| Course Outcomes Guide |
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| **Course Outcomes Guide**<br>**RAD 218 FY 14** |

**Directions:  Please complete this form to document your progress toward improving student learning.  For each item, indicate your progress and your anticipated next steps. Thank you!**

**Course/Program Title: RAD 218 Principles of CT Imaging      Date:  FY 14**

**Course/Program Team:  Jennifer Beirdneau and Jessie Monroe**

**Expected Learning Outcomes:**
Student Learning Outcomes:
1. Define and apply the basic terminology in Computed Tomography.
2. Analyze and critique Computed Tomography images.
3. Apply the basic concepts in performing a computed tomography procedure.

**Assessment: (**How do or will students demonstrate achievement of each outcome? Please attach a copy of your assessment electronically.)
- Quizzes, exams, discussion questions.

**Validation: (**What methods have you used or will you use to validate your assessment?)
- Completion of course with a 75% or higher.
- 85% of students will answer designated questions correctly.

**Results:** (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)
- 90% (28/31 students) completed the course with a 75% or higher. For the student break down 24 students were radiography students and 7 were professional students. The three students that did not successfully pass the class were all professional students with two of those three being walk away fails.

Designated Questions

| Outcome # 1<br>Provide appropriate patient care with respect to diverse cultures, values, and beliefs | Question number from Final Exam | Actual results (# correct) | % Correct |
|---|---|---|---|
| | # 76 Culture/history | 25/30 | 83% |
| | #77 Culture/Communication | 29/30 | 97% |
| | # 78 beliefs/Communication | 5/5 | 100% |

**\*** Question #76, 77, and 78 need new questions due to Final Exam being redone for spring 2014 semester. When new questions are designated they will replace old numbering

| Outcome # 2 Competently perform routine imaging procedures | Question number from Final Exam | Actual Results (# correct) | % Correct |
| --- | --- | --- | --- |
| | # 2- Date of exam (No new question number yet) | 5/5 | 100% |
| | # 38 Acoustic neuroma – new # 39 | 19/30 | 63% |
| | # 54 CT Venography – new # 53 | 12/30 | 40% |
| | # 57 Pulmonary nodules – new # 59 | 17/30 | 57% |
| | # 66 Thorax-aneurysm – new # 48 | 25/30 | 83% |

There are new question numbers where designated. For question # 2 there will be a new question in place for next data collection. Students in radiography seem to struggle with some of the concepts more than the professionals so we will look at exposing students to CT images and rotation in clinical as to help them understand some of these difficult concept. We would like to see if this will help them to retain this new and different information.

| Outcome # 3 Utilize appropriate protection and standard precautions | Question number from Final Exam | Actual Results (# correct) | % Correct |
| --- | --- | --- | --- |
| | # 22 Rad dose/pitch – Need new question # | 4/5 | 80% |
| | # 23 Dose/Continuous slices – new # 56 | 29/30 | 97% |
| | # 25 Rad dose small objects – new # 22 | 8/30 | 27% |
| | # 26 Patient dose – new # 6 | 29/30 | 97% |
| | # 27 Rad to fetus – new # 15 | 23/30 | 77% |

There are new question numbers where designated. For question # 22 there will be a new question in place for next data collection. Students in radiography seem to struggle with some of the concepts more than the professionals so we will look at offering tutoring sessions to all students enrolled in the course for difficult concepts.

| Outcome # 4 Critique images to assure highest quality | Question number on Final Exam | Actual Results (# correct) | % Correct |
|---|---|---|---|
| | # 13 Tissue enhancement – new # 92 | 17/30 | 57% |
| | # 35 Mastoid air cells – new # 33 | 30/30 | 100% |
| | # 39 Subdural hematoma – new # 40 | 17/30 | 57% |
| | # 74 Spinous process – new # 3 | 27/30 | 90% |
| | # 75 Subclavian artery – new # 8 | 20/30 | 67% |

All questions have relating new question numbers so this will be updated in new data collection. Students seem to struggle with viewing and identifying anatomy for CT so we will look at placing review modules that go over anatomy for a review from their cross-sectional anatomy course that they already have taken.

| Outcome # 7 Make critical decisions appropriate for the medical imager | Question number from Final Exam | Actual Results (# correct) | % Correct |
|---|---|---|---|
| | # 3 Good history – new # 72 | 29/30 | 97% |
| | # 4 Dialysis patient – no new question yet | 5/5 | 100% |
| | # 5 Creatine value – new # 2 | 16/30 | 53% |
| | # 6 Coumadin – no new question yet | 5/5 | 100% |
| | # 7 Contrast injection – new # 37 | 28/30 | 93% |

We will have new questions in place for next collection for those that do not have new question numbers. Review lab values again with students from a review from their venipuncture class that they already have taken.


**Follow-up: (**How have you used or how will you use the data to improve student learning?)
- Continue to offer class delivery as hybrid and online to ensure that students can choose class delivery based on their learning needs.
- Continue to use CT Basics modules as supplemental teaching material.

- Results and review for designated questions are above and we will have all new question numbers in place for next data collection period.

**Budget Justification:**  (What resources are necessary to improve student learning?)

No new budget items needed.

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