

**Course Outcomes Guide  
RAD 201 – Fall 2017**

**Course/Program Title:** RAD 201 Medical Imaging I

**Date:** Fall 2017

**Program Team:** M. McDaniel

**Expected Learning Outcomes:**

The student will:

1. Describe concepts and theories of digital imaging.
2. Differentiate between conventional analog and digital equipment.
3. Relate digital equipment components to the image process.
4. Adapt technical variables to changing conditions such as age, patient size, pathology, and equipment capabilities.
5. Determine the corrective action needed to successfully repeat an inadequate image.

**Assessment (How do or will students demonstrate achievement of each outcome?)**

- unit exams
- comprehensive final

**Validation (What methods have you used or will you use to validate your assessment?)**

- completion of course with an average grade of 75% or higher

**Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)**

- 100% (24/24 students) scored 75% or higher for the course

**Final Exam:**

Question	17/FA
# 7 Quantum Mottle	23/24 – 96%
#4 Indirect conversion	16/24 – 79%
#5 kVp and histogram	22/24 – 92%
#8 DICOM	24/24 – 100%
#44 Compression ratio	23/24 – 96%
#11 Pixel size	16/24 – 79%
#6 Imaging cycle	22/24 – 92%
#3 Photo-stimulated excitation	21/23 – 83%
#64 Exposure indicator	21/24 – 88%

**Follow-up (How have you used or how will you use the data to improve student learning?)**

- continue with current curriculum and add some additional online sources to complement course
- reinforce difference between direct and indirect conversion and what affects pixel size

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

No additional resources needed