Lab "Mock" Midterm & Lab Midterm: Guidelines

When: *Your scheduled lab time*
Where: *In your assigned room* (as per your lab schedule)
Assessment Length: 20 *minutes total*
Testable Content: Anything covered (aka. practiced) during labs (i.e. upper extremities)

How it will work:
Before the 20-minute timer starts:

- The room must be set-up as follows:
  - X-ray tube placed at foot end of table
  - IR selection set to TABLE
  - Control panel prepared for the case
  - Input patient information on monitor and prepare for the case

The timer will start immediately after you select the first projection on the console/control panel.
**The midterm ends after you dismiss your patient and clean the room, or if the time runs out.*
Marks will be posted to D2L *after* all lab exams are completed. If you wish to discuss your assessment to enhance your learning, you must reach out to the instructor who marked you.

General Rules:

- Everyone must participate as a technologist when being assessed.
- Everyone must participate as a patient at least once, when not being assessed.
  - "Patients" are not allowed to purposefully help the "Technologist" during an assessment (ex. place yourself into a perfect lateral position)
    - If you purposefully help your lab partner, you will be awarded a zero on your lab exam
- Inappropriate language during your assessment or a classmate's is rewarded a 5% deduction
- Medical asepsis is required, as part of your assessment
- Instructors are not allowed to assist students during an assessment, however they may:
  - Give you time prompts (as requested) & encourage you to move onto your next projection
- Personal verbal cues during your assessment are allowed (ex. "I placed my marker, I collimated…")
- "Technologists" must instruct their "patient" after each image (ex. "you can breathe, you can move") HOWEVER, "patient's" cannot move out of position until the instructor gives approval
- Changes cannot be made after an exposure is taken (example: place a lead anatomical marker)
- Projections cannot be repeated. However, if you completely forget to do a routine projection, and still have time left to complete it, you can
- Required to audibly say "BEEP" to identify an exposure was taken – ensure the instructor hears you
- Follow the rubric below (note: also accessible via D2L)

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Marking Rubric:

Total Marks: 35 (worth 15% of final course grade)

Equipment	4 Points	3 Points	2 Points	1 Point	0 Points
Console	Patient selection matched patient requisition Console set to Examination screen Correct technique selected (view selected matches view performed) Correct IR selection	**Missing 1** component	**Missing 2** components	**Missing 3** components *or* **Incorrect IR selected**	**Missing 4** components *or* **Pt. selection does not match pt. req.**
Tube & Detector	Correct IR orientation & size used Aligned tube & detector without "jamming" Correct 110cm SID and détente used for detector Appropriate tube angle used (ex. locks must be engaged for all straight-ray imaging) Correct locks engaged	**Missing 1** component	**Missing 2** components	**Missing 3** components *or* **All required locks not engaged**	**Missing 4 or more** components *or* **"Jammed" equipment**

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Anatomical Markers	Anatomically correct Correct location Correct orientation	Anatomically correct but Incorrect location (aka. does not follow Marker Rules)	Anatomically correct but Marker over anatomy shadow or not in light-field	Anatomically incorrect	No marker used

Patient Care	4 Points	3 Points	2 Points	1 Point	0 Points
Double ID	Followed double id guidelines (asked all pertinent questions in all 5 categories)	**Missing 1** component	**Missing 2** components	**Missing 3** components	**Missing 4 or more** components
Communication	Provided patient with proper instructions for a diagnostic exposure Watched patient during exposure (to ensure no unwanted motion) Positioned patient respectfully (moved equipment hazards out of the way, assisted the patient into the proper position) Dismissed patient effectively	**Did not dismiss patient effectively** (forgot to ask if the patient knew how to find their way out or that they're referring physician would have results within 2 business days)	**Did not provide patient with proper instructions for a diagnostic exposure** (did not tell patient to "hold still/don't move" or give proper breathing instructions)	**Did not position patient respectfully** (did not move tube out of the way to avoid "head collisions", did not help the patient into the proper position - ex. Patient anatomy is positioned under the CR with legs under the cassette)	**Did not watch patient during exposure**

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Radiation Safety	3 Points	2 Points	1 Point	0 Points
ALARA	Patient was accurately identified as well as the body part for x-ray procedure (radiation safety) Correct centering (of Central Ray) Collimation included all required anatomy (including anatomy "shadow" when applicable)	**Collimated field size too large** (extends beyond required anatomy by more than 1-inch/2.5-cm)	**Incorrect centering of CR** (miscentered by 1-inch/2.5-cm or greater; i.e. required anatomy not in middle of light-field)	**Beam not collimated**

Positioning	8 Points	6 Points	4 Points	2 Points	0 Points
Patient Position	Palpated appropriate anatomical landmarks Correctly positioned patient anatomy for the part ordered Correctly positioned patient for the projection selected	Correctly performed all components but **palpated inappropriately** (did not inform the patient PRIOR to palpating, used incorrect landmarks, palpated sensitive tissue, and/or hurt the patient)	Patient position demonstrates **over/under rotation**	**Anatomy clipped** (aka. required anatomy and/or anatomy shadow not included in the light field: due to poor centering or field size too small)	**Imaged the wrong body part** (i.e. wrong side imaged or incorrect view performed) *and/or* **Did not palpate**

Medical Asepsis	4 Points	3 Points	2 Points	1 Point	0 Points
Safety	Cleaned all equipment and tidied room after dismissing patient	Cleaned all equipment before dismissing patient	Cleaned all equipment but did not tidy room	Did not clean all equipment used	Did not clean

*Deductions emphasize the importance of avoiding errors that would result in significantly

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increasing patient risk. Example: errors that would result in a repeat exposure compromises

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patient safety, by increasing their risk for harmful effects due to excess exposure and/or suboptimal image quality (which could lead to misdiagnosis).

Recommended Workflow:

1. Select a requisition
2. Console setup
3. Room setup (markers, etc.)
4. Bring patient into room & double id INSIDE the exam room
5. Position patient
6. Ensure you used the correct anatomical maker, and equipment is lined up using the appropriate SID
7. Provide the patient with the appropriate instructions (ex. do not move; take a breath in and hold it in, etc.)
8. Expose (aka. AUDIBLY say "beep")
9. Give the patient instructions (ex. Breath; you can move, etc.)
10. Reset Console (i.e. change technique and/or IR selector)
11. Reposition patient for the next projection
12. Repeat steps 6-11 until all projections on the requisition have been completed
13. When the final image is completed – dismiss your patient
    - Tell your patient:
        - ***1. "You are all done."***
        - ***2. "Your doctor will get the results within two business days."***
        - ***3. "Do you know how to find your way out?"***
14. Clean your exam room and any equipment used during the assessment

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