Marian University
Radiologic Technology
Program
Clinical Handbook

2016-2017
“If some phenomenon which has been shrouded in obscurity suddenly emerges into the light of knowledge, if the key to a long sought mechanical combination has been found, if the missing link of a chain of thought is fortuitously supplied, this then gives to the discoverer the exultant feeling that comes with a victory of the mind, which alone can compensate him for all the struggle and effort, and which lifts him to a higher plane of existence.”

Wilhelm Conrad Roentgen
# TABLE OF CONTENTS

**Reference Material for Clinical Practicum and Radiographic Procedures & Imaging Courses**  
Radiologic Technology Program Contact List .......................................................1  
Clinical Site Listing and Schedule of Hours ...........................................................2  
Introduction ...........................................................................................................3  
Clinical Grading and Requirements .......................................................................4  
Automatic Failures .................................................................................................9  
Students’ Clinical Supervision Policy .....................................................................9  
Explanation of Master Record and Copy of Master Record .....................................11  
RAD314 Practicum I Progress Report .....................................................................17  
Professional Development Evaluation Form ...........................................................21

**Student Equipment and Rotation Responsibilities, Objectives, and Protocols**  
Student’s Phone/Computer Use While in the Clinical Setting ....................................29  
Student’s Assigned Rotation Responsibilities ..........................................................29  
Objectives for all Positioning Units ..........................................................................29  
Grading Scale ............................................................................................................30  
Objectives and Tasks for Competency Examinations on Patients .............................31  
Explanation of the Steps for Demonstration of Clinical Competency on Patients ...33  
Explanation of Equipment Competency Evaluation Due Dates ..............................34  
Radiographic Rooms Objectives .............................................................................35  
Objectives for Fuji/Konica CR Workstation .............................................................37  
Transportation Rotation Objectives .........................................................................38  
Fluoroscopic Room Clinical Rotation Objectives ....................................................39  
Digital Fluoroscopic Equipment – Room Objectives .................................................40  
Tomographic (IVU) Room – Objectives for Equipment Operation ..........................40  
Contrast Study Examination Objectives ..................................................................41  
Patient Examinations for Digestive System ................................................................41  
Orthopantomograph Objectives ..............................................................................42  
Portable Rotation Clinical Objectives .......................................................................43  
Objectives for Portable Radiographic Equipment ..................................................43  
Objectives for Mobile Radiographic Units – C-arm ..................................................44  
Rotating Clinical Site Objectives .............................................................................44  
Surgery Clinical Rotation Objectives ........................................................................45  
Pain Clinic Clinical Rotation Objectives .....................................................................46  
Introduction to the Specialty Rotations .....................................................................47  
Weekday PM Clinical Rotation Objectives ..............................................................48  
Special Procedures/Angiography/Cardiac Catheterization Objectives .....................49  
Objectives for Magnetic Resonance Imaging ...........................................................50  
Explanation of Computed Tomography (CT) Rotations ...........................................51  
Venipuncture/Medication Administration Policy ......................................................52  
Explanation of Elective Rotations ............................................................................53  
Radiologist Reading Room Rotation Objectives .....................................................55  
Clinical Instructor General Responsibilities .............................................................55
Program Forms and Checklists:
Respiratory/Bony Thorax and Abdomen Checklist ......................................................... 58
Upper Extremities Checklist ..................................................................................... 59
Lower Extremities Checklist ..................................................................................... 60
Digestive Contrast Studies Checklist ..................................................................... 61
Urinary System Contrast Studies Checklist ......................................................... 62
Spines Checklist .................................................................................................. 63
Competency Evaluation for Transportation ....................................................... 64
Competency Evaluation for Radiographic Room (Equipment) Objectives ............. 65
Competency Evaluation for Digital Fluoroscopic Room ....................................... 67
Competency Evaluation for Tomographic (IVU) Rooms Equipment Operation ...... 68
Competency Evaluation for Fuji/Konica CR Workstation .................................... 69
Competency Evaluation for Orthopantomograph Unit ......................................... 70
Competency Evaluation for Portable Radiographic Equipment ............................ 71
Competency Evaluation for Mobile C-arm ............................................................ 72
Clinical Competency Form .................................................................................. 73
Fluoroscopic Clinical Competency Form ............................................................ 76
C-arm Clinical Competency Form ........................................................................ 78
Repeat Radiograph Form for All Indirect Supervision Exams ......................... 79
Competency Evaluation for Weekday PM Rotations – Second Year ................... 80
Competency Evaluation for Special Procedures ................................................ 82
Competency Evaluation for Magnetic Resonance Imaging .................................. 83
Computed Tomography Clinical Competency Form ........................................... 84
Reading Room Rotation Form .............................................................................. 85
Competency Evaluation for Rotating Through Clinical Sites .............................. 86
Clinical Site Evaluation ...................................................................................... 87
Grading Rubric for Simulated Positioning Lab Test ............................................. 88
Venipuncture Competency Form ....................................................................... 91
Competency Evaluation for Elective Rotations .................................................. 92
Acknowledgement of Student Clinical Supervision Policy ................................ 93
Practicum Absence Form .................................................................................... 94
Make-up Verification Form ................................................................................ 95
Requisition for Schedule Change ...................................................................... 96
Exam Log/Attendance Verification Sheet ........................................................... 97
Radiologic Technology Program Contact List

Brian Joachim                920-223-0135
bwjoachim03@marianuniversity.edu

Tabitha Miller         920-223-0136
tamiller25@marianuniversity.edu

Fax number for the School of Radiology 920-223-1727

Hospital Sites

**Mercy Medical Center**
Jean Camp-Rothe 920-223-1702

**St. Agnes Hospital**
Amy Bobo 920-926-5591

**St. Elizabeth Hospital**
Nikki Seacotte 920-738-2181

**Waupun Memorial Hospital**
Elaine Miller 920-324-6547

Clinic Rotations

**Koeller St.- Affinity Medical Group (AMG)**
Holly Flunker 920-223-7427

**St. Elizabeth’s Orthopedic Clinic - AMG**
Kim Chapin 920-996-3740

**Fond du Lac Health Plaza - Agnesian Healthcare**
Jodi Steffen 920-926-8052
The Program requires rotations to multiple hospital and clinic sites. Below is a listing of each site that you will visit and the hours you will be scheduled at each site. The hours are varied to give you the student an opportunity to be at the facility during peak patient flow.

**Hospitals**

Mercy Medical Center, Oshkosh  
7:00 - 3:30  
St. Agnes Hospital, Fond du Lac  
7:00 - 3:30  
St. Elizabeth Hospital, Appleton  
7:00 - 3:30  
Waupun Memorial Hospital, Waupun  
7:00 – 3:30

**Clinics**

AMG Koeller St., Oshkosh  
8:00 - 4:00  
AMG St. Elizabeth’s Orthopedic Clinic, Appleton  
8:00 - 4:00  
Fond du Lac Health Plaza, Fond du Lac  
8:00 -4:00

Each student will be required to complete four PM (second shift) rotations during the program. The PM rotation is performed at your assigned home site.

**PM rotation**  
3:30- 9:30 pm Tuesday, Thursday, and Friday

- There will not be any assigned clinical hours on Saturday, Sunday or University recognized holidays during the duration of the program.
INTRODUCTION

While it seems a large undertaking to be a student, it will be a wonderful reward when you graduate. Part of becoming a Radiologic Technologist involves becoming competent at performing radiologic exams. The purpose of this manual is to give a working guide to help you, as a student technologist, carry out your responsibilities in the radiological care of the patient. In this manual is the explanation of how the clinical grading is performed. Each unit has a specific list of objectives and a checklist to demonstrate that you have the basic knowledge to progress in the unit. Any form that you will utilize throughout the program will be provided in this manual.

There is a copy of the handbook at all clinical sites; however, you may choose to leave this manual at your clinical sites for easy reference and as a storage binder for your copies of the forms. Please make copies whenever necessary, it is your responsibility to turn in the original copies of your forms to the Clinical Coordinator at the appropriate times.

Each positioning unit will include patient testing procedures to ensure that each student is adequately assessed in the performance of a variety of clinical examinations in each unit, & to learn from the performance and assessment. The student’s objective is to perform each examination error free. This, of course, is not always possible. For the patient testing procedures to be meaningful beyond the simple validation of competent (albeit imperfect) performance, it is imperative for each student to carefully identify the deficiencies he or she makes for future correction. To work toward the goal of error free performance a student must be aware of the nature of the mistakes made, understand why they are made, and have a strategy for eliminating them. The patient examination procedure is designed with that purpose in mind.

The value of grades has been debated in the annals of educational research for years. Some people say grades are necessary to set & maintain standards, to reward accomplishment and & acknowledge failure. Other people say that grades stigmatize students who perform poorly on certain forms of testing, and that there is no certain method for administering grades fairly. One thing, which is certain, is that very few people actually like to be tested and graded. This seems to become more so the older a person gets.

This ideal of the adult learner is that of a self-motivated autonomous individual who seeks knowledge for the sake of itself. If this ideal were true in practice there would be no need to evaluate grades. Unfortunately, for the vast majority of us, a motivating force seems to be required.

Performing clinical examinations can be an anxiety producing experience, especially in the early months of training. Performing in a testing procedure is that much more difficult. The difference between being anxious and being relaxed is the confidence. Confidence comes from competence, and competence comes from a structured course of practice and evaluation.
The question which this clinical testing program attempts to answer is: How can competent performance be developed and assessed, without undue stress, in a testing procedure designed to enhance performance and yet provide the necessary factors of motivation? The design of this clinical testing program is based on the philosophy that most adult function most effectively in a structured learning environment which guides and enhances learning, not one, which dictates, quantifies, and penalizes it. The desired outcome for each student is the development of critical thinking, self-evaluation, & autonomy, in addition to the technical performance of tasks.

The Method of Error Tracking for Performance Enhancement

This method is designed to provide a functional system in which to accomplish the goals stated as the purpose & philosophy of the clinical testing program. The key element of this method is the accurate identification of each mistake, which any individual student makes. As you will discover, there are many things to remember during the course of performing a radiologic examination. Everyone will make a mistake from time to time, but your objective as a student is to identify the type of error you are prone to, why you make the error, & determine a strategy to alleviate the mistake. In theory your strategies will help you develop good habits which will serve you throughout your career in radiologic technology.

There are three questions you must address for each error you have made on a patient exam. These questions are:

a. What = specific description of error
b. Why = circumstances of error, e.g. Steps out of sequence or even a simple lapse of memory
c. Strategy = how repeating this error can be avoided

The patient test itself is a mechanism to establish good working habits tailored to the needs of each individual student.

Clinical grading and requirements

Grading of courses RAD313, RAD333, RAD441, & RAD452:

Each of the Radiographic Procedures & Image Analysis courses contains specific Anatomy & Physiology (A&P) Units and Clinical Procedure Units within the course. Patient safety is the number one concern. In order to protect patients from unnecessary exposure to ionizing radiation, the student must attain a eighty (80%) percent or greater at the conclusion of each A&P unit and Clinical Procedure unit within each Radiographic Procedures and Image Analysis course in order to begin the performance of radiographic examinations on patients. If the student should fail to obtain the required eighty (80%) percent, they will be required to complete a remediation test as determined by the instructor. If the student successfully passes the remediation test with a score of
eighty (80%) or greater, he/she will remain in the program on academic probation. The grade for the unit will be an eighty (80%). If he/she fails the remediation test, they will be immediately dismissed from the program. If the student should fail to obtain a minimum score of eighty (80%) or greater on any future unit in any Radiographic Procedures and Image Analysis course, he/she will be immediately dismissed from the program. Refer to the Clinical Handbook for further explanation of grading in the Radiographic Procedures and Image Analysis courses.

The A&P units will each be graded as follows:

- Out of class assignments: 10%
- Written Quiz Average: 40%
- Written A&P Unit Final Exam: 50%

Grades for each clinical procedure unit will consist of the following:

1. Written quizzes (2-3 per unit) given throughout the unit which include radiograph evaluation.

   Each quiz is worth 50 points with each quiz consisting of multiple choice questions, short answer questions and radiographs. The radiograph portion of the quiz consists of radiographic critique, various questions about positioning of the patient for the respective radiograph, etc.

2. Written Final Exam that is given at the completion of each clinical unit which includes radiograph evaluation.

   The Final Exam is worth 100 points consisting of multiple choice questions, short answer questions and multiple radiographs. Similar to the quizzes, the radiograph portion of the Final Exam consists of radiographic critique, various questions about positioning of the patient for the respective radiograph, etc.

3. Simulated Positioning Final Exam that is given at the completion of each clinical unit which is performed on another student.

   The student that is to be evaluated performs an entire exam on a “patient” (another classmate) without making an exposure. The exam (2-3 exams per unit) performed by the student is selected at random based on the positioning unit that is currently being taught. The student will select 1-2 routine exams (dependent on the unit) and 1 non-routine/trauma exam.
Each one of these previously explained evaluation tools are an important step in learning and practicing positioning skills and patient care. To arrive at a percentage grade for each clinical procedure unit, the following items will be averaged:

1. Scores from the written quizzes will be averaged - equaling 1/3 of the unit grade.
2. Grade from the written final exam will equal 1/3 of the unit grade.
3. Scores from the Simulated Positioning Final Exams will be averaged together equaling 1/3 of the unit grade.

The Simulated Positioning Final Exam is designed to ensure that a student has a competent understanding of the examinations and the procedure of performing the examinations in the unit they have most recently completed. Due to the necessity of competency, if a student scores below an 80% for any one of the exams during the Simulated Positioning Lab Final, they will be required to perform remedial testing of the failed examination on the next class day. If the student passes the remedial testing of the examination with an 80% or better, the highest score allowed will be an 80%. A repeated failure of the remedial examination will be immediate dismissal from the program.

The final course grades will be determined by averaging the final A&P units and clinical procedures unit scores instructed during the course. If the student fails to obtain the minimum 80%, refer to the Program Progression Policy stated in the Radiologic Technology Program Handbook.

**Clinical Course Grading Scale:**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Letter Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>95-100%</td>
<td>A</td>
<td>4.0 points</td>
</tr>
<tr>
<td>93-94%</td>
<td>A-</td>
<td>3.75 points</td>
</tr>
<tr>
<td>91-92%</td>
<td>B+</td>
<td>3.25 points</td>
</tr>
<tr>
<td>87-90%</td>
<td>B-</td>
<td>3.0 points</td>
</tr>
<tr>
<td>85-86%</td>
<td>B-</td>
<td>2.75 points</td>
</tr>
<tr>
<td>83-84%</td>
<td>C+</td>
<td>2.25 points</td>
</tr>
<tr>
<td>80-82%</td>
<td>C</td>
<td>2.0 points</td>
</tr>
<tr>
<td>78-79%</td>
<td>C-</td>
<td>1.75 points</td>
</tr>
<tr>
<td>76-77%</td>
<td>D+</td>
<td>1.25 points</td>
</tr>
<tr>
<td>74-75%</td>
<td>D+</td>
<td>1.0 points</td>
</tr>
<tr>
<td>72-73%</td>
<td>D-</td>
<td>.75 points</td>
</tr>
<tr>
<td>71% or below</td>
<td>F</td>
<td>0 points</td>
</tr>
</tbody>
</table>
At the completion of Winterim I, SummerI, and Winterim II semesters, a cumulative written final exam will be given covering all the clinical information in all preceding courses. The student must attain a minimum score of 80% on the cumulative exam and meet all other criteria of the Progression Policy to advance in the program. Each unit will also have required checklists to be completed to show competency in equipment used for patient exams.

**Equipment objectives and competency evaluations**—See Explanation of Equipment Competency Evaluation Due Dates, for the due dates of each evaluation. It is your responsibility to be certain you can identify and operate all the components of the radiographic equipment. Much of it will be discussed in class and you will have many opportunities on your clinical rotations to ask an instructor or technologist. When you are ready to be evaluated on your equipment objectives, inform the clinical instructor and have your evaluation form ready.

The **positioning checklist** is documentation that you simulated each projection and demonstrated basic competency. The checklist will be stimulated positioning on another student and observed by the CI or a staff technologist. If you have difficulty with a projection on the first try you will be asked to try it again at another time. There is no penalty for trying a second time.

Practice and positioning checklist completion will be completed during the days you are scheduled in the clinical areas. Your assigned area is your first priority but there will be days when your area is not busy. Deadlines for checklist completion will be 8 days after the completion of the simulated positioning final. The specific date will be announced in advance by the Clinical Coordinator. It is best to get started as soon as possible. **Failure to meet the deadline will result in a reduction of 10 points per week from the student's final score for the unit.** See Explanation of the Steps for Demonstration of Clinical Competency on Patients for more details.

**Radiograph critique** is an integral part of radiography. We will incorporate radiograph critique with positioning lectures. This subject requires the identification of radiographic anatomy and knowledge of what the specific projection should demonstrate. It also requires judgments as to whether a radiograph should be repeated based upon the quality of the finished product. Each unit will have radiographs to critique on the written quizzes and written final exam.

**Clinical Requirements**

Patient safety is the number one concern. To ensure that students are competent to perform examinations on patients, all students must maintain an average of 80% or better in each clinical unit of the Radiographic Procedures & Image Analysis courses. All of the information required to compute the unit grade is included in the syllabus of each unit.

To monitor the practical skills of the student, the student will also have a clinical evaluation, see the Professional Development Form. He/she is required to attain the
necessary points on the form at the ending of each of the following sessions, Fall I, Summer I, Winterim II, to continue or advance in the Program. If the student does not attain the required number of points, he/she will be placed on probationary status and reevaluated after six weeks. If at the end of the six week period the student fails to meet the required points the student will be terminated from the program without opportunity for reentry. For further explanation see the progression policy in the Radiologic Technology Program Handbook.

Upon entering the Program in Radiologic Technology, students are assigned clinical rotations in the department of radiology under the direct supervision of a staff technologist or the clinical instructor until the student has completed the required number of Clinical Competency Forms on patients for each exam listed on the Master Record. **All radiographs are required to be evaluated by a registered technologist.** See the Student’s Clinical Supervision Policy for the explanation of direct vs. indirect supervision. The technologists/instructors supervise the student’s clinical performance. The student is also assigned patient transportation rotations. Again the employees in those respective areas will supervise the students and evaluate their performance.

Students will be permitted to participate in clinical exams while they are attempting to or have successfully completed instruction and have demonstrated competency in anatomy and physiology, proper positioning and technical factors according to the program’s policy and procedures concerning direct and indirect supervision of students – refer to Student’s Clinical Supervision Policy. Students may participate in clinical exams prior to their formalized instruction in anatomy and physiology, proper positioning and technical factors by performing ancillary tasks such as proper identification of patients prior to an exam, assisting with patient comfort, patient transportation, pre and post preparation for medical interpretation by a radiologist and the processing of the radiographic image.

Students who have satisfactorily completed and have been tested on the objectives of the radiographic procedures along with completing the required number of Clinical Competency Forms for each exam will then be allowed to perform radiographic examinations with indirect supervision **but must have all radiographs evaluated by a registered technologist. In the event a retake is necessary, a registered technologist must accompany the student.** Please refer to the Student’s Clinical Supervision Policy.

Clinical Instructors and staff technologists are involved in the evaluation of the student’s clinical performance while the student is attending the program. During RAD314-Practicum I, the student will have two monthly clinical progress reports completed by the Clinical Instructor. At the completion of Practicum I, III, IV, V, and VIII students will have a program clinical evaluation that involves input from the Clinical Instructor and staff technologists. Students must successfully attain the necessary points on the evaluation form to continue or advance in the program. If the student does not attain the required number of points, their standing in the program will be reviewed by the Administrative Committee for Student Affairs and will render a decision on the students continued status in the program. See RAD314 Practicum I Progress Report and Professional Development Evaluation Form, for a copy of the clinical evaluation forms.
The second year, the students begin with clinical rotations on PM’s, as well as in the specialized area of MRI, CT, Cardiac Catheterization and Special Procedures. There are objectives assigned to each of these areas that the student is required to complete. In the area of Nuclear Medicine, Ultrasound, and Radiation Therapy, the student may elect to visit these areas in an observational role.

Patient examinations for demonstration of competency, will be done at the pace you choose. See the Student’s Clinical Supervision Policy. When you have completed the positioning checklist, completed a few patient exams under direct supervision, and feel ready to be evaluated, give a Clinical Competency Form, to a registered technologist or the clinical instructor.

**Automatic Failures**
There are certain things which will result in an automatic failure of a patient exam. They are:

a. Being disrespectful to a patient. This is grounds for immediate termination from the program (see school policy & procedures book).

b. Failure to ask a woman of childbearing age if it is possible that she could be pregnant (12-56 year of age according to department policy).

c. Doing an examination on the wrong patient due to your negligence.

d. Doing the wrong exam on the right patient due to your negligence.

There are two things, which these last three criteria have in common. First, if you make one of these errors due to negligence; there is no excuse for the serious consequences which may result. Second, you must ensure these errors are not made before you begin positioning. Therefore, when you bring the patient in the room, you should do everything reasonably possible to be certain it is the right person, the correct part was ordered, & a woman of childbearing age was asked about the possibility of pregnancy. After this is accomplished you need not worry about failing the exam.

**STUDENTS’ CLINICAL SUPERVISION**

Policy:

Students attending Marian University’s Radiologic Technology Program shall be directly supervised until they have demonstrated and documented competency in any given clinical assignment. After demonstrating competency, students may perform procedures with indirect supervision. (Refer to Clinical Competency Master Record in the Clinical Handbook.)

**NOTE:** It is a requirement of the Joint Review Committee on Education in Radiologic Technology (JRCERT) that the number of students assigned to a clinical setting must not exceed the number of clinical staff assigned to the radiology department. The student to radiography clinical staff must be 1:1.

Procedure:
Direct supervision is defined by the Joint Review Committee on Education in Radiologic Technology (JRCERT) as:

1. A qualified radiographer reviews the examination/procedure in relation to the student's achievement.
2. A qualified radiographer evaluates the condition of the patient in relation to the student's knowledge.
3. A qualified radiographer is physically present during the conduct of the examination/procedure.
4. A qualified radiographer reviews and approves the radiographs/procedure prior to the patient being discharged from the radiographic room.
5. A qualified radiographer MUST be present during the conduct of all retake examinations and approve of the student's procedure prior to re-exposure.
6. A qualified radiographer must approve all retake radiographic examinations prior to the patient being discharged from the radiographic room.

Indirect supervision is defined by the Joint Review Committee on Education in Radiologic Technology (JRCERT) as that supervision provided by a qualified radiographer immediately available to assist students regardless of the level of student achievement. “Immediately available” is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed.

1. A qualified radiographer reviews and approves the radiographs prior to the patient being discharged from the radiographic room.
2. A qualified radiographer MUST be present during the conduct of all retake examinations and approve of the student's procedure prior to re-exposure.
3. A qualified radiographer must approve all retake radiographic examinations prior to the patient being discharged from the radiographic room.

General parameters:

1. Students may take radiographs of patients under Indirect Supervision after completing appropriate competencies. Indirect supervision means that a qualified radiographer MUST be in the immediate area/department and readily available to assist the student, if the student requires help.
2. At NO TIME shall a student take radiographs without a qualified radiographer in the immediate area/department. A manager shall be paged/called if this incident arises and notified of the situation.
3. Student radiographers may NOT operate portable x-ray equipment without direct supervision by a qualified radiographer.
4. In regards to portable/surgical exams, the performing of Computed Tomography exams and venipuncture, even after the student has completed the appropriate number of clinical competencies, the student is still considered to be under Direct Supervision until they graduate from the Program.
5. Student radiographers are NOT permitted to perform radiographic examinations on pregnant patients unless a qualified radiographer is physically present in the examination room.

Approved: 9/24/1991
Revised: 11/15/2011, 2/3/15, 3/18/15, 5/2/16
Reviewed: 6/12/13, 7/16/14

____________________________
Program Director

Dr. Linda Matheson, R.N.

Dean, School of Nursing and Health Professions

**Explanation of the Master Record of Clinical Competency**

This Master Record becomes a part of your permanent academic file for the Radiologic Technology Program. You are required to meet &/or exceed the required number of clinical exams while enrolled in the Program. This document is a record of your level of competency in performing radiological procedures.

*The positioning checklist for each positioning unit needs to be completed and turned into the Clinical Coordinator prior to the student being allowed to take radiographs on patients. All other documentation will be with Clinical Competency Form, Fluoroscopic Clinical Competency Form, C-arm Clinical Competency Form and equipment evaluations. The various Clinical Competency Forms will be used with patients. The simulated positioning checklists and equipment evaluations will be due at specific deadline dates. A delay in handing in your positioning simulated checklists will result in a reduction in your final score for each unit by 10 points. Failure to complete the equipment checklists by the required dates will result in the lowering of the semester grade by 10 points. The required number of Clinical Competency Forms for each exam, as stated on the Master Record, will be due by the time the student graduates from the program.*

Once a student has submitted the required number of Clinical Competency Forms for a particular exam to the Clinical Coordinator, he/she will be allowed to perform that exam under indirect supervision. See Student’s Clinical Supervision Policy, for the explanation of direct vs. indirect supervision. It is the student’s responsibility to hand in the required documentation to the Clinical Coordinator. Each competency form must be completely filled out with a passing score to be accepted. Any competency form that is incomplete will not be registered on the master record and will need to be repeated. **All requirements on the Master Record must be met by the student prior to graduation to be allowed to sit for the registry examination.**
Student Name:

The student is considered competent after completing the required number of mandatory patient exams listed below. The student is required to complete the simulated checklist for each unit with their Clinical Instructor prior to completing the Clinical Competency Forms for the mandatory patient exams. A Clinical Competency Form needs to be completed by a registered technologist for each mandatory patient exam. Once the simulated checklist and required number of mandatory patient exams are completed and handed into the Clinical Coordinator for each exam listed below, the student is then considered to be competent under indirect supervision. Each student is required to turn in the simulated checklist and required number of mandatory patient exams and also the checklists for the ancillary, internal and external rotations along with the equipment checklists prior to graduation. Failure to turn in all clinical competency requirements will be in violation of the Graduation Requirements Program Policy. Mandatory patient exams may be simulated if demonstration on patients is not feasible at the discretion of the Clinical Coordinator.

<table>
<thead>
<tr>
<th>PEDIATRIC EXAMS (6 yrs. or younger per ARRT requirements)</th>
<th>MANDATORY PATIENT EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Routine (6 yrs. or younger) (4)</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Chest Pigg-o-Stat (4)</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Upper Extremity (2)</td>
<td>□ □</td>
</tr>
<tr>
<td>Lower Extremity (2)</td>
<td>□ □</td>
</tr>
<tr>
<td>Abdomen (2)</td>
<td>□ □</td>
</tr>
<tr>
<td>Mobile Study (2)</td>
<td>□ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GERIATRIC EXAMS (**Patient is physically or cognitively impaired as a result of aging) **per ARRT requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Routine (4)</td>
</tr>
<tr>
<td>Upper Extremity (2)</td>
</tr>
<tr>
<td>Lower Extremity (2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHEST/ABDOMEN/THORAX</th>
<th>SIMULATED CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Routine (Upright PA &amp; Lateral) (8)</td>
<td>□</td>
</tr>
<tr>
<td>Chest Routine AP (wheelchair or cart) &amp; Lateral (6)</td>
<td>□</td>
</tr>
<tr>
<td>Chest Obliques (3)</td>
<td>□</td>
</tr>
<tr>
<td>Chest Decubitus (3)</td>
<td>□</td>
</tr>
<tr>
<td>Chest Lordotic (3)</td>
<td>□</td>
</tr>
<tr>
<td>KUB (8)</td>
<td>□</td>
</tr>
<tr>
<td>Abdomen Series (KUB &amp; Upright) (8)</td>
<td>□</td>
</tr>
<tr>
<td>SIMULATED CHECKLIST</td>
<td>MANDATORY PATIENT EXAMS</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Abdomen Series (KUB &amp; Decubitus) (3)</td>
<td>☐</td>
</tr>
<tr>
<td>Ribs (3)</td>
<td>☐</td>
</tr>
<tr>
<td>Sternum (3)</td>
<td>☐</td>
</tr>
</tbody>
</table>

**UPPER EXTREMITIES**

| Fingers/Thumb (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Hand (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Wrist (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Forearm (4) | ☐ | ☐ ☐ ☐ |
| Elbow (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Humerus (4) | ☐ | ☐ ☐ ☐ |
| Shoulder Routine (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Shoulder Trauma (6) (Scapular Y or Transthoracic) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Clavicle (3) | ☐ | ☐ ☐ |
| Scapula (3) | ☐ | ☐ ☐ |
| Acromioclavicular Joints (3) | ☐ | ☐ ☐ |
| Trauma Upper Extremity (Non shoulder) (4) | ☐ | ☐ ☐ ☐ |

Trauma is considered a serious injury or shock to the body. Modifications required to obtain the required radiographs may include variations in positioning, minimal movement of the body part, etc.

**LOWER EXTREMITIES**

<p>| Toes (2) | ☐ | ☐ ☐ |
| Foot (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Calcaneus (3) | ☐ | ☐ ☐ |
| Ankle (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Lower Leg (4) | ☐ | ☐ ☐ ☐ |
| Knee Routine (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Knee Trauma (Obliques and Crosstable Lateral) (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Patella (2) | ☐ | ☐ ☐ |
| Femur (3) | ☐ | ☐ ☐ |
| Hip Routine (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |
| Hip Trauma (Cross-table Lateral) (6) | ☐ | ☐ ☐ ☐ ☐ ☐ |</p>
<table>
<thead>
<tr>
<th>SIMULATED CHECKLIST</th>
<th>MANDATORY PATIENT EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelvis (5)</td>
<td></td>
</tr>
<tr>
<td>Trauma Lower Extremity (4) (Non knee or hip)</td>
<td></td>
</tr>
</tbody>
</table>

Trauma is considered a serious injury or shock to the body. Modifications required to obtain the required radiographs may include variations in positioning, minimal movement of the body part, etc.

**VERTEBRAL COLUMN**

- **Cervical Spine Routine** (6) (includes “open mouth”)  
- **Cervical Trauma (3)** (includes cross table lateral)  
- **Cervical Spine Flex & Ext Study (3)**  
- **Thoracic Spine Routine** (4) (includes “Swimmers”)  
- **Lumbar Spine Routine** (6) (includes “spot”)  
- **Lumbar Spine Obliques (3)**  
- **Lumbar Spine Flex & Ext Study (3)**  
- **Sacroiliac Joints (3)**  

**SKULL (must have 1)**

- **Skull Routine (2)**  
- **Facial Bones (2)**  
- **Sinuses (2)**  
- **Mandible (2)**  
- **Temporomandibular Joints (2)**  
- **Orbits (2)**  
- **Nasal Bones (2)**  
- **Zygomatic Arches (2)**  

**CONTRAST STUDIES (1 UGI or BE)**

- **Esophagram/Ba. Swallow (1)**  
- **Upper G.I. Series (3)**  
- **Small Bowel Series (3)**  
- **Contrast Enema (2) (Single or double contrast)**  
- **IVU (2)**
OTHER

Myelogram (1) □
Arthrography (1) □

MANDATORY
PORTABLE & SURGICAL

Portable Chest (10) □□□□□□□□□□
Portable Abdomen (4) □□□□
Portable Orthopedics (4) □□□□

C-Arm Procedure - Orthopedics – Surgical - Non Spine (5) □□□□□
C-Arm Procedure -Surgical - Spine Only (5) □□□□□
C-Arm Procedure -Non Orthopedic (ERCP, Bronchoscopy, etc.) (5) □□□□□
C-Arm Procedure – Pain Clinic (10) □□□□□□□□□□□

Retrograde Urography (2) □□

All portable exams and surgical procedures require direct supervision throughout the 2 years of the program.

SIMULATED  MANDATORY
CHECKLIST  PATIENT EXAMS

Venipuncture (10) □ □□□□□□□□□

All venipunctures require direct supervision even after the completion of the required number of mandatory patient exams.

MANDATORY

COMPUTED TOMOGRAPHY ROTATIONS

Neck (3) □ □□
Head (5) □□□□□

Chest (8) *may be with or without contrast □□□□□□□□□□
Chest with contrast (4) □□□□
Abdomen/Pelvis (8) *may be with or without contrast □□□□□□□□□□
Abdomen/Pelvis with contrast (4) □□□□

All CT exams require direct supervision even after the completion of the required number of mandatory patient exams.

PATIENT CARE

Competency Demonstrated/Checklist turned in

CPR □
Vital Signs/O2 Administration □
Patient Transfer (Transportation Competency Evaluation Form) □
Sterile/Aseptic Technique □
Care of Patient Medical Equipment (Transportation Eval. Form) □
Drawing up of Contrast Agent from Glass Vial □
### EQUIPMENT COMPETENCY EVALUATIONS

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Competency Demonstrated/Checklist turned in</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Radiography Room</td>
<td></td>
</tr>
<tr>
<td>Digital Fluoroscopy Room</td>
<td></td>
</tr>
<tr>
<td>Tomography (IVU) Room</td>
<td></td>
</tr>
<tr>
<td>Portable Unit</td>
<td></td>
</tr>
<tr>
<td>C-Arm Unit</td>
<td></td>
</tr>
<tr>
<td>Orthopantomograph (Panorex)</td>
<td></td>
</tr>
<tr>
<td>Fuji/Konica CR Workstation</td>
<td></td>
</tr>
</tbody>
</table>

### INTERNAL CLINICAL ROTATIONS

- Transportation
- Special Procedures/Cardiac Cath Lab
- Magnetic Resonance Imaging
- Reading Room with Radiologist
- Competency Evaluation for PM Rotations

### EXTERNAL SITE ROTATIONS

- St. Elizabeth Hospital
- Mercy Medical Center
- St. Agnes Hospital
- Koeller St. Clinic
- Richmond St. Clinic
- Orthopedic Clinic (St. Elizabeth Hospital)
- Waupun Memorial Hospital
- Verification of Elective Weeks

---

Clinical Coordinator ____________________________ Date _________________________

Revised 6/2016
Marian University - Radiologic Technology Program
RAD314 Practicum I Progress Report

Purpose: To provide initial feedback of student’s clinical performances during RAD314 Practicum I.

Rating System: The numerical values are only intended to be a preliminary indicator of student performance.

Clinical instructors from the student’s main clinical site will complete the evaluation form. The completed form will be returned to the Clinical Coordinator. The Clinical Coordinator will review the results of the evaluation form and will then share the complete evaluation form with the student for their review.

Student Name: ________________________________________________________________

Evaluator’s Instructions: Please read the narratives associated with each numerical value. The individual completing this form should circle the appropriate rank on the scale that best describes the student’s level of clinical experience. Please provide an accurate evaluation of the student’s performance. *****PLEASE NOTE THAT A STUDENT DOES NOT HAVE TO MEET ALL DESCRIPTORS PROVIDED FOR A PARTICULAR SCORE TO BE CHOSEN BUT SHOULD MEET THE MAJORITY OF THE CATEGORY.

Personal Attitude toward Learning and Initiative:

<table>
<thead>
<tr>
<th>If student is not busy</th>
<th>If student is not busy</th>
<th>If student is not busy</th>
<th>If student is not busy</th>
</tr>
</thead>
<tbody>
<tr>
<td>they <strong>always</strong> will take initiative to practice positioning or refer to educational aides. i.e. Merrill’s or phantom, etc.</td>
<td>they will <strong>frequently</strong> take the initiative to practice their positioning or refer to educational aides. i.e. Merrill’s or phantom, etc.</td>
<td>they will <strong>occasionally</strong> take the initiative to practice their positioning or refer to educational aides. i.e. Merrill’s or phantom, etc.</td>
<td>they will <strong>seldom</strong> take the initiative to practice their positioning or refer to educational aides. i.e. Merrill’s or phantom, etc.</td>
</tr>
<tr>
<td><strong>Always</strong> demonstrates good judgment, asks for help when needed. The student <strong>always</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
<td><strong>Frequently</strong> demonstrates appropriate judgment. The student will <strong>frequently</strong> demonstrate the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
<td><strong>Occasionally</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
<td><strong>Seldom</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
</tr>
<tr>
<td><strong>Never</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
<td><strong>Sometimes</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
<td><strong>Rarely</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
<td><strong>Never</strong> demonstrates the initiative to either participate /assist in all examinations or completes those that they are deemed clinically capable of performing.</td>
</tr>
</tbody>
</table>

4 points | 3 points | 2 points | 1 point | 0 points
### Interpersonal Interactions with Health Professionals

<table>
<thead>
<tr>
<th>Student always maintains and demonstrates an impeccable work ethic. Is a team player and always cooperates with staff and hospital personnel, fellow students, and clinical instructor/s. Student always accepts constructive comments with a positive attitude.</th>
<th>Student frequently maintains and demonstrates an impeccable work ethic. Is a team player and frequently cooperates with staff and hospital personnel, fellow students, and clinical instructor/s. Student frequently accepts constructive comments with a positive attitude.</th>
<th>Student does not always maintain and demonstrate an impeccable work ethic. Is not always a team player and does not always cooperate with staff and hospital personnel. Student does not always accept constructive comments with a positive attitude.</th>
<th>Student seldom maintains and demonstrates an impeccable work ethic. Rarely is a team player and seldom cooperates with staff and hospital personnel. Student seldom accepts constructive comments with a positive attitude.</th>
<th>Student never maintains and demonstrates team skills and/or work ethic. Is not a team player and never cooperates with staff and hospital personnel. Student never accepts constructive comments with a positive attitude.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>

### Patient Interaction and Care/Management

| The student always identifies and addresses the patient in accordance to program/facility policies. The student always interacts well with patients in a courteous manner. The student always obtains thorough/appropriate patient history. Instills confidence, effectively communicates with clear and precise instructions, and complies with HIPAA regulations. | The student frequently identifies and addresses patients in accordance to program/facility policies. The student frequently interacts well with patients in a courteous manner. The student frequently obtains thorough/appropriate patient history. Tries to instill confidence, attempts to effectively communicate with clear and precise instructions, and complies with HIPAA regulations. | The student is not consistent in addressing patients or identifying them appropriately. The student does not always interact well with patients in a courteous manner or try to instill confidence. The student is not consistent in obtaining thorough/appropriate patient history. Attempts to effectively communicate with clear and precise instructions, and complies with HIPAA regulations. | The student seldom addresses patients or identifying them appropriately. The student does not always interact well with patients in a courteous manner and does not instill confidence in the patient. The student rarely obtains thorough/appropriate patient history. Seldom attempts to effectively communicate with clear and precise instructions, and does not always comply with HIPAA regulations. | The student does not properly address patients or identify them appropriately. The student does not interact well with patients. The student does not obtain thorough/appropriate patient history. They are not courteous, or instill confidence. The student does not comply with all levels of HIPAA regulations. |
| 4 points | 3 points | 2 points | 1 point | 0 points |

### Attendance

<table>
<thead>
<tr>
<th>Student is always on time and always remains in his/her assigned rotation. Student will always offer their assistance in other areas when rotation is slow.</th>
<th>Student is frequently on time and has been late no more than (1 time) and remains in their assigned rotation. Student will frequently offer their assistance in other areas when rotation is slow.</th>
<th>Student has been late (2 times) but for the most part remains in his/her assigned rotation. Student will occasionally offer their assistance in other areas when rotation is slow.</th>
<th>Student has been late at least (3 times) and wanders off from their assigned rotation. Student will seldom offer their assistance in other areas when rotation is slow.</th>
<th>Student has been late more than (3+ times) and does not remain in his/her assigned rotation. Student will not offer their assistance in other areas when rotation is slow.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>
### Adherence to program/clinical agency dress code policies

<table>
<thead>
<tr>
<th>Student always adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, good personal hygiene, does not smell of perfume or tobacco.</th>
<th>Student frequently adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, good personal hygiene, does not smell of perfume or tobacco. Student has received verbal and/or written reprimand for failure to adhere to dress code.</th>
<th>Student seldom adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, good personal hygiene, does not smell of perfume or tobacco. On 1 occurrence student has been sent home from assigned clinical rotation for failure to adhere to dress code.</th>
<th>Student never adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, good personal hygiene, does not smell of perfume or tobacco. On 2 or more occurrences student has been sent home from assigned clinical rotation for failure to adhere to dress code.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>

### Compliance with Code of Ethics & Program/Clinical Agency Policies

<table>
<thead>
<tr>
<th>Student always exhibits exceptional behavior, always demonstrates commitment to ethical standards. Professional demeanor, dependable &amp; responsible behavior. Student always aware and follows departmental protocols. Student also understands and adheres to Direct/Indirect Supervision Policy when performing procedures.</th>
<th>Student frequently exhibits exceptional behavior, frequently demonstrates commitment to ethical standards. Professional demeanor, dependable &amp; responsible behavior Student frequently is aware and follows departmental protocols. Needs some assistance with protocols Student also understands and adheres to Direct/Indirect Supervision Policy when performing procedures</th>
<th>Student is inconsistent in exhibiting behavior, does not always demonstrate a Commitment to ethical standards, professional demeanor. Is not always dependable or responsible. Student demonstrates and inconsistency concerning knowledge of department protocol. Student often needs help understanding protocols. Student also understands and adheres to Direct/Indirect Supervision Policy when performing procedures.</th>
<th>Student seldom exhibits exceptional behavior, seldom demonstrates a Commitment to ethical standards or professional demeanor. Is not dependable and does not demonstrate responsible behavior. Student seldom exhibits a comprehensive knowledge of department protocols and usually needs to be reminded of them. Student also needs to be reminded of Direct/Indirect Supervision Policy.</th>
<th>Student demonstrates inappropriate behavior, is not always committed to ethical standards, unprofessional demeanor demonstrated. Dependable and responsible behavior not always demonstrated. Student fails to demonstrate a comprehensive knowledge of departmental protocols. They also fail to adhere to the Direct/Indirect Supervision Policy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>
### Radiation Protection and Safety

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always adheres and acts in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. Student always inquires regarding the possibility of patient pregnancy. Student always wears their dosimeter badge in the proper location.</td>
<td>4 points</td>
</tr>
<tr>
<td>Frequently adheres and acts in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. Student always inquires regarding the possibility of patient pregnancy. Student always wears their dosimeter badge in the proper location.</td>
<td>3 points</td>
</tr>
<tr>
<td>Inconsistent in acting in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. Student always inquires regarding the possibility of patient pregnancy. Student always wears their dosimeter badge in the proper location.</td>
<td>2 points</td>
</tr>
<tr>
<td>Seldom adheres and acts in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. Student frequently inquires regarding the possibility of patient pregnancy. Student does not always wear their dosimeter badge in the proper location.</td>
<td>1 point</td>
</tr>
<tr>
<td>Does not adhere and act in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. Student seldom inquires regarding the possibility of patient pregnancy. Student does not always wear their dosimeter badge in the proper location.</td>
<td>0 points</td>
</tr>
</tbody>
</table>

#### Student’s Strengths:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

#### Areas to Improve:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

CI Signature: ______________________________ Date: ______________

Clinical Coordinator Signature: ______________________________ Date: __________

Student Signature: ______________________________ Date: __________

Originated: 03/2015; Reviewed 7/16
Marian University- Radiologic Technology Program
Professional Development Evaluation

Purpose: To document strengths and weaknesses of student’s clinical performances.
Rating System: Students will be required to obtain the minimum points for each evaluation period in order to advance to the next evaluation period. The required minimum points are as follows:

- Completion of Practicum I requires 28 points
- Completion of Practicum III requires 30 points
- Completion of Practicum IV requires 32 points
- Completion of Practicum V requires 34 points
- Completion of Practicum VIII - exit evaluation

Students with a score below the required minimum points will be placed on clinical probation and re-evaluated in 6 weeks to document improvement. During the probation period all clinical examinations will be performed while under direct supervision of a registered radiologic technologist. If a second evaluation is also below the required minimum points, the student will be immediately dismissed from the radiologic technology program.

Registered radiologic technologists and clinical instructors from each student’s main clinical site, in addition to the program faculty, will have input into the evaluation process. Please circle the level of competency according to your perspective.

Practicum I  Practicum III  Practicum IV  Practicum V  Practicum VIII
Other

Student Name:

Evaluator’s Instructions: Please read the narratives associated with each numerical value. The individual completing this form should circle the appropriate rank on the scale that best describes the student’s level of clinical experience. Please provide an accurate evaluation of the student’s performance. *****PLEASE NOTE THAT A STUDENT DOES NOT HAVE TO MEET ALL DESCRIPTORS PROVIDED FOR A PARTICULAR SCORE TO BE CHosen BUT SHOULD MEET THE MAJORITY OF THE CATEGORY.
### Personal Attitude Toward Learning and Initiative:

<table>
<thead>
<tr>
<th>Description</th>
<th>4 points</th>
<th>3 points</th>
<th>2 points</th>
<th>1 point</th>
<th>0 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>If student is not busy they always will take initiative to practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>positioning or refer to educational aides. i.e. Merrill’s or phantom, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always demonstrates good judgment, asks for help when needed. The student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>always demonstrates the initiative to either participate /assist in all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>examinations or completes those that they are deemed clinically capable of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>performing. If the student is not busy in their assigned clinical rotation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>they will always take the initiative to inquire about reassignment to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>another clinical area or assignment of other tasks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If student is not busy they will frequently take the initiative to practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>their positioning or refer to educational aides. i.e. Merrill’s or phantom,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc. Student frequently responds positively to criticism; checks routinely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before proceeding with exams; seeks assistance when approaching limits of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ability. Frequently demonstrates appropriate judgment. The student will</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frequently demonstrate the initiative to either participate /assist in all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>examinations or completes those that they are deemed clinically capable of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>performing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If student is not busy they will occasionally take the initiative to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>practice their positioning or refer to educational aides. i.e. Merrill’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc. Student occasionally fails to check with authority before proceeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with exams; Does not always demonstrate good judgment. The student will</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>occasionally demonstrate the initiative to either participate /assist in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>all examinations or completes those that they are deemed clinically</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capable of performing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If student is not busy they will seldom take the initiative to practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the initiative to practice their positioning or refer to educational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aides. i.e. Merrill’s or phantom, etc. Student usually fails to check with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>authority before proceeding with exams; lacks good judgment. The student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seldomly demonstrate the initiative to either participate /assist in all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>examinations or completes those that they are deemed clinically</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capable of performing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If student is not busy they will never take the initiative to practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>their positioning or refer to educational aides. i.e. Merrill’s or phantom,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc. Always fails to check with authority before proceeding with exams;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lacks good judgment. The student never demonstrates the initiative to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>either participate /assist in all examinations or completes those that</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>they are deemed clinically capable of performing. Does not demonstrate any</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>extra effort to excel on their own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Interpersonal Interactions with Health Professionals

<table>
<thead>
<tr>
<th>Description</th>
<th>4 points</th>
<th>3 points</th>
<th>2 points</th>
<th>1 point</th>
<th>0 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student always maintains and demonstrates an impeccable work ethic. Is a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>team player and always cooperates with staff and hospital personnel, fellow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>students, and clinical instructor/s. Student always accepts constructive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>comments with a positive attitude.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student frequently maintains and demonstrates an impeccable work ethic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a team player and frequently cooperates with staff and hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>personnel, fellow students, and clinical instructor/s. Student frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accepts constructive comments with a positive attitude.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student does not always maintain and demonstrate an impeccable work ethic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is not always a team player and does not always cooperate with staff and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hospital personnel. Student does not always accept constructive comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with a positive attitude.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student seldom maintains and demonstrates an impeccable work ethic. Rarely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is a team player and seldom cooperates with staff and hospital personnel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student seldom accepts constructive comments with a positive attitude.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student never maintains and demonstrates team skills and/or work ethic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is not a team player and never cooperates with staff and hospital personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student never accepts constructive comments with a positive attitude.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22
### Patient Interaction and Care/Management

<table>
<thead>
<tr>
<th>The student always identifies and addresses the patient in accordance to program/clinical agency policies.</th>
<th>The student frequently identifies and addresses patients in accordance to program/clinical agency policies.</th>
<th>The student is not consistent in addressing patients or identifying them appropriately.</th>
<th>The student seldom addresses patients or identifying them appropriately.</th>
<th>The student does not properly address patients or identify them appropriately.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student always interacts well with patients in a courteous manner.</td>
<td>The student frequently interacts well with patients in a courteous manner.</td>
<td>The student does not always interact well with patients in a courteous manner or try to instill confidence.</td>
<td>The student does not always interact well with patients in a courteous manner and does not instill confidence in the patient.</td>
<td>The student does not interact well with patients.</td>
</tr>
<tr>
<td>The student always obtains thorough/appropriate patient history. Instills confidence, effectively communicates with clear and precise instructions, and complies with HIPAA regulations.</td>
<td>The student frequently obtains thorough/appropriate patient history. Tries to instill confidence, attempts to effectively communicate with clear and precise instructions, and complies with HIPAA regulations.</td>
<td>The student is not consistent in obtaining thorough/appropriate patient history. Attempts to effectively communicate with clear and precise instructions, and complies with HIPAA regulations.</td>
<td>The student rarely obtains thorough/appropriate patient history. Seldom attempts to effectively communicate with clear and precise instructions, and does not always comply with HIPAA regulations.</td>
<td>The student does not obtain thorough/appropriate patient history. They are not courteous, or instill confidence. The student does not comply with all levels of HIPAA regulations.</td>
</tr>
</tbody>
</table>

| 4 points | 3 points | 2 points | 1 point | 0 points |

### Attendance and Availability

| Student is always on time and always remains in his/her assigned clinical rotation. Student will always offer their assistance in other areas when their assigned rotation is slow. | Student is frequently on time and has been late no more than (1 time) and remains in their assigned clinical rotation. Student will frequently offer their assistance in other areas when their assigned rotation is slow. | Student has been late (2 times) but for the most part remains in his/her assigned clinical rotation. Student will occasionally offer their assistance in other areas when their assigned rotation is slow. | Student has been late at least (3 times) and wanders off from their assigned clinical rotation. Student will seldom offer their assistance in other areas when their assigned rotation is slow. | Student has been late more than (3+ times) and does not remain in his/her assigned clinical rotation. Student will not offer their assistance in other areas when their assigned rotation is slow. |

| 4 points | 3 points | 2 points | 1 point | 0 points |
### Adherence to Program/Clinical Agency Dress Code Policies

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Adherence to Program and Clinical Agencies Dress Code Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Always</strong></td>
<td>Student always adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, no visible piercings other than ears, good personal hygiene, does not smell of perfume or tobacco.</td>
</tr>
<tr>
<td><strong>Frequently</strong></td>
<td>Student frequently adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, no visible piercings other than ears, good personal hygiene, does not smell of perfume or tobacco. Student has received verbal and/or written reprimand for failure to adhere to dress code.</td>
</tr>
<tr>
<td><strong>Seldom</strong></td>
<td>Student seldom adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, no visible piercings other than ears, good personal hygiene, does not smell of perfume or tobacco. On 1 occurrence student has been sent home from assigned clinical rotation for failure to adhere to dress code.</td>
</tr>
<tr>
<td><strong>Never</strong></td>
<td>Student never adheres to program and clinical agencies dress code policies including but not excluding: specified uniform, dosimeter badges, lead markers, ID badge, no visible tattoos, no visible piercings other than ears, good personal hygiene, does not smell of perfume or tobacco. On (2) or more occurrences student has been sent home from assigned clinical rotation for failure to adhere to dress code.</td>
</tr>
</tbody>
</table>

| Points | 3 | 2 | 1 | 0 |

### Compliance with Code of Ethics & Program/Clinical Agency Policies

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Compliance with Code of Ethics &amp; Program/Clinical Agency Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Always</strong></td>
<td>Student always exhibits exceptional behavior, always demonstrates a commitment to ethical standards. Professional demeanor, dependable &amp; responsible behavior. Student always aware and follows departmental protocols. Student also understands and adheres to Direct/Indirect Supervision Policy when performing examinations/procedures.</td>
</tr>
<tr>
<td><strong>Frequently</strong></td>
<td>Student frequently exhibits exceptional behavior, frequently demonstrates a commitment to ethical standards. Professional demeanor, dependable &amp; responsible behavior. Student frequently is aware and follows departmental protocols. Requires some assistance with protocols. Student also understands and adheres to Direct/Indirect Supervision Policy when performing examinations/procedures.</td>
</tr>
<tr>
<td><strong>Is Inconsistent in Exhibiting Behavior</strong></td>
<td>Student is inconsistent in exhibiting behavior, does not always demonstrate a commitment to ethical standards, and professional demeanor. Is not always dependable or responsible. Student demonstrates an inconsistency concerning knowledge of department protocols. Student often needs help understanding protocols. Student also understands and adheres to Direct/Indirect Supervision Policy when performing examinations/procedures.</td>
</tr>
<tr>
<td><strong>Seldom</strong></td>
<td>Student seldom exhibits exceptional behavior, seldom demonstrates a commitment to ethical standards or professional demeanor. Is not dependable and does not demonstrate responsible behavior. Student seldom exhibits a comprehensive knowledge of departmental protocols and usually needs to be reminded of them. Student also needs to be reminded of Direct/Indirect Supervision Policy.</td>
</tr>
<tr>
<td><strong>Never</strong></td>
<td>Student demonstrates inappropriate behavior, is not always committed to ethical standards, unprofessional demeanor demonstrated. Dependable and responsible behavior not always demonstrated. Student fails to demonstrate a comprehensive knowledge of departmental protocols. They also fail to adhere to the Direct/Indirect Supervision Policy.</td>
</tr>
</tbody>
</table>

| Points | 4 | 3 | 2 | 1 | 0 |

---

24
Knowledge of Radiographic Equipment Operation and Functionality

<table>
<thead>
<tr>
<th>Student always maintains proper handling to ensure integrity of radiographic and ancillary equipment. Superior knowledge of operation of all aspects of equipment. Prior to exposure, student is able to adjust technical factors that control contrast and density/image receptor exposure.</th>
<th>Student frequently maintains proper handling to ensure integrity of radiographic and ancillary equipment. Has basic knowledge of operation of equipment. Prior to exposure, student is frequently able to adjust technical factors that control contrast and density/image receptor exposure.</th>
<th>Student occasionally maintains proper use and handling of radiographic and ancillary equipment. Has basic knowledge of operation of equipment but occasionally requires guidance. Prior to exposure, student needs assistance adjusting technical factors that control contrast and density/image receptor exposure.</th>
<th>Student rarely demonstrates proper use and handling of radiographic and ancillary equipment. Student does not demonstrate basic knowledge of operation of equipment use. Often requires assistance. Prior to exposure, student is often not able to properly adjust technical factors that control contrast and density/image receptor exposure.</th>
<th>Student fails to demonstrate proper use and handling of radiographic and ancillary equipment. Student does not demonstrate knowledge of operation of equipment. Always requires assistance. Prior to exposure, student is not able to adjust technical factors that control contrast and density/image receptor exposure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>

Knowledge of Radiographic Exams/Procedures - A student's level of training needs to be considered when evaluating this section.

<table>
<thead>
<tr>
<th>Student always demonstrates accurate patient positioning and radiographic equipment alignment for the required projections in a timely manner, without assistance. Student always completes pre and post examination responsibilities (computer entries, verification of physician order, etc) without prompting.</th>
<th>Student frequently demonstrates accurate patient positioning and radiographic equipment alignment for the required projections in a timely manner, without assistance. Student frequently completes pre and post examination responsibilities (computer entries, verification of physician order, etc) without prompting.</th>
<th>Student occasionally demonstrates accurate patient positioning and radiographic equipment alignment for the required projections in a timely manner, with minimal assistance. Student occasionally completes pre and post examination responsibilities (computer entries, verification of physician order, etc) without prompting.</th>
<th>Student seldom demonstrates accurate patient positioning and radiographic equipment alignment for the required projections in a timely manner. Student requires frequent assistance. Student seldom completes pre and post examination responsibilities (computer entries, verification of physician order, etc) without prompting.</th>
<th>Student never demonstrates accurate patient positioning and radiographic equipment alignment for the required projections in a timely manner. Student requires substantial assistance. Student never completes pre and post examination responsibilities (computer entries, verification of physician order, etc) without prompting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>
## Quality of Radiographic Images and Analysis

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Example Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3 points</strong></td>
<td><strong>Student always</strong> possesses the ability to produce and critique images in order to achieve maximum quality radiographs. <strong>Student always</strong> demonstrates exceptional knowledge of critical anatomy on the radiograph. <strong>They frequently can</strong> accurately diagnose and implement changes to achieve a quality radiograph without assistance.</td>
<td><strong>Student frequently</strong> possesses the ability to produce and critique images in order to achieve maximum quality radiographs. <strong>Student frequently</strong> demonstrates adequate knowledge of critical anatomy on the radiograph. <strong>They usually can</strong> accurately diagnose and implement changes to achieve the desired effect without assistance.</td>
</tr>
</tbody>
</table>

## Radiation Protection and Safety

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Example Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4 points</strong></td>
<td><strong>Student always</strong> adheres and acts in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. <strong>Student always inquires</strong> regarding the possibility of patient pregnancy. <strong>Student always limits</strong> the amount of repeat radiographs and shields all patients. <strong>Student always wears</strong> their dosimeter badges in the proper location.</td>
<td><strong>Student frequently</strong> adheres and acts in accordance with ALARA principles for radiation safety and protection concerning themselves, patients and other health care workers. <strong>Student always inquires</strong> regarding the possibility of patient pregnancy. <strong>Student often limits</strong> the amount of repeat radiographs and sometimes shields patients. <strong>Student always wears</strong> their dosimeter badge in the proper location.</td>
</tr>
</tbody>
</table>
Adaptability and Critical Thinking

<table>
<thead>
<tr>
<th>Student is <strong>always</strong> able to solve technical, equipment, positioning and situational problems. Usually achieves positive outcomes encompassing all aspects of diagnostic imaging. Student <strong>always</strong> demonstrates the ability to alternate between various clinical examinations and/or procedures with ease.</th>
<th>Student <strong>frequently</strong> solves technical, equipment, positioning and situational problems. Frequently achieves positive outcomes encompassing all aspects of diagnostic imaging. Student <strong>frequently</strong> demonstrates the ability to alternate between various clinical examinations and/or procedures with ease.</th>
<th>Student attempts to solve technical, equipment, positioning and situational problems while requiring some assistance. Occasionally achieves positive outcomes encompassing all aspects of diagnostic imaging. Student occasionally demonstrates the ability to alternate between various clinical examinations and/or procedures with ease.</th>
<th>Student <strong>seldom</strong> possess ability for solving technical, equipment, positioning and situational problems in order to achieve positive outcomes encompassing all aspects of diagnostic imaging. Student demonstrates limited ability to alternate between various clinical examinations and/or procedures with ease.</th>
<th>Student does not possess any ability for solving technical, equipment, positioning and situational problems in order to achieve positive outcomes encompassing all aspects of diagnostic imaging. Student is <strong>unable</strong> to alternate between various clinical examinations and/or procedures with ease.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>

Personal Composure to Stressful Situations

<table>
<thead>
<tr>
<th>Student <strong>always</strong> demonstrates the ability to handle areas of high levels of stress and volume. The student does so in a professional manner, remains effective in getting procedures accomplished, and remains helpful and productive at <strong>all times.</strong></th>
<th>Student <strong>frequently</strong> demonstrates the ability to handle areas of high levels of stress and volume. The student does so in a professional manner, remains effective in getting procedures accomplished, remains helpful and productive <strong>most of the time.</strong></th>
<th>Student has <strong>inconsistently</strong> demonstrated the ability to handle areas of high levels of stress and volume. <strong>The student remains professional but</strong> is not always effective in getting procedures completed.</th>
<th>Student struggles with the ability to handle areas of high levels of stress and volume. <strong>The student does not always react in a professional manner. Has difficulty getting procedures completed. Student tries to be helpful and productive in these situations.</strong></th>
<th>Student cannot demonstrate the ability to handle areas of high levels of stress and volume. <strong>The student does not react in a professional manner and cannot get procedures completed. Does not try to be helpful or productive in these situations.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 point</td>
<td>0 points</td>
</tr>
</tbody>
</table>
Evaluation Score:_____________________ Average Score:________________________

Recommended for: Advancement Graduation Termination Probation

If placed on probationary status, date of reevaluation:__________________________

Evaluator comments:
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Student comments:
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Date:______________________________ Evaluator:___________________________

My signature verifies that I had the opportunity to review my clinical evaluation along with the opportunity to discuss it with the Program Director and Clinical Coordinator. My signature does not necessarily acknowledge my agreement or disagreement with my clinical evaluation.

Date:______________________________ Student Signature:______________________

Originated 1/14 Reviewed 7/16
STUDENT RESPONSIBILITIES, OBJECTIVES AND PROTOCOLS

Student’s Phone/Computer Use While in the Clinical Setting

While in the clinical setting, students are only allowed to use computers for school/hospital related use – no personal use. School/hospital use include: PACS for image review/critique, hospital email for messages from program officials/hospital management, entering/editing data pertaining to patient exams. Students will not be making personal phone calls while in their clinical setting. Students are allowed ½ hour lunch while in the clinical setting and it is at this time they should make phone calls on their own personal phones – not hospital phones. Students are not allowed to carry personal cell phones on their person while in the clinical setting. Students should not be receiving personal phone calls while in the clinical setting other than for emergencies.

Student’s Assigned Rotation Responsibilities

Students are responsible to help maintain their assigned rooms. Be aware of the patient’s impression on entering a medical examination room that is in a state of disarray. Imagine if you were the patient and entered a room to see hair on the pillow, or sheets on the table that had obviously not been changed. What would you think if the last patient’s jewelry or (heaven forbid) false teeth were on the counter? What if you went to a dentist who had to continually leave the room because equipment was not available?

Now imagine you are the technologist and your patient brushes their hand over a piece of equipment and dust flies everywhere. Consider your dilemma when you have a nauseated patient and there is no emesis basin in sight.

It is only common sense that any medical examination room should be clean neat, and well stocked. But the more time you spend in a place the more likely you are to overlook things that may be obvious to the patient. Be aware of the image your area of responsibility presents.

Objectives for all Positioning Units

The following units comprise the clinical aspect of the student’s education:

1.) Bony Thorax
2.) Abdomen
3.) Upper Extremities
4.) Lower Extremities
5.) Contrast Studies
6.) Spines
7.) Skulls

Following classroom discussion in positioning for the previous systems, students will be tested on their ability to:

1. Demonstrate each projection in the unit, taking into account the:
   a. Position of the part, obliquity in degrees if applicable.
   b. Direction and angulation (in degrees) of the central ray.
c. Centering point or method.
2. Perform radiographic examinations on patients.
3. Critique the radiographs of completed examinations for quality.
4. Apply the knowledge gained from other clinical and didactic rotations and units (file room, transportation, darkroom, nursing procedures and radiation protection) into the completion of an examination.
5. Inquire and record the history of the patient relevant to the examination.
6. Interact with patients, doctors, radiology staff and fellow students in a professional manner.

**Progression of each positioning unit:**
The progression of each unit and your learning experience will be as follows:
- Positioning class in a radiographic room. This will be composed of instruction and demonstration.
- Simulated practice on another student, verified by the clinical instructor or staff technologist on a checklist.
- Positioning and radiograph critique.
- Observing and assisting in your clinical rotations.
- Performance of examinations on patients with direct supervision of a technologist or instructor until the required number of competencies are performed.
- Evaluation of competency on patient examinations by a technologist or instructor.
- Evaluation of radiographic equipment operation object
- Performance of patient exams with indirect supervision after the required number of competencies are completed.

**Positioning Unit Grades:**
- Written quizzes ...................... 1/3 of the final unit grade
- Written Final Exam .................. 1/3 of the final unit grade
- Simulated Positioning Final ........ 1/3 of the final unit grade
- Checklist ................................ Announced deadline

**Grading Scale:**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>95-100%</td>
<td>A</td>
</tr>
<tr>
<td>93-94%</td>
<td>A-</td>
</tr>
<tr>
<td>91-92%</td>
<td>B+</td>
</tr>
<tr>
<td>87-90%</td>
<td>B-</td>
</tr>
<tr>
<td>85-86%</td>
<td>B-</td>
</tr>
<tr>
<td>83-84%</td>
<td>C+</td>
</tr>
<tr>
<td>80-82%</td>
<td>C</td>
</tr>
<tr>
<td>78-79%</td>
<td>C-</td>
</tr>
<tr>
<td>76-77%</td>
<td>D+</td>
</tr>
</tbody>
</table>
Objectives and Tasks for Competency Examinations on Patients

The student demonstrates competency by consideration of these tasks:

** ROOM PREPARATION AND PATIENT CARE **

1. Correct examination (foot versus ankle.)
   - Correct part (Right versus Left.)
   - Correct patient.
   - Correct date of examination.
   - Patient is properly attired for examination.
   - Rings, earrings, necklaces, dentures etc. are removed as necessary, and returned.
   - Use of correct lifting technique or calls for lifting help.

2. Technique is set on the control panel before positioning—properly adjust the KVP, mAs, focal spot, AEC chambers and density, etc.
   - Equipment needed for exam is present before patient arrives; such as cones, sponges, shields, grids, emesis basins, etc.

3. When greeting a patient, introduce yourself by your first name and explain to them your role in their healthcare.
   - Examination is explained to the patient in simple terms.
   - Patient understands what exams are ordered and approximately how many radiographs will be taken.
   - Inquire and record the history of the patient relevant to the examination.

4. Patient is treated with courtesy, consideration and respect.
   - Comfort, safety, and modesty are ensured.
   - Slippers for feet, covers for warmth, and a pad on the table is provided as needed.

5. Observe for contrast reactions, level of consciousness, anxiety, and basic life support functions.
   - Demonstrate awareness of IV lines, catheters, oxygen, etc.
   - Initiate Code or call for help as needed.
   - Report incidents.

6. Thinks clearly in stressful situations.
   - Does not give up when mistakes are realized.
   - Maintains composure at all times.
   - Difficult situations are handled with patience and understanding.

7. Converses with the patient, technologist, and physician in a manner appropriate to the situation.
   - Is tactful in conversation and mannerisms with peers; superiors, and patients.
   - Presents a positive attitude toward duties and the institution.
** IMAGE RECEPTOR SELECTION, USE, AND EXPOSURE FACTORS **

8. Selects correct image receptor for examination.
   - Uses a grid when applicable.
   - Identifies an exposure technique compatible with the image receptor, grid, part and SID.
9. Identifies the size image receptor routinely used.
   - Utilizes the image receptor to the fullest advantage (two views on one, diagonal, etc.)
   - Uses larger or smaller image receptor in unusual situations.
10. Handles image receptor with care.
    - Protects unexposed cassettes from scatter radiation.
    - Accounts for grid cutoff.
    - Avoids double exposure.
11. Make sure the patient’s identity is on the image receptor prior to processing.
    - Identifies Right and Left parts correctly, free of anatomy.
    - Uses lead markers as needed (time, cut level, etc.)

** POSITIONING SKILLS **

12. Angles the central ray cephalad, caudad, perpendicular, etc. as required by the projection.
13. Utilizes the proper degree of angulation in relation to the part.
14. Centers the tube transversely (detent when applicable.)
    - Centers the tube longitudinally.
15. Positions the tube at the SID required by the examination, the grid radius, and the exposure technique being used.
16. Critique the radiographs for quality.
    - Properly defines the area where the central ray enters or exits the part.
    - Includes all anatomy necessary for the examination.
    - Avoids the positioning of anatomy over the lead ID marker.
17. Correctly uses the AP, PA, or Lateral position required.
    - Correctly uses the upright, recumbent, or decubitus position required.
    - Correctly uses the oblique position and degree of obliquity required.
18. Uses respiration to suspend motion or create motion.
    - Uses inspiration or expiration as required by examination.
19. Positions part in an efficient and direct manner.
    - Performs a task one time without repeating efforts.
    - Positions in a reasonable amount of time (as determined by the number of times the light localizer is used.)
    - Performs tasks in a logical and efficient sequence.
20. Demonstrates working knowledge of tube and table locks and manipulations.
    - Appears proficient and coordinated in actions.
    - Inspires confidence from the patient’s point of view.
** RADIATION PROTECTION **

21. –Collimates to the part.
   -Restricts the X-ray field to the image receptor.
22. –Directs the CR away from the gonads, eyes, or any part not included on the radiograph when possible. (e.g. table top hand with gonads in primary beam, settegast of patella with eyes in primary beam.)
   -Uses lead shielding for anyone up to 60 years of age.
23. –Inquires about the possibility of pregnancy on every woman of child bearing age as required by department policy which is: 12 to 56.
24. – Inquires if patient is wear an insulin pump. ALL insulin pumps need to be removed from the examination room prior to radiation exposure.

** POST EXAMINATION DUTIES **

25. -Enters the patient information in the computer.
   -Initiates retrieval of old films for comparison as needed.
   -Completes the requisition for patient history, height & weight, initials of student & technologist, pregnancy, comments, etc.
   -Places developed radiographs in correct location/follows correct protocol for sending images to PACS.
   -Have radiographs read by radiologist and call report to appropriate location.
   -Dismisses patient, arranges for transportation, or returns or directs patient to proper location.
26. –Changes sheets and pillow case between patients.
   -Returns equipment to its' proper place.

Explanation of the Steps for Demonstration of Clinical Competency on Patients

1) Upon successfully completing each positioning unit with a minimum score of 80% or greater, the student will be required to complete the positioning checklist that corresponds to the previously completed course on a fellow student while being observed by the Clinical Instructor from the clinical site they are scheduled at. Refer to this handbook for the explanation of grading for clinical courses. **NOTE:** there will NOT be any exposures made on the classmate during the completion of the checklist. **ADVICE:** It is to the student’s advantage to attempt to have the positioning checklist completed prior to the Simulated Positioning Final so that if the student has difficulties with any projection, he/she will have the opportunity to correct these with the CI prior to being graded on the Simulated Positioning Final. All required checklists are available in the back of this handbook.

2.) Upon the completion of the checklist, the student will turn it in to the Clinical Coordinator who will then document it on the student’s Master Clinical Record.

3.) The required positioning checklist will be required to be completed by the assigned due date announced by the Clinical Coordinator. **Failure to meet the**
**Deadline for the positioning checklists will result in a reduction of 10 points per week from the student’s final score for the unit.**

4.) The student will now be allowed to begin obtaining radiographs on patients for the projections/exams that were listed on the previous completed positioning checklist. The student will be under Direct Supervision by a registered technologist while obtaining these radiographs. Refer to the Student Supervision Policy in regards to the parameters for Direct Supervision.

5.) For each exam that is listed on the student’s Master Clinical Record, there are a required number of patient competencies that need to be completed. Refer to Clinical Competency Form that will be completed by the observing registered technologist during the completion of patient competencies by the student. While the required number of patient competencies is being completed and being turned in to the Clinical Coordinator for each respective exam listed on the Master Clinical Record, the student is under Direct Supervision for that respective exam. Once the required number of successfully completed patient competencies for each respective exam is turned into the Clinical Coordinator, the student is now under Indirect Supervision for that respective exam. Refer to the Student Supervision Policy in regards to the parameters for Indirect Supervision.

**Explanation of Equipment Competency Evaluation Due Dates**

The following Equipment Checklists are due at the completion of the Respiratory/Bony Thorax/Abdomen Positioning Unit:

1. General Radiographic Room
2. Fuji/Konica CR Workstation
3. Portable Radiographic Equipment

The following Equipment Checklist is due **1 week prior** to the completion of session Winterim I;

1. Digital Fluoroscopic Room

The following Equipment Checklist is due after completion of the first surgical rotation in the Spring I session:

1. Portable Radiographic Equipment – C-arm

The following Equipment Checklist is due at the completion of the Contrast Studies Unit;

1. IVU/Tomographic Room*

*Due to St. Agnes Hospital in Fond du Lac not having an IVU/tomography room, the St. Agnes Hospital students will be required to complete this checklist while rotating through Mercy Medical Center, or St. Elizabeth Hospital during the Spring I semester.

The following Equipment Checklist is due at the completion of the Skull Unit;

1. Orthopantograph Equipment *
All equipment checklists are to be completed at the student’s main clinical site except for the previously mentioned exceptions. Failure to complete the equipment checklists by the assigned dates will result in the lowering of the student’s Final Semester Grade by 10 points.

Radiographic Rooms Objectives

During your diagnostic room rotations you will report to the registered technologist/s that is/are assigned to these rooms.

All students will be assigned to the diagnostic rooms throughout the length of the program. The successful completion of the objectives listed below is dependent on the student’s level of progression throughout the length of the Program. The student’s ability to successfully complete the objectives below will be evaluated on the Clinical Competency Form that is used for each examination performed by the student on a patient. See Objectives and Tasks for Competency Examination on Patients, in the Clinical Handbook for more detailed explanation of the objectives listed below.

The evaluation of your objectives for the diagnostic room rotations will be based upon the ability to:

1. Report to the registered technologist/s on time and be accountable for your presence.
2. Properly prepare the room for the examination prior to the patient entering the room.
3. Correctly verify the identity of the patient, verify the correct examination is being performed, introduce yourself to the patient, obtain patient history that is pertinent to the examination being performed and explains the examination to the patient in terms they can understand.
4. Accurately aligns the xray tube, the patient and the image receptor for the projection/s being performed. Correct use of lead markers. Correct breathing technique used.
5. Review the quality of the radiograph for accurate positioning of the patient and the proper required anatomy. If a radiograph is required to be repeated, the student is able to determine how it should be corrected.
6. When appropriate, properly assess the patient in non-routine situations and adjust the examination in order to obtain the necessary radiographs.
7. Use correct radiation protection practices for both the patient and self. This includes questioning the female patient of the chance of pregnancy, shielding of the patient when it will not interfere with the anatomy of interest and the use of collimation when appropriate.
8. Proper selection of exposure techniques for the projection/s being performed while providing the image receptor with enough exposure but at the same time not violating ALARA.

During your rotations in the radiographic rooms use these objectives as a guide to learning the operation of the equipment. Not every room is the exactly the same, but they all have similar characteristics. Look for these items in the rooms you use and be prepared to demonstrate your ability to:

**NOTE:** The diagnostic room checklist is due by the completion of the Respiratory/Abdomen/Thorax Positioning Unit.

**Operators Panel**

1. Energize the x-ray units.
2. Set warm up exposures and warm up the tube.
3. Select large or small focal spots.
4. Select the upright bucky.
5. Select the table bucky.
6. Select table top exposures.
7. Operate the kVp and mAs selectors.
8. Select the AEC chamber for the table, C-arm, & upright board.
9. Select an AEC chamber by part.
10. Control AEC density
11. Select a pre-programmed technique
12. Alter pre-programmed techniques by body habitus
13. Alter the pre-programmed kVp or mAs manually
14. Set manual technique independent of programming
15. Set the AEC independent of programming
16. Control the exposure time (shortest possible, average longest possible)

**Table**

1. Operate the table tilt (if applicable)
2. Operate the moving tabletop.
3. Orient the patient on the table correctly.
4. Operate the bucky tray
5. Raise and lower the table top from all locations

**Tube**

1. Manipulate the x-ray tube:
   A. vertically
   B. longitudinally
   C. transversely
   D. angle the CR
   E. set up for a horizontal beam projection
F. rotate the collimator
G. rotate the tube
2. Collimate manually and automatically.
3. Center the tube to the table bucky and upright bucky using the detent.
4. Identify the methods for measuring the source image distance (SID).

There are various pieces of equipment, which you will need for certain examinations. Investigate the following items to determine where they might be found, what they are used for, and how to use them.

- Cylinder cones
- Rolling shields
- Calipers
- Weights
- Positioning sponges
- IV poles
- Restraining straps
- Lead aprons
- Oxygen
- Suction supplies
- Sphygmomanometer
- Stethoscope
- Emesis basins
- Leadgloves
- Linen
- Pigg-o-stat

**Objectives for Fuji/Konica CR Workstation**

Following clinical instruction in the use of the Fuji/Konica CR workstation, students must demonstrate their ability to:

1. Select correct patient and accession number/s.
2. Select multiple exams for the patient.
3. Start exam.
4. Demonstrate manually entering patient demographics.
5. Demonstrate how to change modality (for example, fluoroscopy vs. CR) name.
6. Demonstrate how to finish an exam (send to PACS.)
7. Verify that images are saved in PACS.
8. Print images on a laser printer.
9. Suspend an exam.
10. Locate a suspended exam
11. Restart a suspended exam.
12. Restart finished exam.
13. Add/change projection/s to a current exam.
15. Locate patient in Delivered tab.
16. Demonstrate how to display image in anatomical position aka “flip the image.”
17. Manually annotate the image.
18. Add preprogrammed annotation to the image.
19. Verify correct exposure index number for each image.
20. Demonstrate how to window/level the image.
22. Demonstrate how to “zoom” and “pan” image.
23. Scan imaging plate with correct patient identification, body part and position.
24. Demonstrate how to erase imaging plate.
25. Explain the difference between primary and secondary erasure.
26. Understand when to erase the imaging plate.
27. Explain various error/s for image plate reader.

**Transportation Rotation Objectives**

On your transportation rotations you will report to the transportation aides and assist with their duties.

The evaluation of your objectives for the transportation rotations will be based upon your demonstrated ability to:

1. Report on time and be accountable for your presence.
2. Learn the layout of the hospital.
3. Assist patients to and from wheelchair; stretchers, and beds.
4. Transport patients to and from the x-ray department in a manner compatible with their condition.
5. Tend to the patient’s needs while they are in your care.
6. Safely transfer patients using proper body mechanics (ie bed to cart, cart to exam table, bed to wheelchair, wheelchair to exam table.)
7. Ensure a patient’s personal items are not taken to the x-ray department, or that they are returned with the patient.
8. Check patients in and out on the floor’s log.
9. Profile patients in the computer before going to get them.
10. Check-in on computer when patient arrives in department.
11. Store carts and wheelchairs properly.
12. Bring the patient chart to the department when needed.
13. Communicate with the nursing floor regarding the patient’s condition or messages for the radiology department.
14. Describe the steps to be taken if a patient should seize, choke, or codes during transport.
15. Handle the equipment that must be transported with the patient, such as: IV’s, medication dispensers, oxygen tanks, telemetry, pleuravacs, NG tubes, and Foley catheter bags.

**Fluoroscopic Room Clinical Rotation Objectives**

During your fluoroscopic room rotations you will report to the registered technologist that is assigned to this room.

All students will be assigned to the fluoroscopic room throughout the length of the program. The successful completion of the objectives listed below is dependent
on the student's level of progression throughout the length of the Program. The student's ability to successfully complete the objectives below will be evaluated on the Fluoroscopic Clinical Competency Form, see the following page, which is used for each fluoroscopic examination performed by the student on a patient.

The evaluation of your objectives for the fluoroscopic room rotations will be based upon the ability to:

1. Report to the registered technologist/s on time and be accountable for your presence.
2. Properly prepare the room for the examination prior to the patient entering the room. This includes making sure all necessary supplies for the examinations are available and prepared. This also includes the fluoroscopic equipment is properly setup and functional.
3. Correctly verify the identity of the patient, verify the correct examination is being performed, introduce yourself to the patient, obtain patient history that is pertinent to the examination being performed and explains the examination to the patient in terms they can understand.
4. When appropriate, using correct practices when working around sterile instruments and fields.
5. Assists the radiologist with the performance of the examination. This includes the relaying of pertinent patient history to the radiologist prior to the start of the examination.
6. Provides any assistance required by the patient prior, during and after the examination.
7. Accurately aligns the x-ray tube, the patient and the image receptor for the radiographs that are required after the fluoroscopic part of the examination performed by the radiologist.
8. Review the quality of the post fluoroscopic radiographs for accurate positioning of the patient and the proper required anatomy.
9. Use correct radiation protection practices for both the patient and self. This includes questioning the female patient of the chance of pregnancy, shielding of the patient when it will not interfere with the anatomy of interest and the use of collimation when appropriate. In regards to the student technologist, this includes properly positioning their body between their personal protective lead apron and the fluoroscopic equipment along with maintaining an acceptable distance from the patient and fluoroscopic equipment if their assistance is not immediately required.
10. Proper selection of exposure techniques for the post fluoroscopic radiographs being performed.
11. The performing of required post examination responsibilities.

Note- All students are prohibited to observe or participate in any hysterosalpingography exams.
Digital Fluoroscopic Equipment - Room Objectives

Following clinical instruction in the use of the R/F equipment, students must demonstrate their ability to:
1. energize and warm up the x-ray tube
2. operate the power table top
3. operate the table tilt
4. install the footboard
5. enter patient information into the computer
6. position the bucky tray for fluoroscopy
7. reset the fluoro timer
8. locate the emergency stop button
9. engage the horizontal stop on the table
10. select fluoroscopic magnification
11. change the video polarity (image reverse)
12. park the fluoro tower
13. utilize the various tower locks
14. select a fluoroscopic technique on the operators console
15. operate the image intensifier in the fluoroscopic mode
16. select the fluoroscopy mode or printing the film
17. identify the number of used or unused spot film exposures.
18. utilize the compression device
19. make a spot film exposure
20. operate the fluoroscopic cones

Operators Console
1. switch from radiographic to fluoroscopic control
2. select kVp and mA for fluoroscopic spot filming
3. select a radiographic technique for GB, UGI, BaE, and plain films of the abdomen
4. explain the function of the small and large focal spots
5. reset the fluoro timer
6. demonstrate, if applicable, the post processing by printing an exam

Equipment varies from room to room. This checklist is a guide for identifying common functions; it is not applicable for every room.

Tomographic (IVU) Room - Objectives for Equipment Operation

Following clinical instruction in the operation of the tomographic equipment students should be prepared to demonstrate their ability to:

1. energize the x-ray generator.
2. select a radiographic/tomographic technique for an IVU exam.
3. raise the x-ray tube to the correct SID.
4. select the radiographic mode of filming.
5. select the tomographic mode of filming.
6. select a designated tomographic cut level.
7. select a designated tomographic cut thickness.
8. identify the thinnest and thickest tomographic cut angle.
9. operate a floating table top.
10. operate the bucky tray.

**Contrast Study Examination Objectives**

Students are NOT allowed to administer any contrast agents until he/she has successfully passed the Pharmacology and Drug Administration unit with a grade of 80% or better. Even after successfully completing the unit, the student will only be able to administer contrast agents under direct supervision!

It is also during the Pharmacology and Drug Administration unit the student will be instructed on the proper techniques that are necessary to perform venipuncture. After successfully completing the didactic education and demonstrating competency in the classroom setting, the student will be required to demonstrate competency in the clinical setting. The student will be able to obtain the required number of competencies while rotating through the IVU suite and CT Department during the final two semesters of the program. It is the supervising radiologic technologist’s discretion whether a particular patient is appropriate for the student to attempt venipuncture on. See section 16 in the Clinical Handbook for full details regarding venipuncture for radiologic technology students.

Following classroom instruction on the urinary system students should be prepared to:

1. Perform the procedure for an IVU following the normal examination routine.
2. Demonstrate the non-routine radiographic positions used for an IVU.
3. Critique an IVU exam including scouts and tomograms.
4. Demonstrate the operation of the tomographic equipment following the tomographic room equipment objectives.
5. Explain the basic tomographic principle.
6. Define terms related to examinations of the urinary system.
7. Identify other examinations of the urinary system and the method of introducing contrast
8. Explain the use of contrast agents, identify symptoms of a contrast reaction and be prepared to initiate an appropriate reaction response.

**Patient Examinations for Digestive System**

Like other tests, you need a technologist or instructor observer. Due to the addition/invention of digital fluoroscopic units, the radiologist requires few to no
overhead radiographs at the completion of a fluoroscopic examination. If you wish to perform one of the required competencies, it is your responsibility to approach the radiologist **prior to the start** of the exam and explain to him/her that you need to perform a required number of fluoroscopic patient exams for your education. You will need to ask him/her if they would be willing to leave you a few overhead radiographs to be performed at the end of the examination. To have the examination count as a competency, you are required to perform overhead radiographs ordered by the radiologist. The following paragraph explains the role of the technologist or instructor during a fluoroscopic exam if you wish to perform it for a competency.

The observer may help in the capacity of changing the spot films or running barium. It will be the student's responsibility to set up the room, greet the patient, explain the exam, answer the patient's questions, relay messages to the radiologist, assist with fluoro, take the overheads, check the films, and be certain the patient and computer entry is taken care of after the exam. In other words, the student is in charge. Should things not go well and the technologist must take over, it is not a problem, the student will simply do another procedure.

Prior to attempting any clinical competency of patient exams for a unit, **ALL of the assigned checklists must be completed and turned into the Clinical Coordinator**:

**Orthopantomograph Objectives**

Following demonstration and practice of the use of the Orthopantomograph machine students will be tested on their ability to:

1. Energize the Orthopantomograph unit.
2. Load and unload the image receptor.
3. Process the image receptor.
4. Place the image receptor on the unit
5. Operate the unit in the test mode.
6. Utilize the bite block and chin guide
7. Utilize the positioning devices/methods
8. Protect the patient and operator from unnecessary exposure.
9. Make an exposure.
10. Demonstrate positioning for the:
    A. Mandible
    B. TMJ's
11. Deenergize the unit.

Equipment varies from room to room. This checklist is a guide for identifying common functions; it is not applicable for every function of the equipment in every room.
Portable Rotation Clinical Objectives

During your portable rotations you will report to the registered technologist who is responsible for the performing of these exams. The successful completion of the objectives listed below is dependent on the student’s level of progression throughout the length of the Program. The student’s ability to successfully complete the objectives below will be evaluated on the Clinical Competency Form, which is used for each examination performed by the student on a patient.

The evaluation of your objectives for the portable rotations will be based upon your demonstrated ability to:

1. Report on time and be accountable for your presence.
2. Become familiar with the layout of the hospital.
3. Familiarize yourself with the method of correctly verifying the identity of the patient and that the correct examination is being performed.
4. Use of radiation safety practices for the patient and yourself.
5. Demonstrate the mobility and initializing electrical current to the equipment.
6. Properly demonstrate the placement and operation of ancillary equipment (including oxygen administration devices, IV, chest tubes, operation of patient’s bed including movement of bed and proper placement of side rails, etc.) within the patient’s room.

Return patient and room equipment setup back to original position.

Objectives for Portable Radiographic Equipment

1. Turn key switch on/off.
2. Identify battery status display messages.
   a. testing complete
3. Park the telescoping arm for driving the unit.
4. Operate the power drive.
5. Identify the self-stopping bumper.
6. Activate the brake.
7. Drive in forward and reverse.
8. Release the collimator from the park/transport position.
9. Raise the arm on the vertical column.
10. Extend the retractable arm.
11. Pivot on axis with telescope arm extended.
12. Activate the field light and restrict the beam (collimation).
13. Rotate the tube head through its range of motions.
14. Measure SID.
15. Rotate the collimator head.
16. Increase and decrease kVp and mAs.
17. Make a radiographic exposure by:
a. engaging the handswitch to prep position (2.5 sec/ready for exposure)
b. engaging the switch to expose position, recognize 30 second prep limit
18. Prepare the unit to recharge the battery:
a. key switch position 
b. location of unit during charging
19. Use of ACE paddle (if applicable)
a. selection of technique setting for image receptor 
b. selection of proper ACE chamber 
c. adjustment of density control 
d. proper alignment of paddles (CXR & KUB) 
e. location of mAs readout

Objectives for Mobile Radiographic Units - C-arm

1. Engage and release the foot locking brakes of the base (of unit).
2. Adjust the steering handle for direction (parallel to handle)
a. click stop for transverse movement
3. Lock and unlock the brake release of the C-arm.
4. Manipulate the C-arm:
a. raise and lower the C-arm at the column stand (up & down) 
b. rotate the vertical plane (side to side) 
c. adjust the horizontal travel (back & forth) 
d. swivel on the column stand (side to side) 
e. slide the C-arm in an orbital motion (front to back)
5. Lock into transport position.
6. Sterile drape the C-arm.
7. Identify the proper connections from the C-arm to the monitor and wall outlet.
8. Correctly enter the patient ID into the system.
9. Correctly open and adjust the collimators on the c-arm.
10. Identify the function of the operating controls and indicators.
11. Correctly adjust the annotation of the image for proper viewing of the image on the monitor during fluoroscopy.
12. Print saved images on films/send to PACS for permanent record keeping.
13. The ability to correctly setup the c-arm for cine runs and DSA image acquisition.

Rotating Clinical Site Objectives

At the beginning of the Spring I semester, the student will begin rotating to all clinical sites. The purpose of these rotations is for the student to experience and participate in examinations or procedures that they may not have had any exposure to previously. This also includes interacting with other technologists, clinical instructors, radiologists, other physicians, departments, etc.
The objectives for the student to complete while rotating through the various clinical sites include:

1. Demonstrate an understanding and ability to complete the various record keeping and procedures performed.
2. Properly adjust KVP and mAs for the exam being performed.
3. Request pertinent information from the patient including the possibility of pregnancy.
4. Accurately explains the examination to the patient.
5. Accurately positions the patient for examinations.
6. Understand and proper use of lead shielding for patients and personnel when applicable.
7. Understands and demonstrates the basic principles of processing radiographs.

See the competency evaluation that is required to be completed by the supervising technologist for each clinical site.
See the Clinical Site Evaluation Form that is to be completed by the student for each clinical site. The information on the form is reviewed annually by the Program’s Advisory Board to determine whether the site still provides an adequate learning experience for the student.

**Surgery Clinical Rotation Objectives**

During your surgery rotations you will report to the surgery technologist/s who are responsible for the performing of these exams. The student’s ability to successfully complete the objectives below will be evaluated on the C-arm Clinical Competency Form, see the previous page, which is used for each procedure performed by the student on a patient.

The evaluation of your objectives for the surgery rotations will be based upon your demonstrated ability to:

**First Year Spring & Summer Semester:**
1. Report on time and be accountable for your presence.
2. Wear proper surgical attire including lead aprons.
3. Familiarize yourself with the sterile environment.
4. Observe the proper radiation safety for patient, surgical staff and self.
5. Observe the necessary connections of the C-arm to the monitor.
6. Observe the process of verification of the correct patient and procedure.
7. Observe the process of correctly entering patient information regarding the exam into the imaging equipment.
8. Observe the process of transferring the images to PACS at the completion of the procedure.
9. Observe the post procedure documentation.

**Second Year Fall Semester:**
1. Report on time and be accountable for your presence.
2. Wear proper surgical attire including lead aprons.
3. Continue to familiarize yourself with the sterile environment.
4. Practice radiation safety for patient, surgical staff and self.
5. Begin to familiarize yourself with the necessary connections of the C-arm to the monitor.
6. Verification of the correct patient and procedure. Enter correctly patient information regarding exam into the imaging equipment. Transfer the images to PACS at the completion of the procedure.
7. Familiarize yourself with the post procedure documentation.

Second Year Spring Semester:
1. Report on time and be accountable for your presence.
2. Wear proper surgical attire including lead aprons.
3. Practice radiation safety for patient, surgical staff and self.
4. Make the necessary connections of the C-arm to the monitor. Verify the correct patient and procedure. Enter correctly patient information regarding exam into the imaging equipment. Transfer the images to PACS at the completion of the procedure.
5. Act independently in regards to the proper positioning, manipulation and placement of the imaging equipment while working in a sterile environment while under direct supervision.
6. Continue to use the correct exposure techniques that are necessary for the types of exams being performed.
7. Correctly perform post procedure documentation.

**Pain Clinic Clinical Rotation Objectives**

During your Pain Clinic rotations you will report to the technologists who are responsible for the performing of these exams. Each student is scheduled for one designated Pain Clinic Rotation, after that rotation the student will be visit the Pain Clinic when assigned to the Surgery Rotations. The student's ability to successfully complete the objectives below will be evaluated on the C-arm Clinical Competency Form, see the following page, which is used for each procedure performed by the student on a patient.

The evaluation of your objectives for the Pain Clinic rotations will be based upon your demonstrated ability to:

**First Year Summer Semester:**
1. Report on time and be accountable for your presence.
2. Familiarize yourself with the sterile environment.
3. Practice radiation safety for the patient, Pain Clinic staff and self.
4. Learn how to: verify the correct patient and procedure learn how to enter correctly patient information regarding exam into the imaging
equipment and transfer the images to PACS at the completion of the procedure.
5. Begin to familiarize yourself with the necessary connections of the C-arm and monitor.
6. Familiarize yourself with post procedure documentation.
Second Year Fall Semester:
1. Report on time and be accountable for your presence.
2. Practice radiation safety for the patient, Pain Clinic staff and self.
3. Verify the correct patient and procedure. Enter correctly patient information regarding exam into the imaging equipment. Make the necessary connections between the C-arm and monitors. Transfer the images to PACS at the completion of the procedure.
4. Begin to acquaint yourself with the proper positioning, manipulation and placement of the imaging equipment while working in a sterile environment with under direct supervision.
5. Become familiar with the correct exposure techniques that are necessary for the types of exams being performed.
6. Perform post procedure documentation.
Second Year Spring Semester:
1. Report on time and be accountable for your presence.
2. Practice radiation safety for the patient, Pain Clinic staff and self.
3. Verify the correct patient and procedure. Enter correctly patient information regarding exam into the imaging equipment. Make the necessary connections between the C-arm and monitors. Transfer the images to PACS at the completion of the procedure.
4. Act independently in regards to the proper positioning, manipulation and placement of the imaging equipment while working in a sterile environment while under direct supervision.
5. Continue to use the correct exposure techniques that are necessary for the types of exams being performed.
6. Perform post procedure documentation.

Introduction to the Specialty Rotations

The clinical rotations in this section are different than the structure of previous clinical or didactic units. Rotations through Special procedures/Cardiac Catheterization, CT and MRI, will also allow the student to visualize previously learned anatomy in a different format (for example, digital subtraction angiography and cross sectional anatomy.) In addition there are no grades assigned to these units. The requirement is the completion of the checklist by the technologist in these areas. The checklists validate your exposure to and basic competency of the objectives for the equipment and procedures in these areas.
The p.m. and weekend shifts are included to provide an environment of less competition with other students, where you may hone your clinical skills to gain self-confidence and self-reliance. Although you may not prefer the hours, it is a rare student who will not admit that these rotations were invaluable in preparing him or her for entering the working world.

In the other rotations you will find yourself back in a position of being the proverbial fifth wheel. Just as you are gaining confidence in your abilities to perform many radiographic procedures independently, you are placed back in the position of being the observer/questioner. You will also have to adapt to the new people and personalities in these areas.

Some students find this a difficult transition to make but it may not happen to you. Many students enjoy the new environments and work diligently to take full advantage of their opportunities in these areas. But, for those of you who most enjoy general radiography, and are certain that is the kind of position you want, consider this from the old man in the sea. Many a student who loudly expressed their distaste for a certain rotation has changed their tune when a full time position in that area coincidentally became available near the time of graduation.

**Weekday and Weekend PM Clinical Rotation Objectives**
The purpose of weekday and weekend PM rotations is to give students the experience of working shifts, which require more independence and responsibility. A technologist on duty must always make the final decision on passing radiographs and should always be consulted in new or unusual situations. **A technologist must be present when radiographs are being repeated.** You will still find these shifts to be more challenging and the best opportunity for you to practice your basic skills.

Weekday and weekend PM rotations are a big step toward your goal of total independence. Future evaluations will be based on how you handle this responsibility. The technologists on these shifts will participate in your evaluations to ensure the objectives are being met.

**Your objectives for weekday and weekend PM clinical rotations are to:**
1. participate in all imaging exams
2. students will not be left alone in department to perform examinations on their own
3. adjust to the change in clinical hours
4. improve basic clinical skills
5. practice emergency and trauma radiography
6. improvise in non-routine situations
7. organize your actions for more efficiency
8. perform related administrative tasks with the staff technologist
9. work independently of direct supervision (staff technologist must be within close proximity)
10. all radiographs must be checked with a staff tech technologist before releasing patient
11. gain confidence in your clinical abilities
12. work and communicate as a team member
13. demonstrate professional attitudes and behaviors

Weekday and weekend PM clinical rotations: The PM rotation is from 3:30-9:30 pm. Tuesday, Thursday and Friday. You will be responsible for any surgical procedures that are occurring during schedule rotation. A 1/2 hour lunch will be granted on this rotation for students.

If the student has an outside scheduling conflict with a scheduled PM shift, they will be required to choose an evening that no other student is scheduled or find another student from the same clinical site to trade a similar shift with. This trade needs to be approved by the Clinical Coordinator prior to the scheduled shift change.

Regardless of the rotation you are scheduled for there will be regularly scheduled classes as posted on the schedule, and the total clinical and didactic hours will not exceed 40 from Monday to Friday.

Whenever need arises you may:
* Transport Patients
* Help in reception area
* Help in filing
* Stock rooms with supplies
* Assist patients to change for exams

Special Procedures/Angiography/Cardiac Catheterization Objectives

During your special procedures rotations use these objectives to review vascular anatomy and familiarize yourself with the equipment and procedures. By the end of the Special Procedures and Cardiac Catheterization rotations, the student should be able to:

1. Demonstrate basic knowledge of circulatory system anatomy.
2. Identify the functions of the tableside controls.
   a. table height adjustment
   b. c-arm control
   c. support column rotation
   d. image intensifier height adjustment
   e. collimator adjustment
   f. II/field size control
   g. table floatation control
3. a. Power on generator
   b. Power on DSA unit
4. Input patient information.
5. Reset fluoroscopy timer/dose indicator.
6. Explain briefly what DSA is.

**DSA**
1. Enter patient information.
2. Set the digital computer for image acquisition.
3. If appropriate, operate the multi-format printer to produce hard copies.
4. Explain the difference between a mask image, subtracted image and unsubtracted image.

**Related Equipment**
1. Set the pressure injector for a designated injection.
   a. power on injector
   b. load syringe
   c. draw up contrast
   d. set injector to the proper
      - volume
      - rate
      - delay
      - rise time
      - pressure
   e. arm the injector
2. Power on the EKG monitor
   a. connect the test leads of the EKG to the patient

**Objectives for Magnetic Resonance Imaging**

Following the completion of the MRI rotations, a student should be prepared to demonstrate their ability to perform the following functions in magnetic resonance imaging:
1. **Basic Computer Functions**
   a. Enter patient information
2. **Table & Magnet**
   a. Operate table up, down, out, in.
   b. Use positioning lights.
   c. Identify the different parts of the scanner including the magnet, table, different coils and control console.
3. **Basic MRI Physics/Image Formation/Patient Safety**
   a. Explain basic MRI physics.
   b. Explain why you cannot have metal inside the scanner.
   c. Explain how MRI is different than CT.
4. **Anatomy**
   a. Demonstrate basic knowledge of cross sectional anatomy.
   b. Recognizes the difference between axial, sagittal and coronal images.
5. Demonstrate a willingness and enthusiasm to learn
Explanation of Computed Tomography (CT) Rotations
Due to the increased number of exams and procedures that are being performed in the Computed Tomography (CT) Department, it has become a requirement for student radiographers to be educated in the principles related to computed tomography. The purpose of rotating the student radiographer through the CT Department is for him/her to acquire the understanding and experience of the capabilities and functions that are pertinent to a CT scanner and also the exams that are performed using this modality.

The student radiographer will rotate through the CT Department a total of 8 weeks during the 4th semester of the program. The 8 weeks are divided into (4) 2 consecutive week rotations. Each student will be required to complete the following minimum number of patient exams:
- Head- 5 patient exams
- Neck- 3 patient exams
- Chest- 12 patient exams (4 must be with contrast)
- Abdomen/Pelvis- 12 patient exams (4 must be with contrast)

Prior to rotating through the CT Department, the student radiographer must successfully pass the following courses with an 80% or better: Introduction to Digital Imaging Modalities, Cross Sectional Anatomy and Pharmacology and Venipuncture.

It is during the Introduction to Digital Imaging Modalities course that the student will be instructed on, but is not limited to:
- The components of the CT imaging system
- The CT computer data processing steps
- Common controls found on the CT operator console

It is during the Cross Sectional Anatomy course that the student will be instructed on, but is not limited to:
- Being able to identify anatomy in the axial, sagittal and coronal projections of the: Brain and spinal cord, chest/thorax, abdomen and pelvis, upper and lower extremities, circulatory system along with advanced imaging sequences.

It is during the Pharmacology and Venipuncture course that the student will be instructed on, but is not limited to:
- Review from the Patient Care course and provide more in-depth discussion of the pharmacology of iodinated contrast media.
- Review from the Patient Care course and provide more in-depth discussion of adverse reactions to iodinated contrast media along with the various treatment options.
- Instruct on the process of performing venipuncture.

For a study to be counted towards the required number of patient exams, the student radiographer must have a Computed Tomography Clinical Competency Form, in the Clinical Handbook, filled out by a CT technologist. The Computed Tomography Clinical Competency Form, which is turned in to the Clinical Coordinator after it has been filled out, will be recorded on the Master Clinical Record. **After having turned in the required number of patient exams,**
exams, the student radiographer will still be performing CT exams while under direct supervision of a CT technologist.

It is also during the rotations through the CT Department that the student radiographer will work on completing their venipuncture clinical competencies. See the Venipuncture Clinical Competency Form.

Venipuncture/Medication Administration Policy

Venipuncture is considered to be within the Scope of Practice for Radiologic Technologists. In addition, competency in venipuncture is required by the American Registry of Radiologic Technologists (ARRT) in order for candidates to be eligible to sit for the certification examination in radiography. In order to ensure they are prepared to perform this function as a registered technologist, radiologic technology students must be provided with education and experience in venipuncture prior to completion of the program. This competency is particularly important if the graduate is to be practicing in a department or an environment where there are no radiology nurses available.

Policy

All venipuncture performed by students enrolled in the School of Radiologic Technology will be under the direct supervision of a Registered Nurse or a registered radiologic technologist. The only type of medication students will be allowed to administer is contrast media. The administration of contrast is allowed only under direct supervision. All other types of medications will be administered only by a Registered Nurse or an appropriately credentialed registered radiologic technologist performing within their scope of practice. Students that perform venipuncture or the administration of contrast agents on patients without direct supervision of a Registered Nurse or an appropriately credentialed registered radiologic technologist will be subject to disciplinary measures up to and including dismissal from the program.

Process & Procedure

Prior to performing the administration of contrast agents, radiologic technology students must successfully pass the Pharmacology and Drug Administration unit with a grade of 80% or better. It is in this unit that the student will be instructed of, but is not limited to:

- Types of contrast agents
- Systemic effects of contrast administration on the body
- Categories of allergic reactions to contrast agents and the actions that should be performed by a radiologic technologist if such a reaction should occur.
Once the student has successfully completed the unit, the student will be allowed to administer contrast under direct supervision of a Registered Nurse or an appropriately credentialed registered radiologic technologist.

The proper techniques that are necessary for performing venipuncture will also be taught during the Pharmacology and Drug Administration unit. Prior to performing venipuncture on patients, radiologic technology students must successfully complete didactic and laboratory education and training in venipuncture procedures, which includes, but is not limited to:

- Site preparation
- Sterile technique
- Selection of an appropriate vein for needle insertion
- Proper use of venipuncture equipment
- Practicing proper venipuncture technique on a mannequin in the classroom setting.
- Demonstration of competency by successfully performing venipuncture on a mannequin and/or another radiologic technology student in the classroom setting for the instructor. This demonstration of competency will be recorded by the Clinical Coordinator on the student’s Master Clinical Record.

Upon successful demonstration of competency has occurred in the classroom setting, radiologic technology students will be required to demonstrate competency in the clinical setting by successfully performing venipuncture on 10 patients while under direct supervision. The student will be able to obtain the required number of competencies while rotating through the Computed Tomography Department or the IVU suite during the final two semesters of the program. It is the supervising radiologic technologist’s discretion whether a particular patient is appropriate for the student to attempt venipuncture on. After having turned in the required 10 competencies to the Clinical Coordinator, which will be recorded on the Master Clinical Record, the student will continue to be allowed to perform venipuncture on patients while under direct supervision of a Registered Nurse or an appropriately credentialed registered radiologic technologist.

Revised 7/07, Reviewed 2/14, 7/15

Explanation of Elective Rotations
Our curriculum requires us to provide you with the opportunity for observation in areas outside of your normal scheduled rotations. During the Spring II semester is your opportunity to schedule your own clinical hours- there are not any scheduled classes for this period.

You have 3 different opportunities available to you in regards to your scheduling:
1. You may schedule yourself for additional rotations through areas/modalities that you are normally assigned to if you feel you need additional experience in those areas.

For example: Surgery (at any site)
Diagnostic (at any site)
Fluoroscopy/IVU (at any site)
CT, MRI, etc. (at any site)
PM or nightshift

* Hysterosalpingography exams are prohibited

2. You may also choose to observe areas/modalities that you are not normally scheduled for:

For example: Radiation therapy (MMC or St. E)
Ultrasound (at any site)
Nuclear medicine (at any site)
Mammography

* Mammography- any student that requests to observe in the area of mammography must follow the guidelines stated in the Mammography Clinical Rotation Observational Experience Policy found in the Radiologic Technology Student Handbook.

3. You may choose to observe in the medical imaging department at locations other than the program assigned rotations (hospitals/clinics/departments in other cities, states, or countries.)

If you decide on this option, it is YOUR responsibility to find a contact person at that site and complete all requirements established by the facility to observe in the medical imaging area. The Clinical Coordinator will mail a letter asking for specific dates of your visit and to inform them of the guidelines that you have.

These locations will need to contact me to give permission order for you to observe there. The Clinical Coordinator reserves the right to prevent you from observing at a location if the site requires Marian University to enter a formal written agreement in order to allow you to be there.

Note: attending any sites that are outside the sites that you normally perform your clinical rotations will be observational only. While observing at any outside location, Marian University and the Radiologic Technology Program are not liable/responsible for you.
With any option that you choose, you will be required to present a calendar that specifies where you wish to rotate.

A checklist will be signed by the technologist that you worked/observed with each day of electives. This includes the areas/modalities that you normally rotate through.

**Radiologist Reading Room Rotation Objectives**

Your Objectives for this rotation are to:
1. Observe during the interpretation of the various imaging modalities done in this department.
2. Listen carefully to the diagnosis made from the images.
3. Note terminology that you are not familiar with.
4. Consider, from the radiologists point of view, how good and poor quality images affect diagnosis.
5. Question the radiologist on what you do not understand.

**A few words on etiquette**

Some of the radiologists will be very receptive of your presence and others may be...less receptive. You are not assigned to any one radiologist. If the person you are observing is having a bad day, simply walk away and find someone else. Be aware of their phone calls and conversations, which may become personal, and give them their privacy just as you would if this were not a rotation. A good approach would be to tell them at the beginning of the week what you are doing and give them the chance to voice any objections or expectations they may have.

**Clinical Instructor General Responsibilities:**

Each clinical site has a designated Clinical Instructor. A Clinical Instructor is an advocate for the students and liaison between the facility and the faculty of the Radiologic Technology Program. The list below is a description of the role of the Clinical Instructor.

1. Provide a non-threatening/easy learning/enjoyable experience for the students at your clinical site.
2. Be responsible for reporting student absences/tardiness to the Clinical Coordinator or Program Director.
3. Be responsible for orientating new students to the clinical site. Complete the orientation Checklist with each student and send to Clinical Coordinator.
4. Maintain authority as the student’s supervisor while he/she is assigned to the clinical site.
5. Provide direct and indirect supervision of students regarding clinical exams.
6. Will be responsible for performing majority of positioning unit checklist with the students.
7. Will assist the student with radiograph critique/evaluation of the exams the student has performed.
8. Coordinate student’s clinical experience and placement within clinical site to match students learned clinical experience.
9. Report to the Program any infraction of the clinical site/program’s policies and procedures [for example, pulling of students from assigned area to fill in at understaffed (ie registered technologist) clinical areas.]
10. Complete a Competency Evaluation for each student rotating to the clinical site.
11. Once a month complete a RAD314 Practicum I Progress Report on each student assigned at the “Home-sites” (hospitals).

**Daily responsibilities:**

1. Check in with students at their various clinical rotations throughout the day, especially at your earliest convenience in the a.m., to see if there are any issues/problems that require your assistance. This is especially important with rotating students at your site.
2. Reassign students if their assigned clinical rotation is not busy. Be sure, if possible, that all clinical rotations that are busy each day have a student in that area based on the student’s position within the program.
3. Make sure a student is involved/performing an exam that is not ordered very frequently ie. IVU, BE, etc.
4. Make sure, if possible, that a student is involved with all exams that are being performed throughout the day based on the student’s position within the program.
5. Be involved with the students as much as possible – instruct/assist the student!!! You are an ally to the student!!!
6. **Very important:** while working with the students throughout their time in the program, you should have the attitude/mindset that, due to your assistance/instruction each student will graduate as a technologist that you would want to work with each day!!!

**Daily suggestions:**

1. Prior to 1st year students starting surgery rotations at your clinical site, take them to the OR to show them around including where surgical scrubs, C-arms, portable machines, etc. are located.
2. If students are currently involved in a positioning unit, have the students practice in a diagnostic room with your assistance if there are not any patients.
3. Have “spot tests” by quizzing students on exposure techniques for various projections.
Weekly responsibilities:

1. If possible, once a week, with all students assigned to your site, perform radiograph critique with students – discuss radiograph quality (positioning, CR angle, etc.) along with reviewing basic exposure technique that would be used for each particular projection.

2. If possible, at completion of the week, assemble the students together to see if there were any issues, problems, etc. that arose during the week that need to be addressed/solved.

Yearly Responsibilities:

The Clinical Instructor will be a member of the Program’s Advisory Committee and will attend the yearly meeting that is held at Mercy Medical Center in May/June.

The Clinical Instructor will attend the yearly meeting for Clinical Instructors that is held at Mercy Medical Center in July/August.

The Clinical Instructor will participate in the student’s clinical evaluations that occur at the completion of the following semesters: Fall I, Winterim I, Summer I, Winterim II, and Spring II.

Reviewed 7/14; Revised 7/15, 7/16
Marian University Radiologic Technology Program
RESPIRATORY SYSTEM, ABDOMEN AND BONY THORAX CHECK LIST

Student Name: ___________________________

1. PA chest (upright) ---------------- ____
2. Lateral chest (upright) ----------- ____
3. AP Chest Wheelchair-------------- ____
4. Lateral Chest Wheelchair------- ____
5. AP Chest Cart--------------------- ____
6. Lateral Chest Cart---------------- ____
7. AP Supine Chest----------------- ____
8. PA Oblique Chest----------------____
9. AP Oblique Chest----------------____
10. Lordotic Chest------------------ ____
11. Lateral Decubitus Chest------- ____
12. Dorsal Decubitus Chest-------- ____
13. KUB----------------------------- ____
14. Left Lateral Decubitus Abd. --- ____
15. Lateral Abd. ------------------- ____
16. Dorsal Decub. Abdomen -------- ____
17. Upright Abdomen---------------- ____
18. PA Ribs-------------------------- ____
19. AP Ribs-------------------------- ____
20. PA Oblique Ribs------------------ ____
21. AP Oblique Ribs------------------ ____
22. RAO Sternum--------------------- ____
23. Lateral Sternum----------------- ____

Completion of this checklist indicates the student has competently performed the listed radiographic positions in a simulated demonstration. Evaluation criteria are based on demonstrated knowledge of:

- position of the part, obliquity of part.
- angle and direction of the CR.
- centering of part and tube to image receptor.
- size and type of image receptor.
- exposure technique (compatible with SID, image receptor, grid, part and part thickness)
- use of image receptor to its best advantage.
- placement of markers.
- use of patient protection.

Date ____________________ Evaluated by: _____________________________
Marian University Radiologic Technology Program

UPPER EXTREMITIES CHECK LIST

Student Name:___________________________________

1. PA Hand---------------------------------------------------  ____
2. PA Obl. Hand---------------------------------------------  ____
3. Lat. Hand--------------------------------------------------  ____
4. Fingers or Thumb(PA, Lat. and Obl.)------------------  ____
5. PA Wrist----------------------------------------------------  ____
6. PA Obl. Wrist---------------------------------------------  ____
7. Lat. Wrist--------------------------------------------------  ____
8. Carpal Tunnel (Gaynor Hart)--------------------------  ____
9. Navicular (ulnar deviation)-----------------------------  ____
10. AP Forearm-----------------------------------------------  ____
11. Lat. Forearm----------------------------------------------  ____
12. AP Elbow----------------------------------------------------  ____
13. Medial Obl. Elbow--------------------------------------  ____
14. Lateral Obl. Elbow--------------------------------------  ____
15. Lateral Elbow--------------------------------------------  ____
16. Trauma Elbow (Partial flexion)(2 projections)--   ____
17. Trauma Elbow (Acute flexion)(2 projections)-  ____
18. Trauma Elbow Obliques (Coyle Method)(2 projections) ____
19. Radial Head Series (4 projections)------------------  ____
20. AP Humerus---------------------------------------------  ____
21. Lat. Humerus-------------------------------------------  ____
22. Transthoracic Upper Shoulder/Humerus------  ____
23. Lateral Lower Humerus to complete #22-----  ____
24. AP Shoulder--------------------------------------------  ____
25. Obl. Shoulder (Glenoid fossa/Grashey Method)-____
26. Scapular Y (Trauma Shoulder)------------------------  ____
27. Axial Shoulder (Lawrence Method)---------------------  ____
28. AP Scapula---------------------------------------------  ____
29. Lat. Scapula--------------------------------------------  ____
30. A.C. Joints---------------------------------------------  ____
31. AP Clavicle--------------------------------------------  ____
32. Axial Clavicle-----------------------------------------  ____

Completion of this checklist indicates the student has competently performed the listed radiographic positions in a simulated demonstration. Evaluation criteria is based on demonstrated knowledge of:
- position of the part, obliquity of part. -use of patient protection.
- angle and direction of the CR. -placement of markers
- centering of part and tube to image receptor.
- size and type of image receptor.
- exposure technique (compatible with SID, image receptor, grid, part and part thickness)
- use of image receptor to its best advantage.

Date:_________________  Completed By:_____________________

59
Marian University Radiologic Technology Program
LOWER EXTREMITY CHECK LIST

Name: __________________________

1. Dorsoplantar foot (AP)----------------- ___
2. Oblique foot---------------------------- ___
3. Lateral foot--------------------------- ___
4. Toes (AP, Lateral and Oblique)------- ___
5. AP ankle----------------------------- ___
6. Oblique ankle (45° medial oblique)-- ___
7. Ankle Mortise (15-20° medial oblique)-- ___
8. Lateral ankle------------------------- ___
9. Os calcis, axial---------------------- ___
10. Os calcis, lateral-------------------- ___
11. AP lower leg------------------------ ___
12. Lateral lower leg-------------------- ___
13. AP knee----------------------------- ___
14. Lateral knee------------------------- ___
15. Medial oblique knee------------------ ___
16. Lateral oblique knee----------------- ___
17. Beclere axial knee------------------- ___
18. Camp Coventry axial knee------------ ___
19. Homblad knee------------------------ ___
20. PA patella-------------------------- ___
21. Lateral patella---------------------- ___
22. Settegast patella--------------------- ___
23. Hughston patella-------------------- ___
24. AP femur (2 projections)------------ ___
25. Lateral femur (2 projections)------ ___
26. AP pelvis--------------------------- ___
27. Pelvic Inlet/Outlet(2 projections)-- ___
28. AP hip------------------------------- ___
29. Frog lateral hip--------------------- ___
30. Axiolateral (trauma) hip------------- ___

Completion of this checklist indicates the student has competently performed the listed radiographic positions in a simulated demonstration.
Evaluation criteria is based on demonstrated knowledge of:
- position of the part, obliquity of part.
- angle and direction of the CR.
- centering of part and tube to image receptor.
- size and type of image receptor.
- exposure technique (compatible with SID, image receptor, grid, part and part thickness).
- use of image receptor to its best advantage.
- placement of markers.
- use of patient protection.

Date: _______________ Completed by:__________________________________________
Marian University Radiologic Technology Program
Digestive Contrast Studies Checklist

Student Name:_____________________

1. Esophagus AP…………………..   _____
2. "     PA…………………………    _____
3. "     Lateral…………………….   _____
4. "     Oblique – RAO……………   _____
5. “ Oblique – LPO……………   _____
6. Stomach AP…………………….    _____
7. " PA………………………………
8. "     Lateral…………………….   _____
9. "     Oblique – RAO……………   _____
10. “ Oblique – LPO……………   _____
11. BA Enema PA Obliques…………   _____
12. BA Enema AP Obliques…………
13. "     Lateral (Rectum)………..  _____
14. "     Lateral Decubitus…………
15. "     Ventral Decubitus…………
16. "     AP Axial (Sigmoid)………
17. “     PA Axial (Sigmoid)………
18. “     AP…………………………..    _____
19. “     PA…………………………

Completion of this checklist indicates the student has competently performed the listed radiographic positions in a simulated demonstration. Evaluation criteria is based on demonstrated knowledge of:

- position of the part, obliquity of part.
- angle and direction of the CR.
- centering of part and tube to image receptor.
- size and type of image receptor.
- exposure technique (compatible with SID, image receptor, grid, part and part thickness)
- use of image receptor to its best advantage.
- placement of markers.
- use of patient protection.

Date: ________________________Completed by: _____________________
Marian University
Radiologic Technology Program
Urinary System Contrast Studies Checklist

Student Name: ______________________________

1. Upright KUB (post void)……   _____
2. Oblique KUB.....................   _____
3. 10 x 12 coned down of kidneys.......  _____
4. AP Bladder.......................   _____
5. Oblique Bladder.................   _____
6. Simulated placement of compression   _____

Completion of this checklist indicates the student has competently performed the listed radiographic positions in a simulated demonstration. Evaluation criteria is based on demonstrated knowledge of:

- position of the part, obliquity of part.
- angle and direction of the CR.
- centering of part and tube to image receptor.
- size and type of image receptor.
- exposure technique (compatible with SID, image receptor, grid, part and part thickness)
- use of image receptor to its best advantage.
- placement of markers.
- use of patient protection.

Date: _______________________ Completed by: _______________________

62
Marian University
Radiologic Technology Program
SPINES CHECKLIST

Student Name: ________________________

1. AP Axial cervical-------------     ____
2. Lateral cervical-------------     ____
3. Cross-table Lateral Cervical-  ____
4. Open Mouth (Odontoid)------    ____
5. Fuchs Method (Odontoid)-----    ____
6. AP Oblique cervical-----------  ____
7. PA Oblique cervical----------    ____
8. Cervical Flexion-------------    ____
9. Cervical Extension-----------  ____
10. AP Soft Tissue Neck----------  ____
11. Lateral Soft Tissue Neck-----  ____
12. AP thoracic------------------   ____
13. Lateral thoracic-------------  ____
14. Swimmers---------------------  ____
15. AP Oblique thoracic---------   ____
16. PA Oblique thoracic---------   ____
17. AP lumbar---------------------  ____
18. Lateral lumbar---------------  ____
19. AP L5-S1/SI joints------------  ____
20. Lateral L5-S1----------------  ____
21. AP Oblique lumbar------------  ____
22. PA Oblique lumbar------------  ____
23. Lumbar Flexion---------------  ____
24. Lumbar Extension-------------  ____
25. AP sacrum---------------------  ____
26. Lateral sacrum---------------  ____
27. AP coccyx---------------------  ____
28. Lateral coccyx---------------  ____
29. Oblique SI Joints------------  ____

Completion of this checklist indicates the student has competently performed the listed radiographic positions in a simulated demonstration. Evaluation criteria are based on demonstrated knowledge of:
- position of the part, obliquity of part.
- angle and direction of the CR.
- centering of part and tube to image receptor.
- size and type of image receptor.
- exposure technique (compatible with SID, image receptor, grid, part and part thickness)
- use of image receptor to its best advantage.
- placement of markers.
- use of patient protection.

Date: __________________________    Completed By: __________________________
Marian University Radiologic Technology Program
Competency Evaluation for Transportation

Student Name:_________________________________

Yes No

( ) ( ) 1. Report on time and be accountable for your presence.
( ) ( ) 2. Learn the layout of the hospital.
( ) ( ) 3. Assist patients to and from wheelchairs, stretchers, and beds.
( ) ( ) 4. Transport patients to and from the Imaging Department.
( ) ( ) 5. Tend to the patient’s needs while they are in your care.
( ) ( ) 6. Safely transfer patients using proper body mechanics (ie bed to cart, cart to exam table, bed to wheelchair, wheelchair to exam table.)
( ) ( ) 7. Ensure a patient’s personal items are not taken to the Imaging department or that they are returned to the patient.
( ) ( ) 8. Follow protocol for checking patients in and out on the patient floor’s log.
( ) ( ) 9. Profile the patients in the computer prior to bringing them to the Dept.
( ) ( ) 10. Check-in the patient in the computer when arriving to the Imaging Dept.
( ) ( ) 11. Store carts and wheelchairs properly.
( ) ( ) 12. Bring the patient’s chart to the Imaging Department when needed.
( ) ( ) 13. Communicate with the nursing floor regarding the patient’s condition or messages from the Imaging Department.
( ) ( ) 14. Describe the steps to be taken if a patient should seize, choke, or code during transport.
( ) ( ) 15. Properly and safely handle the equipment that must be transported with the patient, such as:
   a. IV’s
   b. oxygen tanks
   c. pleuravacs
   d. Foley catheter bags
   e. medication dispensers.
   f. telemetry
   g. NG tubes

Comments:____________________________________________________________
______________________________________________________________________
______________________________________________________________________

Date:____________________ Evaluated By:_________________________

Reviewed 6/14, 7/15, 7/16
Marian University Radiologic Technology Program

Competency Evaluation for Radiographic Room (Equipment) Objectives

Student Name:___________________________________

Operators Panel

Yes No

( )  1. Energize the x-ray units.
( )  2. Set warm up exposures and warm up tube.
( )  3. Select large or small focal spots.
( )  4. Select the upright bucky.
( )  5. Select the table bucky.
( )  6. Select table top exposures.
( )  7. Operate the kVp and mAs selectors.
( )  8. Select the AEC chamber for the table, C-arm, & upright board.
( )  9. Select an AEC chamber by part.
( ) 10. Explain the meaning of the acronym AEC.
( ) 11. Control AEC density
( ) 12. Select a pre-programmed technique
( ) 13. Alter pre-programmed techniques by body habitus
( ) 14. Alter the pre-programmed kVp or mAs manually
( ) 15. Set manual technique independent of programming
( ) 16. Set the AEC independent of programming
( ) 17. Control the exposure time (shortest possible, average longest possible)

Table

( )  1. Operate the table tilt (if applicable)
( )  2. Operate the moving tabletop.
( )  3. Orient the patient on the table correctly.
( )  4. Operate the bucky tray.
( )  5. Raise and lower the table top from all locations

Tube

( )  1. Manipulate the x-ray tube:
   ( )       A. vertically
   ( )       B. longitudinally
   ( )       C. transversely
   ( )       D. angle the CR
   ( )       E. set up for a horizontal beam projection
   ( )       F. rotate the collimator
   ( )       G. rotate the tube
( )  2. Collimate manually and automatically.
( )  3. Center the tube to the table bucky and upright bucky using the detent.
( )  4. Identify the methods for measuring the source image distance (SID).
Locate where are these items found, what are they are used for and demonstrate their use if applicable.

( ) cylinder cones               ( ) rolling shields

( ) calipers                     ( ) weights

( ) positioning sponges           ( ) IV poles

( ) restraining straps            ( ) pigg-o-stat

( ) table pad                     ( ) slip or tape on grids

( ) pelvimeter                    ( ) emesis basins

( ) lead gloves                   ( ) linen

( ) lead aprons                   ( ) O2

( ) sphygmomanometer             ( ) Suction

( ) stethoscope

 Comments:________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

NOTE: This checklist is due at the completion of the Respiratory/Abdomen/Thorax Positioning Unit.

Date:________________Completed by:_______________________________________________

Clinical Site:  ( ) SEH    ( ) MMC    ( ) St. Agnes

Revised 5/12, 7/16 Reviewed 2/14, 7/15
Marian University  
Radiologic Technology Program  
Competency Evaluation for Digital Fluoroscopic Room

Student Name:___________________________________

( ) 1. Energize and warm up the x-ray tube.
( ) 2. Operate the power tabletop.
( ) 3. Operate the table tilt.
( ) 4. Install the footboard.
( ) 5. Input the patient information into the computer.
( ) 6. Position the bucky tray for fluoroscopy.
( ) 7. Reset the fluoro timer.
( ) 8. Locate the emergency stop button.
( ) 9. Engage the horizontal stop on the table.
( ) 10. Select fluoroscopic magnification.
( ) 11. Change the video polarity (image reverse).
( ) 12. Park the fluoro tower.
( ) 13. Utilize the various tower locks.
( ) 14. Select a fluoroscopic technique on the operator's console.
( ) 15. Operate the image intensifier in the fluoroscopic mode.
( ) 16. Select the fluoroscopy mode for printing, if applicable.
( ) 17. Expose a spot film.
( ) 18. Utilize the compression device.
( ) 19. Operate the fluoroscopic cones.

Operators Console

( ) 1. Switch from radiographic to fluoroscopic control.
( ) 2. Select kVp and mA for fluoroscopic spot filming.
( ) 3. Select a radiographic technique for GB, UGI, BaE, and Plain films of the abdomen.
( ) 4. Explain the function of the small and large focal spots.
( ) 5. Reset the fluoro timer.
( ) 6. Print an exam, if applicable.
( ) 7. Be able to explain the different post processing functions (label film, pt. ID placement, etc.)

Comments:_______________________________________________________  
_________________________________________________________________  
_________________________________________________________________

Date:_________________ Evaluated By:_______________________________

Clinical Site: ( ) SEH       ( ) MMC       ( ) St. Agnes

- Equipment varies from room to room. This checklist is a guide for identifying common functions, it is not applicable for every function of the equipment in every room.

Revised 5/12, 7/16; Reviewed 2/14,7/15
Student Name:________________________

Yes No
( ) ( ) 1. Energize the x-ray generator.
( ) ( ) 2. Select a radiographic/tomographic technique for an IVU exam.
( ) ( ) 3. Raise the x-ray tube to the correct SID.
( ) ( ) 4. Select the radiographic mode of filming.
( ) ( ) 5. Select the tomographic mode of filming.
( ) ( ) 6. Select a designated tomographic cut level.
( ) ( ) 7. Select a designated tomographic cut thickness.
( ) ( ) 8. Engage/disengage the tomographic connecting rod.
( ) ( ) 9. Identify the thinnest and thickest tomographic cut angle.
( ) ( ) 10. Operate a floating table top.
( ) ( ) 11. Operate the bucky tray.

Comments:
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Date:___________________ Evaluated By:__________________________

Clinical Site: ( ) SEH ( ) MMC

NOTE: due to St. Agnes Hospital not having a tomographic unit, the St.Agnes students will be required to complete the checklist at one of the other 3 hospitals.

Revised 2/14,7/16; Reviewed 7/2015
Marian University  
Radiologic Technology Program  
Competency Evaluation for Fuji/Konica CR Workstation

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Task Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Select correct patient and accession number/s.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Select multiple exams for the patient.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Start exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Demonstrate manually entering patient demographics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Demonstrate how to change modality name. (for example, fluoroscopy vs. CR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Demonstrate how to finish an exam (send to PACS.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Verify that images are saved in PACS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Print images on a laser printer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Suspend an exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. Locate a suspended exam</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Restart a suspended exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Restart finished exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. Add/change projection/s to a current exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15. Locate patient in Delivered tab.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16. Demonstrate how to display image in anatomical position aka “flip the image.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>17. Manually annotate the image.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>18. Add preprogrammed annotation to the image.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>19. Verify correct exposure index number for each image.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20. Demonstrate how to window/level the image.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>22. Demonstrate how to &quot;zoom&quot; and “pan” image.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>23. Scan imaging plate with correct patient identification, body part and position.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>24. Demonstrate how to erase imaging plate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>25. Explain the difference between primary and secondary erasure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26. Understand when to erase the imaging plate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>27. Explain various error/s for image plate reader.</td>
<td></td>
</tr>
</tbody>
</table>

Comments:_______________________________________________________  
________________________________________________________________  
________________________________________________________________

Date:____________________   Evaluated by:________________

Clinical site: ( ) SEH     ( ) MMC     ( ) St. Agnes
Revised 6/11, 7/16; Reviewed 2/14, 7/2015
Marian University
Radiologic Technology Program
Competency Evaluation for Orthopantomograph Unit

Yes/No

Student Name__________________________

( ) ( ) 1. Energize the Orthopantomograph unit.

( ) ( ) 2. Load and unload the cassette.

( ) ( ) 3. Process the film.

( ) ( ) 4. Place the cassette on the unit

( ) ( ) 5. Operate the unit in the test mode.

( ) ( ) 6. Utilize the bite block and chin guide

( ) ( ) 7. Utilize the light source positioner and mirror

( ) ( ) 8. Protect the patient and operator from unnecessary exposure.

( ) ( ) 9. Make an exposure.

( ) ( ) 10. Demonstrate positioning for the:

( ) ( ) A. Mandible

( ) ( ) B. TMJ's

( ) ( ) 11. Deenergize the unit

Equipment varies from room to room. This checklist is a guide for identifying common functions, it is not applicable for every function of the equipment in every room.

Date:_______________    Evaluated by:_________________

Clinical Site: ( ) SEH  ( ) MMC  ( ) St. Agnes

Revised 5/12, Reviewed 2/14, 7/15, 7/16
Marian University Radiologic Technology Program

Competency Evaluation for Portable Radiographic Equipment

Yes No

( ) ( ) 1. Turn Key switch on/off.
( ) ( ) 2. Identify battery status display messages
   a.   testing complete
( ) ( ) 3. Park telescoping arm for driving the unit
( ) ( ) 4. Operate the power drive
( ) ( ) 5. Identify the self-stopping bumper
( ) ( ) 6. Activate the brake
( ) ( ) 7. Drive in forward and reverse
( ) ( ) 8. Respond to drive motor failure (brake release)
( ) ( ) 9. Release collimator from the park/transport positions
( ) ( ) 10. Raise the arm on the vertical column
( ) ( ) 11. Extend the retractable arm
( ) ( ) 12. Pivot on axis with telescope arm extended
( ) ( ) 13. Rotate the tube head through its range of positions.
( ) ( ) 14. Activate the field light and restrict the beam (collimation)
( ) ( ) 15. Measure SID
( ) ( ) 16. Rotate the collimator head
( ) ( ) 17. Increase and Decrease kVp and mAs
( ) ( ) 18. Make a radiographic exposure by:
   a.   engaging the hand switch to prep position (2.5 sec/ready for x-ray)
   b.   engaging switch to expose position (no message)
   c.   recognize 30 second prep limit
( ) ( ) 19. Prepare the unit to recharge battery:
   a.   key switch position
   b.   location of unit during charging
( ) ( ) 20. Use of ACE Paddle (if applicable):
   a.   selection of technique setting for image receptor.
   b.   selection of proper AEC chamber
   c.   adjustment of density control.
   d.   proper placement of paddles, (CR & KUB)
   e.   location of mAs readout

Comments:_______________________________________________________
________________________________________________________________
________________________________________________________________

Date:____________     Evaluated By:___________________

Clinical Site: ( ) SEH ( ) MMC ( ) St. Agnes

Revised 5/12,7/16; Reviewed 6/13, 7/15
Marian University
Radiologic Technology Program
Competency Evaluation for Mobile-C-arm

Yes No

Student Name: ______________________

( ) ( ) 1. Engage and release the foot locking brake of the base (of unit.)
( ) ( ) 2. Adjust the steering handle for direction (parallel to handle.)
   a. click stop for transverse movement
( ) ( ) 3. Lock and unlock the brake release of the C-arm
( ) ( ) 4. Manipulate the C-arm:
   a. raise and lower the C-arm at the column stand (up & down)
   b. rotate the vertical plane (side to side)
   c. adjust the horizontal travel (back & forth)
   d. swivel on the column stand (side to side 90 degrees)
   e. slide the C-arm in an orbital motion (front to back)
( ) ( ) 5. Lock into transport position.
( ) ( ) 6. Sterile drape the C-arm.
( ) ( ) 7. Identify the proper connections from the C-arm to the monitor and
   wall outlet.
( ) ( ) 8. Correctly enter the patient ID into the system.
( ) ( ) 9. Correctly open and adjust the collimators on the c-arm.
( ) ( ) 10. Identify the functions of the operating controls and indicators.
( ) ( ) 11. Correctly adjust the annotation of the image for proper viewing of
   the image on the monitor during fluoroscopy.
( ) ( ) 12. Print saved images on films/send to PACS for permanent record
   keeping.
( ) ( ) 13. The ability to correctly setup the c-arm for cine runs and DSA
   image acquisition.

Comments: _______________________________________________________

________________________________________________________________

Date:__________________ Evaluated By:_______________________

Clinical Site: ( ) SEH ( ) MMC ( ) St. Agnes

Revised 5/12,7/16; Reviewed 7/14, 7/15
Marian University Radiologic Technology Program
Clinical Competency Form

Student Name:___________________________________     Date:__________________
Examination:____________________________________________________     Attempt _____ of _____.
( ) Adult  ( ) Pediatric  ( ) Geriatric
( ) Surgery  ( ) Portable  ( ) ER
( ) Routine  ( ) Non Routine/Trauma)(requires modifications in CR angulation, positioning of the part, etc. by the student)

1.) Room Preparation  
   0 Points  Student fails to set up room prior to patient entering.
   ___ point

   1 Point  Student sets up the room properly prior to the patient entering the room.

2.) Patient Interview  
   0 Points  Student fails to identify as correct patient, does not ask for patient history, does not explain exam to patient, fails to maintain eye contact. Fails to document patient history on requisition.

   1-2 Points  Student identifies as correct patient, acquires limited patient history, provides limited explanation of exam, fails to modify patient history/explanation of exam based on patient age or mental capabilities. Writes limited/vague patient history on requisition. Intermittent eye contact.

   ___ point/s

   3 Points  Student maintains good eye contact, gains complete patient history, provides thorough explanation of exam, provides patient opportunity to ask any questions they may have, if necessary, modifies acquiring of patient history and explanation of exam based on patient age or mental capabilities. Difficult to suggest improvement. Writes thorough and concise patient history on requisition.

3.) Accuracy of Positioning  
   0 Points  Student fails to correctly align xray tube and bucky tray, inaccurate centering of anatomy on all projections requiring all radiographs to be repeated, lack of knowledge by student requires RTR to take over exam. Fails to use lead markers on all projections. Fails to use correct breathing technique for all projections.

   1 – 2 Points  Student requires some assistance by RTR (for example, student needs reminding on amount of CR angulation, to use R/L markers) but student does demonstrate knowledge/understanding of the exam. Exam takes substantial amount of time to complete. Uses lead markers and correct breathing technique on some projections.

   ___ point/s

   3-4 Points  Student requires minimal assistance from the RTR. Performs required projections but the order of the projections may not be convenient for the patient’s condition. Time to complete exam is average. Uses lead markers and correct breathing technique on all projections.

   5 Points  Student requires no assistance from the RTR. Completes exam in timely manner. Positions the patient accurately while causing the least amount of discomfort/pain. Uses lead markers and correct breathing technique. Difficult for RTR to suggest any improvement.
4.) Patient Assessment (ability to adapt to non-routine situations, ability to adjust exam for patient condition)

NA  Routine exam. Exam required no alternative positioning methods/changes in exam is performed.

0 Points  Student is unable to determine alternative positioning strategies to achieve required radiographs. RTR had to take over and complete the exam.

1-2 Points  Student was able to vocalize alternative positioning strategies but requires assistance with physically performing the alternative strategies. Takes into account the body habitus/patient limitations.

3 Points  Student performs well in non-routine situations. Was able to demonstrate alternative positioning strategies while maintaining the proper tube/part/image receptor relationship. Required no assistance from the RTR in determining how the exam should be performed.

5.) Radiation Protection

0 Points  Fails to inquire about possibility of pregnancy, fails to shield patient and collimate (when appropriate.)

1-2 Points  Inquires about possibility of pregnancy, occasionally needs to be reminded about shielding of patient (when appropriate), occasionally attempts to provide limited collimation (when appropriate.)

3 Points  Inquires about possibility of pregnancy, always remembers to shield (when appropriate), collimates the optimal amount without the clipping of required anatomy (when appropriate). Difficult to suggest improvement.

6.) Quality of Radiographs/Image Evaluation (review of proper positioning and anatomy demonstrated)

0 Points  All projections are un-diagnostic OR are diagnostic but required significant assistance from supervising technologist. Unable to identify determine whether correct anatomy is properly demonstrated. Unable to determine how a radiograph should be repeated if necessary.

1-2 Points  If applicable, all radiographs are un-diagnostic – repeat radiographs are necessary and the student requires some assistance in determining how the radiograph should be repeated.

3 -4 Points  Two repeats are necessary but the student is able to determine how the radiographs should be repeated. Suggestions/criticisms are necessary for future exams.

5-6 Points  All projections are of good diagnostic quality, only possible to make minor criticisms/suggestions on how radiograph could be improved for future reference. Only one repeat is necessary.

7-8 Points  All projections are near-perfect, difficult to provide any assistance on how the radiograph/s could be improved.
7.) Exposure Technique Selection

**0 Points**  Student was unable to select manual technical factors, is unable to vocalize a basic/average/starting technique for the required projection/s. When applicable, student fails to change AEC settings more than 1 time throughout the exam.

**1 Point**  Student is able to vocalize a basic/average/starting manual technique but is unable to determine how the exposure technique needs to be adjusted if the radiograph needs to be repeated or if the patient does not require the routine exposure technique to be utilized. When applicable, student fails to change AEC settings only once throughout the exam.

___ point/s

**2-3 Points**  Student needs assistance, on occasion, on determining how the manual exposure technique needs to be adjusted if the radiograph needs to be repeated or if the patient does not require the routine exposure technique to be utilized. When applicable, student utilizes correct AEC settings throughout the exam.

**4 Points**  Student either selects the appropriate manual exposure technique which results in the radiograph not having to be repeated OR if the radiograph needs to be repeated is able to accurately determine which exposure technique should be used. When applicable, student utilizes correct AEC settings throughout the exam. Difficult to suggest improvement.

**NOTE:** the only radiographs that can utilize the AEC chambers are radiographs of the chest, abdomen and lumbar spine – all others require the setting of manual techniques by the student.

**Documentation of S#/Exposure Technique Used:**

<table>
<thead>
<tr>
<th>S#/technique for projection #1:</th>
<th>S#/technique for projection #6:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S#/technique for projection #2:</td>
<td>S#/technique for projection #7:</td>
</tr>
<tr>
<td>S#/technique for projection #3:</td>
<td>S#/technique for projection #8:</td>
</tr>
<tr>
<td>S#/technique for projection #4:</td>
<td>S#/technique for projection #9:</td>
</tr>
<tr>
<td>S#/technique for Projection #5:</td>
<td>S#/technique for projection #10:</td>
</tr>
</tbody>
</table>

_____total number of points obtained.  Comments by technologist:

__________________________________________ R.T.R

Registered Technologist Signature

__________________________________________ R.T.R

Signature of Registered Technologist present during repeat of any radiographs.

This form needs to be given to the technologist **prior** to the beginning of the exam. This Clinical Competency Form is required to be filled out by a registered technologist. To be recorded as a Clinical Competency requirement, the student must obtain a minimum of 19 points (Simulated exams must score 15 points) on a routine exam or 21 points (Simulated exams must score 18 points) on a non-routine exam to be considered competent when performing the patient examination. Failure to obtain the minimum number of points will result in the observing technologist retaining the Clinical Competency Form and turning it into the Clinical Coordinator to further assist in monitoring the student’s clinical performance.

Revised 7/15,7/16; Reviewed 2/14
Marian University Radiologic Technology Program  
Fluoroscopic Clinical Competency Form

Student Name: __________________________ Date: ________________ Attempt ______ of ______

1.) Room/Fluoroscopic Equipment Preparation and Post Examination Required Responsibilities
   
   0 Points  Student fails to set up room prior to patient entering and/or fails to make sure the fluoroscopic equipment is properly setup and functional OR student fails to perform the required post exam responsibilities.
   
   1 Point  Student sets up the room properly and makes sure the fluoroscopic equipment is properly setup and functional prior to the patient entering the room. Student performs the required post exam responsibilities.

2.) Patient Interview
   
   0 Points  Student fails to identify as correct patient, fails to verify correct exam, fails to introduce self to patient, does not ask for patient history, does not explain exam to patient, fails to maintain eye contact. Fails to document patient history on requisition.
   
   1-2 Points  Student identifies as correct patient and examination, introduces self to the patient, acquires limited patient history, provides limited explanation of exam, fails to modify patient history/explanation of exam based on patient age or mental capabilities. Writes limited/vague patient history on requisition. Intermittent eye contact.
   
   ____ point/s
   
   3 Points  Student maintains good eye contact, gains complete patient history, provides thorough explanation of exam based on patient age or mental capabilities. Difficult to suggest improvement. Writes thorough and concise patient history on requisition.

3.) Accuracy of Positioning
   
   0 Points  Student fails to correctly align xray tube and bucky tray, inaccurate centering of anatomy on all projections requiring all radiographs to be repeated, lack of knowledge by student requires RTR to take over exam. Fails to use lead markers on all projections. Fails to use correct breathing technique for all projections.
   
   1 – 2 Points  Student requires some assistance by RTR (for example, student needs reminding on amount of CR angulation, to use R/L markers) but student does demonstrate knowledge/understanding of the exam. Exam takes substantial amount of time to complete. Uses lead markers and correct breathing technique on some projections.
   
   ____ point/s
   
   3-4 Points  Student requires minimal assistance from the RTR. Performs required projections but the order of the projections may not be convenient for the patient’s condition. Time to complete exam is average. Uses lead markers and correct breathing technique on all projections.
   
   5 Points  Student requires no assistance from the RTR. Completes exam in timely manner. Positions the patient accurately while causing the least amount of discomfort/pain. Uses lead markers and correct breathing technique. Difficult for RTR to suggest any improvement.

4.) Sterile Instruments/Field
   
   NA  Routine exam. Exam required no sterile instruments or field.
   
   ____ NA or 0 Points
   
   ____ point/s
   
   1 Point  Student was able to maintain the sterility of instruments and field.

5.) Assisting of Physician and Patient
   
   0 Points  Student fails to provide the necessary assistance to the physician and/or the patient prior, during and/or after the exam.
   
   ____ point/s
   
   1 Point  Student provides the required and necessary assistance to the radiologist and patient prior, during and after the exam.

6.) Radiation Protection
   
   0 Points  Fails to inquire about possibility of pregnancy, fails to shield patient and collimate (when appropriate.) Student fails practice radiation safety measures to protect themselves.
   
   1-2 Points  Inquires about possibility of pregnancy, occasionally needs to be reminded about shielding of patient (when appropriate), occasionally attempts to provide limited collimation (when appropriate.) Student practices minimum radiation safety measure to protect themselves.
   
   ____ point/s
   
   3 Points  Inquires about possibility of pregnancy, always remembers to shield (when appropriate), collimates the optimal amount without the clipping of required anatomy (when appropriate). Always practices radiation safety measures to protect themselves. Difficult to suggest improvement.
7.) Quality of Radiographs/Image Evaluation (review of proper positioning and anatomy demonstrated)

N/A Applies to exams requiring use of a sterile tray but overhead images were not needed

0 Points All projections are un-diagnostic OR are diagnostic but required significant assistance from supervising technologist. Unable to identify determine whether correct anatomy is properly demonstrated. Unable to determine how a radiograph should be repeated if necessary.

1-2 Points If applicable, all radiographs are un-diagnostic – repeat radiographs are necessary and the student requires some assistance in determining how the radiograph should be repeated.

3-4 Points All projections are of good diagnostic quality, only possible to make minor criticisms/suggestions on how radiograph could be improved for future reference. If applicable, only one repeat is necessary.

5-6 Points All projections are near-perfect, difficult to provide any assistance on how the radiograph/s could be improved.

8.) Exposure Technique Selection

0 Points Student was unable to select manual technical factors, is unable to vocalize a basic/average/starting technique for the required projection/s. When applicable, student fails to change AEC settings more than 1 time throughout the exam.

1 Point Student is able to vocalize a basic/average/starting manual technique but is unable to determine how the exposure technique needs to be adjusted if the radiograph needs to be repeated or if the patient does not require the routine exposure technique to be utilized. When applicable, student fails to change AEC settings only once throughout the exam.

2-3 Points Student needs assistance, on occasion, on determining how the manual exposure technique needs to be adjusted if the radiograph needs to be repeated or if the patient does not require the routine exposure technique to be utilized. When applicable, student utilizes correct AEC settings throughout the exam.

4 Points Student either selects the appropriate manual exposure technique which results in the radiograph not having to be repeated OR if the radiograph needs to be repeated is able to accurately determine which exposure technique should be used. When applicable, student utilizes correct AEC settings throughout the exam. Difficult to suggest improvement.

Documentation of S#/Exposure Technique Used:

S#/technique for projection #1:________________           S#/technique for projection #6:________________
S#/technique for projection #2:________________           S#/technique for projection #7:________________
S#/technique for projection #3:________________           S#/technique for projection #8:________________
S#/technique for projection #4:________________           S#/technique for projection #9:________________
S#/technique for Projection #5:________________         S#/technique for projection #10:________________

_____ total number of points obtained.

Comments by technologist:
_________________________________________________________________________________________________
_________________________________________________________________________________________________
_________________________________________________________________________________________________
_________________________________________________________________________________________________
_________________________________________________________________________________________________

_______________________________________R.T.R
Registered Technologist Signature

_______________________________________R.T.R
Signature of Registered Technologist

This form needs to be given to the technologist prior to the beginning of the fluoroscopic exam. This form is required to be filled out by a registered technologist. To be recorded as a fluoroscopic clinical competency requirement, the student must obtain a minimum of 19 points (joint injections must obtain a minimum of 18) to be considered competent when performing the patient examination. Failure to obtain the minimum number of points will result in the observing technologist retaining the Clinical Competency Form and turning it into the Fluoroscopic Clinical Coordinator to further assist in monitoring the student’s clinical performance.
Marian University
Radiologic Technology Program
C-arm Clinical Competency Form

<table>
<thead>
<tr>
<th>Examination:</th>
<th>Date:</th>
<th>Pain Clinic/Procedure Area</th>
<th>Surgery Dept.</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Correct C-arm Setup/Procedure Prep.</th>
<th></th>
<th>0 points</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
<th>4 points</th>
<th>5 points</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ability to connect C-arm to monitors, enter patient data into imag. equip., verification of correct patient/examination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Sterile Environment</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Wear proper surgical attire including lead apron, awareness of sterile surroundings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>C-arm Equipment Operation</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Ability to properly manipulate/position C-arm while obtaining required projections w/o contaminating surgical staff/equipment/field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Exposure Technique Selection/Displayed Monitor Image Manipulation</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Determines correct fluoroscopic exposure technique. Adjusts/orientates image display on monitor for viewing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Radiation Protection for Patient, Surgical Staff and Self</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>For female patients 12-56 years of age verifies they are not pregnant, shields patient when it does not interfere with the area of interest, makes sure all staff involved w/procedure are properly shielded, practices radiation safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Post Procedure Responsibilities</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Transferring images to PACS at end of procedure, completion of post procedure documentation, properly shutting down equipment at end of procedure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMENTS:
__________________________________________

R.T.R. ________ total number of points obtained.

Registered Technologist Signature

This form needs to be given to the technologist prior to the beginning of the exam.

To be recorded as a Clinical Competency requirement, the student must obtain a minimum of 24 points to be considered competent when performing the patient examination.

Failure to obtain the minimum number of points will result in the observing technologist keeping the Clinical Competency Form and turning it into the Clinical Coordinator to further assist in monitoring the student's clinical performance.

Only 3 of the required 10 C-arm competencies can be procedures that were not performed in the Surgery Department.

The C-arm Clinical Competency Form is required to be filled out by a registered technologist.

Originated 9/05, Rev. 5/12
Reviewed 7/16
Marian University
Radiologic Technology Program
Repeat Radiograph Form for all Indirect Supervision Exams

Student name:___________________________ Date:__________________

Exam performed:________________________________________________

This form is to be completed by the Registered Radiologic Technologist that verifies he/she was present during the repeat of a radiograph/s by a student radiographer that was under Indirect Supervision.

Please “X” the box that refers to the reason/s the radiograph/s was/were in need of being repeated:

☐ Improper exposure technique or incorrect Exposure Index (S#)

☐ Improper positioning (for example; incorrect centering, incorrect amount of obliquity of the patient, incorrect central ray angle, etc.)

☐ Improper collimation (collimated essential anatomy off the radiograph)

☐ Other

Comments:_______________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

_________________________________________ R.T.R

Signature of Registered Radiologic Technologist that was present during the repeat/s of a radiograph/s by a student radiographer that was under Indirect Supervision

Originated 3/10, Reviewed 5/15, 7/16
Student Name:________________________________________

Instructions for the evaluator:

This form documents a student’s adaptation to new responsibilities. At the time this evaluation is used, the student will have successfully completed all of the following clinical units: upper extremities, lower extremities, respiratory system, digestive system, and spines.

The objectives for the students at this point in their education are less well defined than previous objectives. Their success or failure on these nontraditional clinical assignments will often be determined by their ability to handle responsibility and demonstrate confidence in their basic skills. To evaluate this progress, it is necessary to have the candid impression of their supervising technologists. Below are six objective goals given to the students prior to their weekday PM clinical rotations. Please use the provided space to critique the named student in each of the given areas and indicate whether the student has met/not met the stated objectives by marking the correlating box. Each student will be assigned four (4) rotations to complete and be evaluated on the assigned objectives. Any unmet objectives by the students will result in the rescheduling of additional PM rotations to full fill the requirements of the assigned rotation.

The following objectives should be completed and evaluated after two (2) PM rotations.

1. Adjust to change in clinical hours
   Met____ Unmet____
   Comments:

2. Improvement of basic clinical skills
   Met____ Unmet____
   Comments:

Technologist signature:____________________________________Date:_______________
The following objectives should be completed and evaluated after four (4) PM rotations.

3. Performs independently of direct supervision                      Met____  Unmet____
   Comments:

4. Demonstrates initiative and continued improvement in knowledge of clinical exams:
   Comments:                          Met____Unmet____

5. Demonstrates professional attitudes and behaviors:               Met____Unmet____
   Comments:

6. Increases surgical and portable clinical skills:                Met____Unmet____
   Comments:

Technologist
signature__________________________Date:__________________

Clinical Site   ( ) St.Elizabeth   ( ) MMC   ( ) St. Agnes

Marian University
Radiologic Technology Program
Competency Evaluation for Special Procedures

Student Name: ________________________

Yes No

( ) ( ) 1. Demonstrate basic knowledge of circulatory system anatomy.

( ) ( ) 2. Identify the functions of the tableside controls:
   ( ) ( ) a. table height adjustment
   ( ) ( ) b. c-arm control
   ( ) ( ) c. support column rotation
   ( ) ( ) d. image intensifier height adjustment
   ( ) ( ) e. collimator adjustment
   ( ) ( ) f. II/field size control
   ( ) ( ) g. table floatation control

( ) ( ) 3. a. Power on generator
   ( ) ( ) b. Power on DSA unit

( ) ( ) 4. Input patient information.

( ) ( ) 5. Reset fluoroscopy timer/dose indicator.

( ) ( ) 6. Explain briefly what DSA is.

**DSA**

( ) ( ) 1. Enter patient information.

( ) ( ) 2. Set the digital computer for image acquisition.

( ) ( ) 3. If appropriate, operate the multi-format printer to produce hard copies.

( ) ( ) 4. Explain the difference between a mask image, subtracted image and un-subtracted image.

**Related equipment**

Yes No

( ) ( ) 1. Set the pressure injector for a designated injection.
   ( ) ( ) a. power on injector
   ( ) ( ) b. load syringe
   ( ) ( ) c. draw up contrast
   ( ) ( ) d. set injector to the proper
      -volume
      -rate
      -delay
      -rise time
      -pressure
   ( ) ( ) e. arm the injector

( ) ( ) 2. a. Power on the EKG monitor
   ( ) ( ) b. connect the test leads of the EKG to the patient

Date: ____________________  Evaluated by: _________________________

Revised 4/11, Reviewed 2/14, 7/16
Competency Evaluation for Magnetic Resonance Imaging

Student Name: ________________________________

**Yes No** 1. Basic Computer Functions
   ( ) ( ) a. Enter patient information.

2. Table and Magnet
   ( ) ( ) a. Operate table up, down, out, in.
   ( ) ( ) b. Use positioning lights.
   ( ) ( ) c. Identify the different parts of the scanner including the magnet, table, different coils and control console.

3. Basic MRI Physics/Image Formation/Patient Safety
   ( ) ( ) a. Explain basic MRI physics.
   ( ) ( ) b. Explain why you cannot have metal inside the scanner.
   ( ) ( ) c. Explain how MRI is different than CT.

4. Anatomy
   ( ) ( ) a. Demonstrate basic knowledge of cross sectional anatomy.
   ( ) ( ) b. Recognizes the difference between axial, sagittal and coronal images.

( ) ( ) 5. Demonstrates enthusiasm and willingness to learn.

Comments: _______________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Date: ____________  Evaluated By: ________________________________

Revised 4/11, Reviewed 2/14, 7/15, 7/16
**Computed Tomography (CT) Clinical Competency Form**

<table>
<thead>
<tr>
<th>Student Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination:</td>
<td>Neck ( ) Head ( ) Chest ( ) Abdomen/Pelvis ( ) Other ( )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Room Preparation: (load power injector, enter pt. demographics, IV supplies ready, correct table extension on)</th>
<th>0 points</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
<th>4 points</th>
<th>5 points</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Patient Care:</strong> (remove jewelry/artifacts, explain exam, instructions to pt., ? insulin pump, ? preg./shielded, ? contrast allergy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>Accuracy of Positioning:</strong> (correct orientation of pt. on table, correct height of table, correct placement of table within gantry)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Protocol Selection:</strong> (select correct exam and orientation prior to initiating scanning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><strong>Planning of Exam:</strong> (select correct FOV, set correct starting/ending location for image acquisition, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>Correctly Set Injector Parameters:</strong> (CC per second, total amount injected, proper PSI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><strong>Permanent Archiving of Images:</strong> (sending images to PACS, sending images to outside locations/teleradiology)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><strong>Correct Post Procedure Documentation:</strong> (contrast type/amount administered, # of images in study, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**R.T.R. ________ total number of points obtained.**

Registered Technologist Signature

To be recorded as a Clinical Competency requirement, the student must obtain a minimum of 24 points to be considered competent when performing the patient examination. The Clinical Competency Form is required to be filled out by a registered technologist.

Reviewed 2/14, 7/15, 7/16
Student Name: ____________________________

Fill in the number of hours that you have spent with the radiologist(s) while in this rotation in the appropriate areas below.
At the end of each day have 1 of the Radiologists sign this form and return to the Clinical Coordinator once the required number of hours have been completed. To complete the rotation you must have a total of 19.5 hours.

<table>
<thead>
<tr>
<th>Date:</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone/Chest/Diagnostic/Fluoro Exams Minimum 9 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT/MR Minimum 6 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Modalities: US/Nuc Med/Angio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiologist(s) Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Marian University
Radiologic Technology Program
Competency Evaluation for Rotating Through Clinical Sites

Student Name: ____________________________

Yes No

1. ( ) ( ) The student understands and completed the record keeping procedures.
2. ( ) ( ) The student selected the appropriate technical factors for the exam being performed.
3. ( ) ( ) The student obtained pertinent patient history from the patient and requisition for the exam(s).
4. ( ) ( ) The student explained the exam to the patient.
5. ( ) ( ) The student positioned the patient correctly for the exam requested.
6. ( ) ( ) The student used the proper radiation protection methods for the patient and personnel when applicable.
7. ( ) ( ) The student processed the radiographs.

( ) Mercy Medical Center ( ) St. Elizabeth Hospital ( ) St. Agnes Hospital
( ) FDL Health Plaza ( ) AMG-Koeller
( ) Ortho – St.E ( ) Waupon Memorial

Student Strengths: ____________________________________________________________
________________________________________________________________________
________________________________________________________________________

Recommendations for Areas of Improvement: ______________________________________
________________________________________________________________________
________________________________________________________________________

____________________________________   ________________________________
Staff Technologist Signature      Date

NOTE TO TECHNOLOGIST: After filling out the evaluation, please mail it back to the Clinical Coordinator so that it can be documented on the student’s Master Clinical Record.
Revised 07/2015, 07/2016
Circle the facility that you are evaluating: __________________________

Mercy Medical Center  St. Agnes Hospital  St. Elizabeth Hospital
AMG Koeller St. Clinic  Waupun Memorial Hospital  FDL Health Plaza  SEH Orthopedic Clinic

Each student will complete one evaluation form for each rotation to clinical sites other than his/her home site. Only score whole digit values for each question. Return completed form to the Clinical Coordinator.

Please circle the following areas that you observed or participated in at this facility:

<table>
<thead>
<tr>
<th>Portables</th>
<th>Surgery</th>
<th>General Radiography</th>
<th>Fluoroscopy</th>
<th>PM’s</th>
<th>IVU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. How would you rate the facility’s Imaging Department appearance: 4 3 2 1 NA
   COMMENTS:

2. How would you rate the technologist’s ability to teach: 4 3 2 1 NA
   COMMENTS:

3. Was the site a productive learning experience? 4 3 2 1 NA
   COMMENTS:

4. Attitude of department staff towards students: 4 3 2 1 NA
   COMMENTS:

5. Attitude of Radiologists towards students: 4 3 2 1 NA
   COMMENTS:

6. Would you suggest using this facility again for a clinical site? 4 3 2 1 NA
   COMMENTS:

7. Were you ever requested to perform an exam at this site that failed to abide by the program’s Clinical Supervision Policy?
   YES  NO
   COMMENTS:

Revised: 7/15, 7/16
# Grading Rubric for Simulated Positioning Lab Test

Student Name: ________________________
Date: ________________________________
Positioning Routine Performed: _________________________ (circle one: routine  non-routine)

1.) Room Preparation/Patient Attire

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points</td>
<td>Fails to set up room prior to patient entering. When applicable, fails to explain or incorrectly explains the patient's attire for the exam.</td>
</tr>
<tr>
<td>1 point</td>
<td>Room is properly set up prior to the patient entering the room. When applicable, correctly explains the patient's attire for the exam.</td>
</tr>
</tbody>
</table>

Comments:

2.) Patient Interview

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points</td>
<td>Fails to identify as correct patient, does not ask for patient history, does not explain/demonstrate exam to patient, fails to maintain eye contact.</td>
</tr>
<tr>
<td>1-2 points</td>
<td>Identifies as correct patient, acquires limited patient history, provides limited explanation/demonstration of exam, maintains intermittent eye contact with patient throughout the examination.</td>
</tr>
<tr>
<td>3 points</td>
<td>Maintains good eye contact, gains complete patient history, provides thorough explanation/demonstration of exam, provides patient opportunity to ask any questions they may have.</td>
</tr>
</tbody>
</table>

Comments:

3.) Patient Assessment (ability to adapt to non-routine situations, ability to adjust exam for patient condition)

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Routine exam. Exam required no alternative positioning methods/changes in exam is performed.</td>
</tr>
<tr>
<td>0 points</td>
<td>Student unable to determine alternative positioning strategies while maintaining the proper tube/part/image receptor alignment with all of the required projections.</td>
</tr>
<tr>
<td>1-2 points</td>
<td>Student was able to vocalize alternative positioning strategies but struggles with physically performing the alternative strategies while maintaining the proper tube/part/image receptor relationship with some of the required projections.</td>
</tr>
<tr>
<td>3 points</td>
<td>Performs well in non-routine situations. Was able to demonstrate alternative positioning strategies while maintaining the proper tube/part/image receptor relationship for all of the required projections.</td>
</tr>
</tbody>
</table>

Comments:

4.) Image Receptor (IR) Size/Orientation

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points</td>
<td>Student fails to utilize the correct size of IR for all projections and/or fails to orientate the IR correctly for all projections.</td>
</tr>
<tr>
<td>1-2 points</td>
<td>Student utilizes the correct IR size and/or orientates the IR correctly for some projections.</td>
</tr>
<tr>
<td>3 points</td>
<td>Student utilizes the correct IR size AND orientates the IR correctly for all projections.</td>
</tr>
</tbody>
</table>

Comments:
5.) Source Image Distance (SID)

0 points: Student fails to utilizes the correct SID for all projections.
1-2 points: Student utilizes the correct SID for some of the projections.
3 points: Student utilizes the correct SID for all projections.

Comments:

6.) Central Ray (CR)

0 points: Student fails to utilize the correct CR angle and/or keeping the CR centered to the IR for all projections.
1-2 points: Student utilizes the correct CR angle and/or keeping the CR centered to the IR for some projections.
3 points: Student utilizes the correct CR angle AND keeps the CR centered to the IR for all projections.

Comments:

7.) Accuracy of Positioning/Breathing Instructions

0 points: Completely inaccurate positioning of the anatomy on all projections including wrong obliquity of part, CR entering at incorrect spot, etc. Fails to use the correct breathing technique. Demonstrates complete lack of knowledge.
1-2 points: Student demonstrates knowledge/understanding but requires instruction/correction from the Clinical Coordinator after all projections are completed, requires substantial amount of time to complete the exam. Uses the correct breathing technique for some projections.
3-4 points: Student demonstrates knowledge/understanding while requiring limited instruction/correction from the Clinical Coordinator after some projections are completed, completes exam in reasonable amount of time. Uses the correct breathing technique for all projections.
5 points: Student demonstrates complete knowledge/understanding while requiring virtually no instruction/correction from the Clinical Coordinator at the completion of any of the projections. Amount of time required to complete the exam was excellent. Uses correct breathing technique for all projections.

Comments:

8.) Exposure Technique Selection

0 points: Unable to select technical factors, is unable to vocalize a basic/average/starting technique for the required projection/s.
1-2 points: Is able to vocalize a basic/average/starting technique for the required projection/s BUT it took a substantial amount of time for the student to be able to recall it.
3 points: Is able to vocalize a basic/average/starting technique for the required projection/s within a reasonable amount of time.

Comments:
9.) Radiation Protection Methods

0 points: Fails to inquire about possibility of pregnancy at the beginning of exam, fails to shield on 1 or more of the projections (when appropriate), fails to collimate (when appropriate) on 1 or more projections.

___ point/s 1-2 points: Inquires about possibility of pregnancy, remembers to shield the patient on all projections (when appropriate), occasionally attempts to provide limited collimation (when appropriate.)

3 points: Inquires about possibility of pregnancy, remembers to shield the patient on all projections (when appropriate), collimates the optimal amount without clipping the required anatomy (when appropriate.)

Comments:

10.) Use of Accessories

0 points: Fails to use lead markers on 1 or more projections, fails to use radiolucent sponges, lead masks, grids, etc. when required.

___ point/s 1-2 points: Remembers to use lead markers on all projections but the placement of the marker, with 1 or more projections, may interfere with the anatomy, uses radiolucent sponges, lead masks, grids, etc. when required.

3 points: Remembers to use lead markers on all projections with the placement of the marker not interfering with the anatomy, uses radiolucent sponges, lead masks, grids, etc. when required.

Comments:

______ total points obtained

___________% for examination (based on whether exam was routine or non-routine)

Maximum points that can be obtained: 27 points for routine exams

30 points for non-routine exams

The student is required to obtain 22 points or more to be acknowledged as clinically competent on each routine exam.
The student is required to obtain 24 points of more to be acknowledged as clinically competent on each non-routine exam.

The student not obtaining the minimum points on each individual exam will be required to perform the exam again as remedial work to obtain the required points. The averaging of the individual exams will account for 1/3 of the student’s unit grade.

This form will evaluate the student’s ability to perform radiologic examinations under routine and non-routine conditions. The student will be able to demonstrate his/her abilities in decision making, problem solving and critical thinking skills.

Reviewed 2/14, 7/15, 7/16
Marian University Radiologic Technology Program

<table>
<thead>
<tr>
<th>Student Name:_______________________</th>
<th>Date:_______________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Required Competency Criteria</th>
<th>Did not meet Competency Criteria</th>
<th>Met Competency Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Confirm the identity of the patient by asking the patient his/her name and date of birth.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Explain the procedure to the patient while assembling the required equipment and inspecting and evaluating the veins.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Apply tourniquet and ask the patient to make a fist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Palpate veins to determine size and direction they run.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Cleanse area with Chloroprep and allow to dry.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Gloves must be worn prior to insertion of the needle.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Using the dominant hand, hold the butterfly/angiocath between the thumb and the first two fingers, making sure the bevel is up.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Using the opposite hand, secure the chosen vein by placing the thumb below the intended puncture site and stretching the skin taut.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. With the needle bevel up, enter the vein.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. After entry into the vein, keep the needle immobile by &quot;planting&quot; three fingers of the dominant hand (the one holding the equipment) on the surface of the skin to provide a immobile base.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Release the tourniquet when good blood flow is established.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Instruct the patient to relax the hand.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Tape the insertion device to the patient's arm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. After the injection, withdraw the needle and apply pressure with gauze.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Discard the needle without recapping.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: ____________________________________________________________

Registered Technologist/Registered Nurse

To be recorded as a Clinical Competency requirement, ALL criteria MUST be met for the student to be considered competent.

Reviewed 7/15, 7/16
Marian University Radiologic Technology Program
Competency Evaluation for Elective Rotations

Student Name: ___________________________________________

Yes No

1. ( ) ( ) The student understands/participates in the record keeping procedure.
2. ( ) ( ) The student observed/participated in the selection of the appropriate technical factors.
3. ( ) ( ) The student observed/participated in the requesting of pertinent history from the patient and the requisition for the exam(s).
4. ( ) ( ) The student observed/participated in the explanation of the exam to the patient.
5. ( ) ( ) The student observed/participated in the positioning of the patient correctly for the exam.
6. ( ) ( ) The student observed/participated the proper radiation protection methods for the patient & personnel when applicable.
7. ( ) ( ) The student observed/participated the processing of radiographs.

Comments:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

__________________________   ___________________
Staff Technologist Signature    Date

Facility Name

Reviewed 2/14, 7/15, 7/16
Acknowledgement of Student Clinical Supervision Policy

I _________________, have on this date, ________________ have been instructed on Marian University’s Radiologic Technology Program policy regarding direct and indirect supervision while in the clinical setting. My signature verifies that I understand and will abide with this policy.

I have received a copy of this policy. It is located in the Student Handbook and also the Clinical Handbook.

Signature: ________________________________

Witness: ________________________________
Marian University
Radiologic Technology Program
Practicum Absence Form

In the event of an absence during a practicum rotation, the top portion of this form is to be completed by the Clinical Instructor or Coordinator representing the practicum rotation missed. The bottom portion of the form is to be completed by the Clinical Coordinator and signed by the student upon the student’s return following an absence from the clinical site due to an illness or emergency. All absences from clinical hours must be rescheduled and made up by the student prior to the start of the next scheduled Practicum or date of graduation.

Name of Student: ________________________________________________________

Date of Absence: ___________________________ Time Notified: __________________

Clinical Rotation missed:_____________________________________________________

Reason for Absence:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Signature of Clinical Instructor or Coordinator : ________________________________

-----------------------------------------------

To be completed by Clinical Coordinator:

Absence Rescheduled Date:____________________________________________________

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

I understand any practicum hours missed are required to be rescheduled. The date above is/are the day/s I have voluntarily chosen to make-up the hours missed.

Signature of Student: _____________________________ Date: __________________

Signature of Clinical Coordinator: __________________ Date: __________________
Marian University
Radiologic Technology Program
Make-up Verification Form

This form is to be completed when the student is making up clinical time that was missed due to illness or emergency. This form must be signed by the Clinical Instructor or a registered technologist that supervised the student during the make-up hours.

Name of Student:
________________________________________________________________________

Date: ___________________________________________________________________

Hours Student Made up: example 7am to 3:30pm
________________________________________________________________________

Clinical site:
________________________________________________________________________

Signature of Clinical Instructor/Registered Technologist:
________________________________________________________________________

The date above is/are the day/s I have voluntarily chosen to make-up the hours missed.

Signature of Student: _____________________________ Date: ______________
Requisition for Schedule Change

Name: __________________________________________
Date: __________________________________________
Reason for Request:
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Original Schedule- New Schedule-

Date: ___________________________  Date: _____________________________
Week# __________________________ Week# _____________________________
Hours: __________________________ Hours: ___________________________

Student Signature: ________________________________

( ) Approved       ( ) Not Approved

Clinical Coordinator: ___________________________ Date: _______________________

Revised 7/15; Reviewed 7/16
Marian University Radiologic Technology Program
Exam Log Sheet

Student Name: ___________________________ Date: ___________________________

Each entry must include the exam performed, the student's role during the exam/procedure and the techniques or total dose (e.g. fluoro or surgery cases).
At the end of the each clinical day a registered technologist from that shift will sign to verify that the information provided is accurate.

**Student role: place an "X" in the column/s below that best describes the student's role during each exam**

<table>
<thead>
<tr>
<th>Exam performed: (list # of views)</th>
<th>Observed exam</th>
<th>Assisted with patient care</th>
<th>Positioned under direct supervision</th>
<th>Attempted/Completed competency</th>
<th>Completed exam under indirect supervision</th>
<th>Exposure techniques:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Registered Technologist Signature: ________________________________________

Clinical Site: ___________________________________________________________  Created 2/2016