Course Outcomes Guide  
RAD 201 – Fall 2019

Course/Program Title: RAD 201 Medical Imaging I  
Date: Fall 2019  
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% (21/21 students) scored 75% or higher for the course

Final Exam:

<table>
<thead>
<tr>
<th>Question</th>
<th>17/FA</th>
</tr>
</thead>
<tbody>
<tr>
<td># 7 Quantum Mottle</td>
<td>21/21 – 100%</td>
</tr>
<tr>
<td>#4 Indirect conversion</td>
<td>20/21 – 95%</td>
</tr>
<tr>
<td># 61 kVp and histogram</td>
<td>21/21 – 100%</td>
</tr>
<tr>
<td>#8 DICOM</td>
<td>21/21 – 100%</td>
</tr>
<tr>
<td>#40 Compression ratio</td>
<td>21/21 – 100%</td>
</tr>
<tr>
<td>#11 Pixel size</td>
<td>20/21 – 95%</td>
</tr>
<tr>
<td>#6 Imaging cycle</td>
<td>21/21 – 100%</td>
</tr>
<tr>
<td>#3 Photo-stimulated excitation</td>
<td>21/21 – 100%</td>
</tr>
<tr>
<td>#59 Exposure indicator</td>
<td>18/ 21 – 86%</td>
</tr>
</tbody>
</table>

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  
- continue to utilize lab activities for visual learners, and to make connection between real-life concepts and didactic instruction

Budget Justification (What resources are necessary to improve student learning?)
No additional resources needed

MLM/FA19

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