X 17 IR in table bucky
____ Patient supine, MSP centered to midline of IR
____ Center IR to iliac crest
____ CR is directed perpendicular to midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Surgical Abdomen: Decubitus; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

SURGICAL ABDOMEN- RIGHT LATERAL DECUBITUS

_____ 14x17 IR
_____ 48" SID
_____ MSP centered to the midpoint of the IR
_____ Patient lying on right side, arms raised above head, knees bent for support
_____ CR perpendicular, 2" above the iliac crests
_____ Proper markers
_____ Suspend respiration
_____ Appropriate speed

SURGICAL ABDOMEN- LEFT LATERAL DECUBITUS

_____ 14x17 IR
_____ 48" SID
_____ MSP centered to the midpoint of the IR
_____ Patient lying on left side, arms raised above head, knees bent for support
_____ CR perpendicular 2" above the iliac crests
_____ Proper markers
_____ Suspend respiration
_____ Appropriate speed

GRADE: _____ **PASS**:_____ **FAIL**: _____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Cystogram; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CYSTOGRAM-SUPPLIES

____ Catheterization tray
____ Betadine solution
____ Sterile gloves
____ Chux pads
____ 1 bottle of contrast Isovue 370
____ Sheet to cover patient
____ Fluid administration tubing
____ Clamp
____ Scissors
____ Tape

CYSTROGRAM PROCEDURE

____ Assists in obtaining informed consent
____ Assists in evaluating patient to determine if pre-procedure orders were followed
____ 14 x 17 IR in table bucky
____ Patient supine, MSP centered to midline of IR
____ IR centered to level of iliac crest
____ CR directed perpendicular to the midpoint of the IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed
____ Checks images with radiologist
____ Assists nurse in patient catheterization
____ Properly prepares and handles supplies
____ Maintains sterile field
____ Follows universal precautions policy and procedure

CYSTOGRAM ROOM READINESS/FLUOROSCOPY

____ Radiographic tube placed in home position
____ Bucky moved to head of table
____ Foot pedal properly placed
____ TV monitor ready and properly located
____ Fluoro tower marked for side of interest
____ Anticipates and meets radiologist needs
____ Properly instructs patient to maintain position
____ Takes overhead radiographs as directed
____ Accurately entered patient name and information into digital imager
____ Was able to accurately acquisition images from the digitizer as requested by the radiologist

CYSTOGRAM-POST PROCEDURE

____ Instructs patient to empty bladder
____ 14 x 17 IR in table bucky
____ Patient supine, MSP centered to midline of the IR
____ Center IR to level of iliac crest
____ CR directed perpendicular to midpoint of IR
____ Proper markers
____ Suspend respiration
____ Appropriate speed
____ Checks images with radiologist

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph.

Interventional Procedure; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

INTERVENTIONAL COMPETENCY ROOM READINESS

____ Radiographic tube placed in the home position
____ Bucky moved to head/foot of table
____ Foot pedal properly placed
____ TV monitor ready and properly located
____ Footboard on table (if applicable)
____ Mark fluoro tower with appropriate marker
____ Accurately entered patients name and information in computer monitor
____ Was able to accurately acquisition images from the fluoro monitor to PACS
____ Was able to aid radiologist with digital imaging as needed

INTERVENTIONAL COMPETENCY PROCEDURE

____ Assists in obtaining allergy history.
____ Assists in obtaining informed consent.
____ Patients personal articles removed if necessary
____ Patient placed supine on table.
____ Properly prepares and handles supplies
____ Maintains sterile field
____ Assists radiologist as needed
____ Follows universal precautions policy and procedures
____ Takes overhead radiographs as directed
____ Appropriate speed

INTERVENTIONAL COMPETENCY-POST PROCEDURE

____ Provides patient with proper discharge instructions
____ Assists radiologist/radiographer with patient care requirements
____ Proper disposal of supplies
____ Checks images with radiologist
____ Informs charge person of status of exam as needed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Patient Care Criteria

_____ 1. Prepared radiographic room prior to exam.

_____ 2. Verified patient's name, DOB, LMP, change of pregnancy etc.

_____ 3. Escorted patient to x-ray room with gown fastened. Secured personal belongings.

_____ 4. Obtained medial history and explained exam to the patient.

_____ 5. Adapted to the patient's physical limitations. Minimized patient's discomfort.

_____ 6. Upon exam completion, properly discharged patient.

Technique Selection

_____ 1. Selected correct Anatomically Programmed Radiography (APR) option.

_____ 2. Modified suggested APR technique correctly, as needed.

_____ 3. Set proper SID and set x-ray tube to detent (if appropriate).

_____ 4. Exposure Index (EI) was in acceptable range.

_____ 5. Employed proper collimation to minimize the effects of scatter radiation.

_____ 6. Properly utilized accessory devices, (ie. Cylinder cones, stationary grids, lead blockers etc.)

Radiation Protection

_____ 1. Provided immobilization and breathing instructions to avoid patient motion.

_____ 2. Shielded gonads and other radiosensitive organs/tissues.

_____ 3. Collimated to limit the amount of tissue exposed.

_____ 4. Directly observed the patient through lead window during all exposures.

_____ 5. Explained how the EI value for each image relates to selected exposure factors.

_____ 6. No repeat exposures were needed.

Image Analysis

_____ 1. Logged on to CR system and selected the correct patient and exam.

_____ 2. Bar coded each IR to the proper view/projection displayed by the CR menu.

_____ 3. Processed image, annotating as needed, prior to sending images to PACS.

_____ 4. Answered questions from R.T. related to image quality.

_____ 5. Described actions needed to improve quality.

_____ 6. Named various anatomical structures viewed on each radiograph

CLINICAL OBJECTIVES
OR

Upon completion of the clinical rotation to the front desk film room area, he/she shall be able to demonstrate the knowledge, skills, and understanding necessary to:

1. comply with instructions and guidelines from supervising technologist
2. understand the mechanics and function of the C-ARM and demonstrate knowledge of manipulation
3. understand techniques for surgical procedures
4. assemble and disassemble the C-ARM equipment such as the monitor
5. known and beware of sterile equipment and personnel and avoid contamination of sterile fields
6. select patient from a work list and know how to manually enter patient information
7. assist and identify procedures that require cleaning and draping of equipment
8. evaluate quality of images after each case and send quality images to PACS
9. assist technologist with final paper work

Retrograde; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

RETROGRADE

Y	N	Turn equipment on/off properly
Y	N	Obtains history from patient or patient chart and record information
Y	N	Removed and/or placed articles away from areas of anatomic interest
Y	N	Utilized equipment correctly when positioning for examination
Y	N	Adhere to proper positioning criteria
Y	N	Properly instructed patient concerning moving and breathing as needed
Y	N	Observed correct identification markers
Y	N	Demonstrated experience in moving c-arm
Y	N	Was able to answer questions related to the procedure and anatomy
Y	N	Performed clerical tasks accurately
Y	N	Accurately evaluated radiograph in terms of correct position, respiration and technique

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

C-ARM Gallbladder; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

C-ARM GALLBLADDER

Y N Obtains history from patient chart and record information

Y N Accurately interpreted requisition

Y N Accurately entered patient information into c-arm

Y N Removed and/or placed articles away from areas of anatomic interest as needed

Y N Utilized equipment correctly during c-arm procedure

Y N Adhered to proper positioning criteria

Y N Demonstrate experience in moving c-arm

Y N Was able to answer questions related to the procedure and anatomy

Y N Performed clerical tasks accurately

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

C-ARM Ortho; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

C-ARM ORTHO

Y	N	Turn equipment on/off properly
Y	N	Obtains history from patient chart and record information
Y	N	Accurately interpreted requisition
Y	N	Accurately entered patient information into c-arm
Y	N	Removed and/or placed articles away from areas of anatomic interest as needed
Y	N	Utilized equipment correctly during c-arm procedure
Y	N	Adhered to proper positioning criteria
Y	N	Demonstrated experience in moving the c-arm
Y	N	Was able to answer questions related to the procedure and anatomy
Y	N	Performed clerical tasks accurately
Y	N	Proper examination follow through

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

PICC Line Placement; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

C-ARM PICC LINE

Y	N	Turn equipment on/off properly
Y	N	Accurately interpreted requisition
Y	N	Accurately entered patient information into c-arm
Y	N	Removed and/or placed articles away from areas of anatomic interest as needed
Y	N	Utilized equipment correctly during c-arm procedure
Y	N	Adhered to proper positioning criteria
Y	N	Demonstrated experience in moving the c-arm
Y	N	Was able to answer questions related to the procedure and anatomy
Y	N	Performed clerical tasks accurately

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CLINIAL OBJECTIVES
PORTABLE RADIOGRAPHY

Upon completion of the student's clinical rotation on portable procedures he/she shall be able to demonstrate knowledge, skills, and understanding of:

I. Patient care and safety
II. Mobile and radiographic equipment and accessories
III. Mobile and radiographic procedure for positioning
IV. Radiographic technique
V. Radiation protection

An acceptable level of competence has been attained when the student is able to:

I. Patient care and safety
a. correctly identify patient
b. communicate with the patient in a concerned and professional manner
c. explain and instruct patient regarding procedure to be performed
d. provide safe storage for patient's personal possessions which may have been removed temporarily during the procedure
e. provide for patient's modesty and comfort using blankets, pads, sponges, etc.
f. safely position patient to protect lines and tubes
g. correctly care for patients with infectious disease
h. practice good medial asepsis to prevent spread of disease by using correct hand washing procedures before and after each patient and routinely cleaning equipment

II. Accurately provide description of the mobile radiographic equipment:
a. heat capacity or tube rating
b. unit output capacity and type (ma, mas, kvp)
c. power source (conventional, battery operated or capacitor)
d. current phase (single or three phase)
e. special features or accessories

III. Radiographic Procedure
a. perform the portable procedure form the standpoint of:
1. radiographic and diagnostic quality
2. interpretation of the request
3. identify the correct radiographic procedure on film evaluation
4. identify anatomical parts on film evaluation
5. correct beam limitation and filtration

IV. Radiographic Technique
a. select the proper technical factors for routine and non-routine situations and make the appropriate adjustments for the non-routine examinations

V. Radiation Protection
a. demonstrate appropriate radiation protection methods
b. provide protection from possible electrical hazards by inspecting electrical wiring

Portable Pediatric; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PORTABLE PEDIATRIC STUDY AGE 6 AND UNDER

Y N Turn equipment on/off properly

Y N Accurately check patient for correct identification

Y N Obtains history from patient or patient charge and record information

Y N Accurately interpreted requisition

Y N Removed and/or placed articles away from areas of anatomic interest

Y N Utilized equipment correctly when positioning for portable examination

Y N Adhered to proper positioning criteria

Y N Properly instructed patient concerning moving and breathing

Y N Observed correct immobilization techniques

Y N Used correct identification markers

Y N Accurately directed CR to properly align part, tube and IR

Y N Performed clerical tasks accurately

Y N Accurately evaluated radiograph in terms of correct position, respiration, and technique

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Portable Chest X ray; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PORTABLE CHEST

Y	N	Turn equipment on/off properly
Y	N	Accurately check patient for correct identification
Y	N	Obtains history from patient or patient charge and record information
Y	N	Accurately interpreted requisition
Y	N	Removed and/or placed articles away from areas of anatomic interest
Y	N	Utilized equipment correctly when positioning for portable examination
Y	N	Adhered to proper positioning criteria
Y	N	Properly instructed patient concerning moving and breathing
Y	N	Observed correct immobilization techniques
Y	N	Used correct identification markers
Y	N	Accurately directed CR to properly align part, tube and IR
Y	N	Performed clerical tasks accurately
Y	N	Accurately evaluated radiograph in terms of correct position, respiration, and technique

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Portable Abdomen X ray; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PORTABLE ABDOMEN

Y	N	Turn equipment on/off properly
Y	N	Accurately check patient for correct identification
Y	N	Obtains history from patient or patient charge and record information
Y	N	Accurately interpreted requisition
Y	N	Removed and/or placed articles away from areas of anatomic interest
Y	N	Utilized equipment correctly when positioning for portable examination
Y	N	Adhered to proper positioning criteria
Y	N	Properly instructed patient concerning moving and breathing
Y	N	Observed correct immobilization techniques
Y	N	Used correct identification markers
Y	N	Accurately directed CR to properly align part, tube and IR
Y	N	Accurately evaluated radiograph in terms of correct position, respiration, and technique

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

Portable Orthopedic X ray; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

PORTABLE ORTHOPEDICS

Y	N	Turn equipment on/off properly
Y	N	Accurately check patient for correct identification
Y	N	Accurately interpreted requisition
Y	N	Accurately explained examination to be performed
Y	N	Removed and/or placed articles away from areas of anatomic interest
Y	N	Utilized equipment correctly when positioning for portable examination
Y	N	Adhered to proper positioning criteria
Y	N	Properly instructed patient concerning moving and breathing
Y	N	Observed correct immobilization techniques
Y	N	Used correct identification markers
Y	N	Accurately directed CR to properly align part, tube and IR
Y	N	Accurately evaluated radiograph in terms of correct position, respiration, and technique

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CLINICAL OBJECTIVES
CT SCANNER

Upon completion of the student's clinical rotation in the CT scanner area, he/she shall be able to demonstrate knowledge, skills and understanding in the following areas:

I. Patient care and safety
II. Software
III. Hardware and accessories
IV. The basics of CT imaging

An acceptable level of competency has been attained when the student is able to:

I. Patient care safety

a. check patient for correct identification
b. safely transport and transfer patients
c. communicate with patient in a concerning and professional manner
d. explain and instruct patient regarding procedure to be performed
e. provide safe storage for patient possessions which may have been removed during procedure
f. provide for patient's modesty and comfort using blankets, pads, sponges, etc.
g. correctly care for patients with infectious disease
h. practice good medial asepsis to prevent spread of disease by using correct hand washing procedures after each patient and routinely cleaning equipment

II. Software

a. describe the capability of the equipment in terms of:
    1 .programs available
    2. application of program to procedure being performed

III. Hardware and accessories

a. explain the equipment necessary by describing the accessories located in each of the following areas:
    1. scan room
    2. control area
    3. computer area

IV. The basics of CT imaging

a. x-ray production
b. data acquisition
c. data processing
d. image display
e. windows and levels

CT Brain; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CT BRAIN

_____ Can accurately position patient on table.

_____ Knows and understands buttons on gantry

_____ Can accurately type in patient information

_____ Knows what protocol to select for which exam
(i.e. PE sure start for PE study, not CT chest)

_____ Knows how to set up and use the injector

_____ Knows filming icon and window settings needed for each exam
(ex. Soft tissue, lung, liver and bone)

_____ Knows selected anatomy

_____ Knows how to archive exam after completed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CT Sinuses; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CT SINUSES

____ Can accurately position patient on table.

____ Knows and understands buttons on gantry

____ Can accurately type in patient information

____ Knows what protocol to select for which exam
(i.e. PE sure start for PE study, not CT chest)

____ Knows how to choose head first and feet first exams and the reason to do so.

____ Can accurately set up scan vari-area, sure start ans Helical Run.

____ Knows filming icon and window settings needed for each exam
(ex. Soft tissue, lung, liver and bone)

____ Knows selected anatomy

____ Knows how to archive exam after completed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CT Neck; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CT NECK

____ Can accurately position patient on table.

____ Knows and understands buttons on gantry

____ Can accurately type in patient information

____ Knows what protocol to select for which exam

____ Knows how to choose head first and feet first exams and the reason to do so.

____ Can accurately set up scan vari-area, sure start ans Helical Run

____ Knows how to set up and use the injector

____ Knows filming icon and window settings needed for each exam
(ex. Soft tissue, lung, liver and bone

____ Knows selected anatomy

____ Knows how to archive exam after completed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CT Chest; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CT CHEST

____ Can accurately position patient on table.

____ Knows and understands buttons on gantry

____ Can accurately type in patient information

____ Knows what protocol to select for which exam
(i.e. PE sure start for PE study, not CT chest)

____ Knows how to choose head first and feet first exams and the reason to do so.

____ Knows how to set up and use the injector

____ Knows filming icon and window settings needed for each exam
(ex. Soft tissue, lung, liver and bone)

____ Can accurately set up scan vari-area, sure start and Helical Run

____ Knows selected anatomy

____ Knows how to archive exam after completed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CT Abdomen and Pelvis; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

CT ABDOMEN AND PELVIS

____ Can accurately position patient on table.

____ Knows and understands buttons on gantry

____ Can accurately type in patient information

____ Knows what protocol to select for which exam

____ Knows how to choose head first and feet first exams and the reason to do so.

____ Knows how to set up and use the injector

____ Knows filming icon and window settings needed for each exam
(ex. Soft tissue, lung, liver and bone)

____ Can accurately set up scan vari-area, sure start and Helical Run

____ Knows selected anatomy

____ Knows how to archive exam after completed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CLINICAL OBJECTIVES
BONE DENSITY

Upon completion of the clinical rotation in Bone Densitometry, he/she shall be able to demonstrate the knowledge, skills, and understanding of the following areas:

I. Patient care and safety
II. Hardware
III. Software and accessories
IV. Basics of Bone Density

An acceptable level of competency has been attained when the student is able to:

I. Patient care safety

a. check patient for correct identification
b. safely transport and transfer patients
c. communicate with patient in a concerning and professional manner
d. explain and instruct patient regarding procedure to be performed
e. provide safe storage for patient possessions which may have been removed during procedure
f. provide for patient's modesty and comfort using blankets, pads, sponges, etc.
g. correctly care for patients with infectious disease
h. practice good medial asepsis to prevent spread of disease by using correct hand washing procedures after each patient and routinely cleaning equipment

II. Software

a. describe the capability of the equipment in terms of:
    1 .programs available
    2. application of program to procedure being performed

III. Hardware and accessories

a. explain the equipment necessary
    1. machine
    2. scanning computer
    3. accessories for obtaining images (forearm board, triangle for hips)

IV. The basics of Bone Densitometry

a. follow instructions and guidelines from technologist
b. assist with QA if possible
c. understand the importance of obtaining a medical history and entering information into the computer
d. position patients for selected scans according to protocols
e. identify and determine correct anatomy to be analyzed and properly perform scans
f. analyze data properly, send and print reports according to facility
g. assist in accurately completing paperwork

Bone Density; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

BONE DENSITY

____ Equipment readiness and patient set-up

____ Select perform exam option
____ Select new patient and type in name and all pertinent information as needed from questionnaire
____ Select scan type (lumbar spine)
____ Position patient correctly
____ Select start scan
____ Select reposition scan option as needed and proceed
____ Select new scan
____ Select scan type (hip of non-dominant side)
____ Position patient correctly with positioning device
____ Reposition scan as needed and proceed
____ Select analyze scan and proceed with analysis set-up of hip
____ Select close when analysis set-up procedure of hip is complete
____ Select the analyze another scan option
____ Select lumbar spine and proceed with analysis set-up of lumbar spine
____ Select close when analysis set-up procedure of lumbar spine is complete
____ Select the report option on the computer screen
____ Highlight both the hip and the lumbar spine under scan type selection
____ Select the print process and then close
____ Proceed with the archiving procedure
____ Appropriate speed

GRADE:_____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

COMMENTS:

CLINICAL OBJECTIVES
MAGNETIC RESONANCE IMAGING

Upon completion of the students' clinical rotation in the MRI area, the student must be able to demonstrate a basic understanding of the following:

I. patient care and patient safety
II. basic physics of MRI image formation
III. the basic equipment components and how they are used
IV. how images of the brain, cervical spine, lumbar spine, and knee appear on a cathode ray tube (CRT) or laser film

An acceptable level of competence has been attained after the student has observed prescribed sections of the MRI safety video and the student is able to do the following:

I. Patient care and patient safety

a. Check all patient types (out-patient, emergency department and in-patient) for correct identification. Make sure the patient was prepared properly for the exam.
b. Assist the patient with completion of the MRI screening form to make sure the patient is safe to enter the scan room
c. When/if the patient is not ambulatory, transport the patient in a non-magnetic wheelchair or non-magnetic cart to the scan room. Assist the patient on to the MRI couch making certain IV pumps, oxygen canisters, ect, are not placed in a location where they could become dangerous projectiles.
d. Explain to the patient what he/she will experience in terms of sights and sounds during the examination.
e. Explain what measures are taken to prepare claustrophobic patients for exams especially for out-patients.
f. Explain the special precautions, including the use of special consent form(s), used if a patient must have a gadolinium product injected during the exam

II. Basic physics of the MRI image formation

a. At a very basic level, explain how the body's hydrogen atoms are affected when a patient is placed in a high field strength magnet.
b. At a very basic level, explain how/when radio frequency energy is involved in image formation
c. Name the conventional and SI units for magnetism and discuss the effect magnetic field strength has on image quality. Also discuss the field strength as it related to traditional magnets versus "open" magnets.

III. Basic equipment components and how they are used.

a. At a very basic level, describe how MRI technologists select scan parameters before a scan begins.
b. Explain what coils the MRI technologists select for imaging the knee, brain, cervical spine, and lumbar spine.
c. Describe how the patient is positioned on the couch in preparation for scanning a brain, cervical spine, lumbar spine, and knee.
d. Explain how the technologist communicates with the patient during the exam and if breathing instructions are used for brain, cervical spine, lumbar spine, and knee.

IV. How do images of the brain, cervical spine, lumbar spine and knee appear on a cathode ray tube (CRT) or lase film.

a. For imaging of the knee, cervical spine, brain, and lumbar spine, explain what types of physician orders and/or pathology requires the injection of a gadolinium-based contrast agent. Explain where and how that injection takes place (ie. intravenous, intrathecal etc)

b. Identify T1 and T2 weighted images and explain how they differ in appearance on scans of the brain, cervical spine, lumbar spine, and knee.

c. For scans of the brain, cervical spine, lumbar spine, and knee, identify what plane (sagittal, axial, or Coronal) the image is displayed in. Identify specific anatomy on a brain, cervical spine, lumbar spine and knee scan

MRI; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

MRI SCANNING

_____ Can accurately position patient on table.

____ Knows and understands button on gantry

____ Can accurately type in patient information

____ Knows what protocol to select for exam

____ Knows how to choose head first and feet first exams and the reason to do so

____ Can assist the technologist with injection

____ Can identify types of imaging for the scan ie. T! and T2

____ Can identify different planes in which the scans are obtained

____ Can identify specific anatomy

____ Knows and understands window settings needed for each exam:
(Ex. Soft tissue, lung, liver, and bone)

____ Student was able to observe MRI of the knee _____cervical spine_____,

lumbar spine_____, Abdomen _____, and brain _____.

Staff Signature: _____

Vital Signs; Clinical Competency Test

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

VITAL SIGNS

RESPIRATION

____ Place patient in comfortable position, in quite state
____ Observe patent without letting patient know they are being assessed
____ Observe chest wall for symmetry of movement
____ Observe skin color
____ Count the number of times patient's chest rises and falls
____ Appropriately document results
____ Recognizes abnormal findings

PULSE

____ Lightly place index finger and middle finger over the anatomical area chosen for assessment
____ Count throbbing of the artery for one minute
____ Appropriately document results
____ Recognize abnormal findings
____ Wash hands

BLOOD PRESSURE

____ Roll up patient's sleeve
____ Place deflated sphygmomanometer cuff around the patient's upper arm above the elbow
____ Secure cuff so that it will not loosen
____ Place bell of stethoscope over the brachial artery
____ Place gauge of sphygmomanometer on flat surface
____ Place earpieces of stethoscope in your ears
____ Tighten thumb screw of pressure bulb and pump bulb until the indicator or mercury reaches 180mmHg
____ Open valve slowly by loosening the thumb screw
____ Listen carefully for the pulse beat to begin
____ Take reading on the gauge where it first heard (systolic pressure)
____ Continue to listen to the pulsations until pulsation is inaudible (diastolic reading)
____ Loosen sphygmomanometer from around patient's arm
____ Record systolic and diastolic values (systolic/diastolic)
____ Wash hands

TEMPERATURE

____ Place patient in supine position or upright position
____ Place a clean plastic sheath on the oral route probe
____ Place the sheathed probe under the patient's tongue
____ Hold firmly in place until the temperature registers automatically on the meter
____ Remove probe and discard sheath
____ Wash hands
____ Document reading
____ Recognize abnormal finding

VENIPUNCTURE

____ Verification of order
____ Patient identification
____ Equipment and supplies
____ alcohol prep
____ tape
____ 21 gauge butterfly needle (or appropriate size)
____ sterile gauze pads
____ tourniquet
____ Proper hand washing prior to injection
____ Proper explanation to patient
____ Gloving
____ Skin preparation
____ Venipuncture
____ Securing butterfly to skin
____ Regulating flow/flushing needle
____ Patient monitoring
____ Removal of needle
____ Safe handling of sharp instrument
____ Appropriate pressure to injection site
____ Bandage to injection site once bleeding has stopped
____ Appropriate follow up instructions given to patient
____ Proper documentation of injection procedure recorded

GRADE:_____ **PASS**:_____ **FAIL**:_____

OXYGEN ADMINISTRATION

____ Identify patients needs for oxygen administration
____ If patient arrives with portable oxygen in use, determine flow rate
____ Prepare transfer to alternate source of oxygen
____ Disconnect tubing from original source and turn off flow valve
____ Reconnect tubing to working source and adjust oxygen to proper setting
____

GRADE:_____ **PASS**:_____ **FAIL**:_____

USE OF SUCTION DEVICE

____ Locate suction device in exam room or holding area
____ Locate correct tubing and attach it to suction device
____ Assist physician or nurse as directed
____ Dispose of used suction container in red bag trash container
____ Re-assemble suction device and make sure device is ready for future use

GRADE: _____ **PASS**:_____ **FAIL**:_____

Staff Signature: _____

CLINICAL OBJECTIVES
RADIATION THERAPY

Upon completion of the student's clinical rotation in radiation therapy, he/she shall be able to demonstrate knowledge, skill and understanding in the following areas:

I. Patient care and safety
II. The basics of radiation therapy
III. Clinical operation

I. Patient care and safety.

a. Check patient for correct identification
b. Safely transport and transfer patient
c. Communicate with patient in a concerned, professional manner
d. Assist in explaining and instructing the patient regarding procedures to be performed
e. Provide safe storage for patient possessions which may be removed during the procedure
f. Provide for patient modesty and comfort using blankets, pads, sponges, etc.
g. Practices good medical asepsis to prevent spread of disease by using correct hand washing techniques
h. Acknowledges and adheres to patient privacy and confidentiality.

II. The basics of radiation therapy

a. Develop a general understanding of related therapy
b. Observes the simulation aspects of treatment planning
c. Observes a computerized dosimetry plan and discuss its development with the dosimetrist
d. Observe activities of the lab and the development of prescribed filters for treatment.

III. Clinical operations

a. Observe the set up for radiation therapy using the following:
1.The patient's chart which includes the position of the patient and devices needed for treatment.
2. Appropriate shaping of wedges, if indicated
3. Selection of treatment time to give appropriate dose
a. linear accelerator
b. Bennet Dx X-ray unit
c. Processor
d. Huestis block fabrication
e. Superficial therapy unit

Patients diagnostic work-up including

1. History and physical
2. Diagnostic tests (blood work, CT, US, etc.)
3. Tumor pathology
4. Clinical impression
5. Treatment plan

The student is also required to complete a 2-3 page typed report to address an overview of radiation therapy. This paper is due one week after completing the scheduled rotation.

Radiation Therapy

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

RADIATION THERAPY

Y N Accurately check patient for correct identification

Y N Safely transport or transfer patient

Y N Remove and retain jewelry or other articles

Y N Protects patient's privacy and confidentiality

Y N Practices good medial aspesis

Y N Displays general understanding of related terminology

Y N Displays general understanding of radiation therapy equipment

Y N Observed development of filter in lab

Y N Reviewed specific case progression with radiation therapist

Y N Completed required typed report within one week of rotation (to be viewed by the Program Director)

Staff Signature: _____

CLINICAL OBJECTIVES
SET UPS

Upon completion of the clinical rotation to the front desk film room area, he/she shall be able to demonstrate the knowledge, skills, and understanding necessary to:

1. know the flow of a department, which exams go where
2. know who the charge person (lead technologist) is and what they do
3. answer phone appropriately (professionally)
4. understand department schedules such as fluoro, CT, and MRI
5. receive an examination request and know how it is processed
6. maintain a neat and organized area
7. understand how patient's from the ER, outpatient, and inpatient are handled and processed

Clinical Performance; SET UPS

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

Y N Use proper phone reception procedure

Y N Properly interpret various departmental schedules

Y N Receive examination request from front desk and initiate processing

Y N Display knowledge of imaging procedures in the emergency room and the imaging departments

Y N Display assertiveness in performing set up desk duties

Y N Maintain a neat and organized work area

Y N In an organized manner and at an acceptable level of performance, display the knowledge, skills and understanding of all functions of the set up area

Staff Signature: _____

CLINICAL OBJECTIVES
FRONT DESK – FILEROOM

Upon completion of the clinical rotation to the front desk film room area, he/she shall be able to demonstrate the knowledge, skills, and understanding necessary to:

1. Effectively operate and perform functions to include:
a. Correctly order radiographic procedure requested for patient.
b. Notify charge person of arrival of scheduled patient.
2. Greet patients appropriately.
3. Use proper phone reception procedures.
4. Use proper paging methods
5. Distribute preparations for exam as required to outpatients.
6. Have knowledge of add/cancel/change examination as needed.
7. Obtain knowledge of creating CDs for patients.

Clinical Performance; FRONT DESK/FILE ROOM

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

Please consider and evaluate the following:

Y	N	Receive and process examination requests to include patient data
Y	N	Use proper phone reception procedures
Y	N	Display knowledge of patient scheduling procedures
Y	N	Effectively instruct patient in proper patient preparation procedure for the examination scheduled
Y	N	Properly incorporate patient data processing procedures
Y	N	Display assertiveness in performing front desk duties
Y	N	Display knowledge of Imaging Services procedures in the emergency department and imaging sections
Y	N	Displays assertiveness in file room duties
Y	N	In an organized manner and at an acceptable level of performance, display the knowledge, skills and understanding of all functions of all file room and front desk functions and film handling

Staff Signature: _____

CLINICAL OBJECTIONS
SHIFT ROTATION

It is the objective of this clinical assignment to provide the student with the opportunity to increase their experience with radiographic procedures in headwork and trauma patients.

Upon completion of the shift rotations the student shall be better able to demonstrate a more complete knowledge and understanding of the patient care and equipment manipulation required when dealing with the pediatric and trauma patient.

A. Under the direction of the assigned clinical instructor the study may:
   1. Assist in the performance of radiographic procedures to include:
   2. The correct identification of the patient.
   3. Instruction of the patient in regard to the procedure being performed
   4. The safe transportation and transfer of the patient
   5. Assist patients in routine care procedures and provide adequate radiation protection for the patient.
   6. Assist in positioning and participate in technique manipulation
   7. Instruct the patient regarding breathing technique
   8. Effect the exposure
   9. Utilize appropriate immobilization devices for the requested radiographic procedure based upon patient type and/or condition.
   10. Accurately assess the patient for possible change in patient condition

B. Perform film processing functions
C. Participate in radiographic film quality review
D. Complete required documentation and examination data follow through
E. Perform file room and front desk functions

Clinical Performance; SHIFT ROTATION

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

Y	N	Accurately check patient for correct identification
Y	N	Safely transport and transfer patient
Y	N	Remove and retain jewelry and other articles superimposing area of interest
Y	N	Properly instruct patient concerning moving and breathing
Y	N	Properly select cassette
Y	N	Properly follow through the entire procedure related to patient examination
Y	N	Utilize equipment correctly when positioning radiographic examinations
Y	N	Utilize correct immobilization technique based upon patient type and condition
Y	N	Use correct identification markers
Y	N	Provide appropriate radiation protection for patient and personnel
Y	N	Accurately select technical factors
Y	N	Accurately document properly
Y	N	Proper utilize processing equipment and accessories
Y	N	Identify normal anatomic structure on radiographs
Y	N	Evaluate routine diagnostic exams in terms of projection accuracy
Y	N	Display knowledge of routine examinations in terms of radiographic exposures
Y	N	Observe patient for change in medical condition

Staff Signature: _____

CLINICAL OBJECTIVES
ULTRASOUND

Upon completion of the student's clinical rotation in ultrasound, he/she shall be able to demonstrate knowledge, skill and understanding in the following areas:

I. Patient care and safety
II. The basics of ultrasound
III. Controls and indicators
IV. Clinical operations

An acceptable level of competence has been attained when the student is able to describe:

I. Patient care and safety

a. Check patient for correct identification
b. Safely transport and transfer patient
c. Communicate with patient in a concerned and professional manner
d. Explain and instruct patient regarding procedures to be performed
e. Provide safe storage for patient's possessions which may be removed during procedure
f. Provide safe storage for patient's modesty and comfort using blankets, pads, sponges, etc.
g. Correctly care for patients with infectious diseases
h. Practice good medical asepsis to prevent spread of disease by using correct hand washing procedures after each patient and routinely cleaning equipment between cases.
i. Communicate proper patient preparation instructions

II. The basics of ultrasound

a. Transducer
b. Sound wave production
c. Multi image camera
d. Gray scale
e. Doppler

III. Controls and indicators

a. Mode
b. Filter
c. Auxiliary
d. Gain
e. Depth
f. Image reversal

IV. Clinical operations

a. Image of transverse/sagittal planes
b. Be able to identify anatomical structures on film

CLINICAL PERFORMANCE
SHIFT ULTRASOUND

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

Y	N	Accurately check patient for correct identification
Y	N	Safely transport and transfer patient
Y	N	Obtain history from patient and record information
Y	N	Remove and retain jewelry and other articles superimposing area of interest
Y	N	Properly instruct patient concerning moving and breathing
Y	N	Display knowledge and concept of sound waves
Y	N	Display knowledge of multi image camera
Y	N	Display knowledge of terms basic to ultrasound
Y	N	Accurately explain the difference between transverse and sagittal planes as related to ultrasound
Y	N	Properly develop and reload ultrasound film

Staff Signature: _____

CLINICAL OBJECTIVES
DARK ROOM

Upon completion of the student's darkroom rotation, he/she shall be able to demonstrate knowledge, skills and understanding in the following areas:

An acceptable level of competence can only when the student is able to:

I. Equipment and accessories

a. provide an accurate description of the processors and the basic operation features to include:

1. model
2. type
3. processing cycle (film transport time)
4. operating temperatures (solutions, dryer)
5. daily maintenance procedures

b. provide an adequate description of accessory equipment and operation features to include:

1. film duplication device
2. model and type
3. basic characteristics of film
4. exposures (range and density variations)

II. Operation and maintenance to include:

a. proper film handling techniques and processing procedures
b. proper cassette handling and cassette unloading technique
c. cassette cleaning procedures
d. maintaining film supply (type, size, location)
e. identification of film artifacts (case and correction)
f. safelight location and types
g. film duplication and subtraction procedures (consult appropriate person for specific instructions regarding subtraction technique and result requirements.
h. loading, unloading, and processing procedure of special film charger magazines

Clinical Performance; DARKROOM

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

Y N Knowledge of passbox operation, film bin location and film arrangement

Y N Properly loads and unloads cassettes

Y N Displays proper film handling and processing techniques

Y N Knowledge of film storage location, types and sizes

Y N Knowledge of cassette cleaning procedures

Y N Accurately describe safelight and location specifications

Y N Knowledge of procedures regarding accidental light exposure of film storage bin

Y N Ability to maintain a neat and orderly darkroom environment

Y N Provides knowledgeable description of automatic film processors and operating features

Y N Displays ability to perform duplication and subtraction procedures

Y N Knowledge of film artifacts, their causes and corrections

Y N Operating knowledge of accessory devices

Y N Use of darkroom film identification

Y N Turn equipment on/off properly

Staff Signature: _____

Clinical Performance; Weekly Fluoro Sign Off Sheet

Student: _____ Exam # _____

Date: _____ Evaluator/Clinical site: _____/_____

Please consider and evaluate the following:

Y	**N**	Room stocked with supplies and linen
Y	**N**	Turn equipment on/off properly
Y	**N**	Room set up for individual exams
Y	**N**	Properly enter patient information into computer system
Y	**N**	Display proper patient care skills (gowning, assisting the patient before and after the procedure)
Y	**N**	Display knowledge of required consents
Y	**N**	Assist staff during procedure
Y	**N**	Clean up, finish paper work, and send images to PACS after the procedure
Y	**N**	Display knowledge of proper discharge instructions for fluoroscopy procedures
Y	**N**	In an organized manner and at an acceptable level of performance, display the knowledge, skills and understanding of all functions of fluoroscopy procedures

Staff Signature: _____