Goal 1: Develop clinical competency in the performance of basic radiologic procedures.

Outcome 1: Students will apply proper positioning skills for various projections.

- Tool 1 (Formative) – Clinical Snapshot Evaluation, Patient Positioning section, average of every evaluation completed. Freshman Fall RAD 120 (Benchmark = Class Average above 80%). Senior Fall RAD 220 (Benchmark = Class Average above 85%).

- Tool 2 (Summative) – Critical Thinking Competency, “Demonstrates Effective Positioning Skills” section. Average of Midterm and Final Exam forms. Freshman Spring RAD 121 (Benchmark = Class Average above 75%). Senior Fall RAD 220 (Benchmark = Class Average above 80%).

Outcome 2: Students will utilize appropriate collimated field sizes for various projections.

- Tool 1 (Formative) – Clinical Snapshot Evaluation, Collimation section, average of every evaluation completed. Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Fall RAD 220 (Benchmark = Class Average above 85%).

- Tool 2 (Summative) – Critical Thinking Competency, “Demonstrates Knowledge of Human A. and P. as well as Pathology with Relation to Examination Being Performed.” Average of Midterm and Final Exam forms for Freshman, Midterm Critical Thinking score for Seniors. Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Spring RAD 221 (Benchmark = Class Average above 85%).

Outcome 3: Students will demonstrate appropriate Exposure Index awareness by adjusting technical factor selection.

- Tool 1 (Formative) – Clinical Snapshot Evaluation, Technical Factors section, average of every evaluation completed. Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Spring RAD 221 (Benchmark = Class Average above 85%).

- Tool 2 (Summative) – General Competency Evaluation, “Image Production – Exposure Index Number or S#” One randomly selected competency evaluation. Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Fall RAD 220 (Benchmark = Class Average above 85%).
## Assessment Plan (Effective Fall 2019)

**Goal 1: Develop clinical competency in the performance of basic radiologic procedures.**

<table>
<thead>
<tr>
<th>Outcome #1</th>
<th>Tools</th>
<th>Benchmark/Time Frame</th>
<th>Results</th>
<th>Analysis/Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will apply proper positioning skills for various projections.</td>
<td>T1: Clinical Snapshot Evaluation, Patient Positioning section.</td>
<td>Fall Freshman RAD 120 average every evaluation submitted for this section (Benchmark = Class Average above 80%). <strong>Senior Fall RAD 220.</strong> Benchmark = Class Average above 85%).</td>
<td><strong>Freshman</strong> 2019 – 82.5% 2020 – 2021 – 2022 – 2023 –</td>
<td>Fall 2019 – Benchmarks met, continue to monitor.</td>
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<tr>
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<td><strong>Senior</strong> 2019 – 90.6% 2020 – 2021 – 2022 – 2023 –</td>
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<td></td>
<td>T2: Critical Thinking Competency, “Demonstrates Effective Positioning Skills” section</td>
<td>Freshman Spring RAD 121 (Benchmark = Class Average above 75%). <strong>Senior Fall RAD 220</strong> (Benchmark = Class Average above 80%).</td>
<td><strong>Freshman</strong> 2020 – TBD 2021 – 2022 – 2023 – 2024 –</td>
<td>Fall 2019 – Benchmark met, continue to monitor.</td>
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<td><strong>Senior</strong> 2019 – 81.1% 2020 – 2021 – 2022 – 2023 –</td>
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</table>

<table>
<thead>
<tr>
<th>Outcome #2</th>
<th>Tools</th>
<th>Benchmark/Time Frame</th>
<th>Results</th>
<th>Analysis/Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will utilize appropriate collimated field sizes for various projections.</td>
<td>T1: Clinical Snapshot Evaluation, Collimation section.</td>
<td>Freshman Spring RAD 121 average every evaluation submitted for this section (Benchmark = Class Average above 80%). <strong>Senior Fall RAD 220</strong> last evaluation submitted (Benchmark = Class Average above 85%).</td>
<td><strong>Freshman</strong> 2020 – TBD 2021 – 2022 – 2023 – 2024 –</td>
<td>Fall 2019 – Benchmark met, continue to monitor.</td>
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<tr>
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<td><strong>Senior</strong> 2019 – 94.1% 2020 – 2021 – 2022 – 2023 –</td>
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<td>T2: Critical Thinking Competency, “Demonstrates Knowledge of Human A. and P.” section.</td>
<td>Average of Midterm and Final Exam forms for Freshman, Midterm Critical Thinking score for Seniors. <strong>Freshman Spring RAD 121</strong> (Benchmark = Class Average above 80%). <strong>Senior Spring RAD 221</strong> (Benchmark = Class Average above 85%).</td>
<td><strong>Freshman</strong> 2020 – TBD 2021 – 2022 – 2023 – 2024 –</td>
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</tr>
<tr>
<td>Outcome #3</td>
<td>Tools</td>
<td>Benchmark/Time Frame</td>
<td>Results</td>
<td>Analysis/Action Plan</td>
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<tr>
<td>Students will demonstrate appropriate Exposure Index awareness by adjusting technical factor selection.</td>
<td>T1: Clinical Snapshot Evaluation, Technical Factors section.</td>
<td>Freshman Spring RAD 121 average every evaluation submitted for this section (Benchmark = Class Average above 80%). Senior Spring RAD 221 (Benchmark = Class Average above 85%).</td>
<td><strong>Freshman</strong>&lt;br&gt;2020 – TBD&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –&lt;br&gt;2024 –</td>
<td><strong>Senior</strong>&lt;br&gt;2020 – TBD&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –&lt;br&gt;2024 –</td>
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<tr>
<td>T2: General Competency Evaluation, “Image Production – Exposure Index Number or S#” One randomly selected competency evaluation.</td>
<td>Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Fall RAD 220 (Benchmark = Class Average above 85%).</td>
<td><strong>Freshman</strong>&lt;br&gt;2020 – TBD&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –&lt;br&gt;2024 –</td>
<td><strong>Senior</strong>&lt;br&gt;2019 – 93.4%&lt;br&gt;2020 –&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –</td>
<td>Fall 2019 – Benchmark met, continue to monitor.</td>
</tr>
</tbody>
</table>

Goal 1 Summary: Fall 2019<br>G1,O1,T1, Senior students scored significantly higher in applying proper positioning skills. This is an expected progression.
Goal 2: Demonstrate problem solving and critical thinking skills.

Outcome 1: Students will be able to modify radiographic procedures to accommodate patient condition.

- Tool 1 – RAD 210 Final Exam Trauma Reflective Response Question (Benchmark = Class Average will score above 80%).

- Tool 2 (Summative) – Critical Thinking Competency, “Demonstrates Critical Thinking in Regards to Patient’s Condition when Positioning for Examinations.” Freshman Summer RAD 122 Summer Clinical Experience, Average of section scores (Benchmark = Class Average above 80%).

- Tool 3 (Summative) – Assessment of Professional Growth form Situational Assessment/Critical Thinking section. Average of Midterm and Final Exam forms for Freshman, Midterm Assessment of Professional Growth form score for Seniors. Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Spring RAD 221 (Benchmark = Class Average above 85%).

Outcome 2: Students will critique images for diagnostic quality.

- Tool 1 – RAD 202 Image Critique Presentations (Benchmark = Class Average above 85%).

- Tool 2 (Summative) – Lab Final Simulation, “Image Critiques” section. Freshman Fall RAD 120 (Benchmark = Class Average above 80%). Freshman Spring RAD 121 (Benchmark = Class Average above 85%).

- Tool 3 (Summative) – Critical Thinking Competency, “Image Critiques” section. Freshman Fall RAD 120 section score (Benchmark = Class Average above 80%). Senior Fall RAD 220 Average of section scores (Benchmark = Class Average above 85%).
### Assessment Plan (Effective Fall 2019)

**Goal 2: Demonstrate problem solving and critical thinking skills.**

<table>
<thead>
<tr>
<th>Outcome #1</th>
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</thead>
</table>
| Students will be able to modify radiographic procedures to accommodate patient condition. | T1: RAD 210 Final Exam Trauma Reflective Response Question: “Please rate on a scale of 1-10 how much you fell you learned during the process of imaging trauma projections.” | Seniors RAD 210 (Benchmark = Class Average will score above 80%). Indication 80% of students will rate their learning as an “8” or higher. | 2019 – 93.1%  
2020 –  
2021 –  
2022 –  
2023 – | Fall 2019 – Benchmark met, continue to monitor. |
| | T2: Critical Thinking Competency, “Demonstrates Critical Thinking in Regards to Patient’s Condition when Positioning for Examinations.” | Freshman Summer RAD 122 Summer Clinical Experience, Average of section scores (Benchmark = Class Average above 80%). | 2020 – TBD  
2021 –  
2022 –  
2023 –  
2024 – | |
| | T3: Assessment of Professional Growth form Situational Assessment/Critical Thinking section | Average of Midterm and Final Exam forms for Freshman, Midterm Assessment of Professional Growth form score for Seniors. **Freshman Spring RAD 121** (Benchmark = Class Average above 80%). **Senior Spring RAD 221** (Benchmark = Class Average above 85%). | **Freshman**  
2020 – TBD  
2021 –  
2022 –  
2023 –  
2024 –  

**Senior**  
2020 – TBD  
2021 –  
2022 –  
2023 –  
2024 – | |
<table>
<thead>
<tr>
<th>Outcome #2</th>
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<tr>
<td></td>
<td>T2: Lab Final Simulation, “Image Critiques” section.</td>
<td>Freshman Fall RAD 120 (Benchmark = Class Average above 80%). Freshman Spring RAD 121 (Benchmark = Class Average above 85%).</td>
<td>Fall Fresh 2019 – 90.5% 2020 – 2021 – 2022 – 2023 –</td>
<td>Fall 2019 – Benchmark met, continue to monitor.</td>
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<tr>
<td></td>
<td>T3: Critical Thinking Competency, “Image Critiques” section.</td>
<td>Freshman Fall RAD 120 average of section scores (Benchmark = Class Average above 80%). Senior Fall RAD 220 Average of section scores (Benchmark = Class Average above 85%).</td>
<td>Freshman 2019 – 88% 2020 – 2021 – 2022 – 2023 –</td>
<td>Fall 2019 – Benchmarks met, continue to monitor.</td>
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</table>

Goal 2 Summary: (Fall 2019)
G2,O2,T3- Seniors only scored .4% higher on image critique then freshmen students. The potential reasons discussed for this were the variation in evaluators. Freshmen students were only evaluated in this area by Mr. Bailey. Senior students were evaluated by multiple faculty at various clinical sites. Also senior students are being asked about 52 various exams and included anatomy. Freshmen are being asked about the 15 radiographic exams they have learned at this time in the fall. We will continue to monitor this particular section.
Goal 3: Cultivate and promote good communication skills with patients, staff and others.

Outcome 1: Students will communicate effectively with patients.

- Tool 1 (Formative) – Clinical Snapshot Evaluation AFFECTIVE SKILLS: Communication: Gives directions/obtains relevant medical history, average of every evaluation completed. Freshman Spring RAD 121 (Benchmark = Class Average above 80%). Senior Spring RAD 221 (Benchmark = Class Average above 85%).

- Tool 2 (Summative) – Critical Thinking Competency, “Demonstrates Proper Patient Communication by Obtaining Full History” section. Average of Midterm and Final Exam forms. Freshman Fall RAD 120 (Benchmark = Class Average above 80%). Senior Fall RAD 220 (Benchmark = Class Average above 85%).

Outcome 2: Students will communicate effectively with other members of the health care team.

- Tool 1 (Formative) – Clinical Snapshot AFFECTIVE SKILLS: Interpretation section, average of every evaluation completed. Freshman Fall RAD 120 Benchmark = Class Average above 80%). Senior Fall RAD 220 (Benchmark = Class Average above 85%).

- Tool 2 – OR Competency Evaluation. Average of Yes/No Section on both (2) OR Competency forms stating, “Maintains a good rapport and effective communication with OR staff and surgeon throughout the procedure.” Senior Spring RAD 221 (Benchmark = Class Average above 85%).

- Tool 3 – Clinical Snapshot AFFECTIVE SKILLS: Teamwork & Collaboration section, average of every evaluation completed. Freshman Spring RAD 121 Benchmark = Class Average above 80%). Senior Spring RAD 221 (Benchmark = Class Average above 85%).
## Assessment Plan (Effective Fall 2019)

**Goal 3:** Cultivate and promote good communication skills with patients, staff and others.

<table>
<thead>
<tr>
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<th>Analysis/Action Plan</th>
</tr>
</thead>
</table>
| Students will communicate effectively with patients. | T1: Clinical Snapshot Evaluation  
**AFFECTIVE SKILLS:** Communication: Gives directions/obtains relevant medical history, average of every evaluation completed.  
**Freshman Spring RAD 121** (Benchmark = Class Average above 80%).  
**Senior Spring RAD 221** (Benchmark = Class Average above 85%). |  
**Freshman**  
2020 – TBD  
2021 – 2022  
2023 – 2024  
2025 – |  
**Senior**  
2020 – TBD  
2021 – 2022  
2023 – 2024  
2025 – | Fall 2019 – Benchmarks met, continue to monitor. |

<table>
<thead>
<tr>
<th>Outcome #2</th>
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</tr>
</thead>
</table>
| Students will communicate effectively with other members of the health care team. | T1: Clinical Snapshot Evaluation  
**AFFECTIVE SKILLS:** Interpretation section, (script, requisition, medical terminology) average of every evaluation completed.  
**Freshman Fall RAD 120** (Benchmark = Class Average above 80%).  
**Senior Fall RAD 220** (Benchmark = Class Average above 85%). |  
**Freshman**  
2019 – 97%  
2020 – 2021  
2022 – 2023  
2024 – |  
**Senior**  
2019 – 92.6%  
2020 – 2021  
2022 – 2023  
2024 – | Fall 2019 – Benchmarks met, continue to monitor. |
“Maintains a good rapport and effective communication with OR staff and surgeon throughout the procedure.”

T3: Clinical Snapshot

AFFECTIVE SKILLS: Teamwork & Collaboration section, average of every evaluation completed.

Freshman Spring RAD 121
Benchmark = Class Average above 80%)

Senior Spring
RAD 221 (Benchmark = Class Average above 85%).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 – TBD</td>
<td>2020 – TBD</td>
</tr>
<tr>
<td>2021 –</td>
<td>2021 –</td>
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<td>2022 –</td>
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<td>2023 –</td>
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<td>2024 –</td>
<td>2024 –</td>
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</table>

Goal 3 Summary:

G3, O1, T2 - Senior students’ class average was 91.6% while freshmen students scored 97% on the “demonstrates proper patient communication by obtaining a full history” section of their critical thinking competency. Potential reasons for this digression discussed were consistency of evaluator. Mr. Bailey does all the freshmen critical thinking assessments, senior students are evaluated by various faculty. Freshmen students in the fall are using scripted words for the few radiographic exams they have learned. Senior students have moved to their new site in the fall and may be a little reserved in the fall semester. We will continue to monitor this tool closely.

G3, O2, T1 - Senior students demonstrated a solid progression from the freshmen in interpreting scripts, requisitions, and medical terminology in relation to radiographic examinations. This is an expected outcome.
Goal 4: Graduate students from a learning environment that encourages high ethical standards and professional development.

Outcome 1: Students will become providers of culturally competent care.

- Tool 1 Freshman RAD 101 Intro Exam. Two Questions on age-specific competency (1 Pediatric, 1 Geriatric). (Benchmark = Class Average above 80% correct for each question).

- Tool 2 Freshman RAD 101 Documentary Journal Reflection Paper on movies. (Benchmark = Class Average above 80%).

Outcome 2: Students will demonstrate knowledge on best practices and advanced imaging modalities.

- Tool 1: Modality Essay Assignment with Rubric Summer Clinical RAD 121. (Benchmark = Class Average above 80%).

- Tool 2: Best Practices White Paper assignment RAD 231 (Benchmark = Class Average above 80%).
**Assessment Plan (Effective Fall 2019)**

**Goal 4:** Graduate students from a learning environment that encourages high ethical standards and professional development.

<table>
<thead>
<tr>
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<th>Results</th>
<th>Analysis/Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will become providers of culturally competent care.</td>
<td>T1: Freshman RAD 101 Intro Exam. Two Questions on age-specific competency (1 Pediatric, 1 Geriatric).</td>
<td><strong>Freshman RAD 101</strong> (Benchmark = Class Average above 80% correct for each question).</td>
<td><strong>Peds Q(left)</strong>&lt;br&gt;2019 – 76.2%&lt;br&gt;2020 –&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –</td>
<td>2019 – Benchmark was met for the Geriatric Question, continue to monitor. The pediatric question benchmark was not met. Action Plan: See Below.</td>
</tr>
<tr>
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<td>Peds Question: Neonates are patients in this age range?</td>
<td><strong>Geri Q #83</strong>&lt;br&gt;2019 – 100%&lt;br&gt;2020 –&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –</td>
<td></td>
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</table>

<table>
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<th>Analysis/Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will demonstrate knowledge on best practices and advanced imaging modalities.</td>
<td>T1: Modality Essay Assignment with Rubric</td>
<td><strong>Summer Clinical RAD 121</strong> (Benchmark = Class Average above 80% score on paper).</td>
<td>2020 – TBD&lt;br&gt;2021 –&lt;br&gt;2022 –&lt;br&gt;2023 –&lt;br&gt;2024 –</td>
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</table>
Goal 4 Summary/ Action Plans:

For Goal 4, Outcome 1, Tool 1, only 76.2% of freshmen students were able to correctly identify the age range for neonatal patients. Potential reasons for this is not having completely covered the topics in their radiographic procedures course at this time. In the class RAD 101, where this was measured they have one lecture on various patient populations relating to age. The action plan will be to include a chart defining age ranges in RAD 101 and re-assessing the tool next fall.

For Goal 4, Outcome 1, Tool 1, only 76.1% of students scored above an 80% on their reflective paper after watching documentary. Potential reasons for this, a grading rubric was not handed out before paper was assigned. I do not think expectations for assignment were clear to all students. Action plan is to hand out grading rubric and specific questions before assigning paper and re-assess tool next fall.