

## Outcomes Assessment Plan – Fall 2021

Goal 1: Students will demonstrate CLINICAL COMPETENCE							
Student Learning Outcomes	Assessment Tool	Timeframe	Benchmark	Spring 2020	Fall 2020	Spring 2021	Fall 2021
1.1: Student will apply positioning skills	1.1.1: DMI 51A Lab, final positioning practical, section 5	2nd Semester (formative)	90%	88.90%	94.40%	89.70%	97.90%
	1.1.2: DMI 68, Student Clinical Evaluation, section 2.2	Final Semester (summative)	2.7	2.5	2.89	2.78	2.77
1.2: Students will practice radiation protection	1.2.1: DMI 51A Lab, final positioning practical, section 9	2nd Semester (formative)	90%	90%	91.70%	90.60%	100%
	1.2.2: DMI 68, Student Clinical Evaluation, section 5	Final Semester (summative)	2.7	2.87	2.96	2.91	3

## Analysis

**1.1.1:** Benchmark met. Student learning was increased due in part to additional lab hours provided and focusing students during lab times.

**1.1.2:** Benchmark met. Student learning was maintained because clinical staff and preceptors worked diligently with intern students affected by the fragmented clinical time caused by COVID 19. Students achieved program-level SLO's by focusing on patient positioning on diagnostic radiographic exams.

**1.2.1:** Benchmark met. Student learning was maintained because faculty required students to use proper radiation protection techniques while practicing in the lab. Students achieved program-level SLO's by using lead shielding throughout the lab and not just during the final practical.

**1.2.2:** Benchmark met. Student learning was maintained because preceptors continued to emphasize and follow radiation protection protocols. Two clinical sites have altered their requirements on lead shielding. The policy change has required the Student Clinical Evaluation to be altered to reflect those changes. Students achieved program-level SLO's by following proper radiation protection protocol.

## Action Plan

**1.1.1:** Faculty will continue to emphasize the importance of positioning skills. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**1.1.2:** Faculty and Clinical Preceptors will continue to emphasize the importance of positioning skills and reinforce best practices. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**1.2.1:** Faculty will continue to emphasize the importance of radiation safety. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**1.2.2:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**Goal 2: Students will demonstrate CRITICAL THINKING**

Student Learning Outcomes	Assessment Tool	Timeframe	Benchmark	Spring 2020	Fall 2020	Spring 2021	Fall 2021
2.1: Students will analyze radiographic images	2.1.1: DMI 51B, final exam, image critique questions	2nd Semester (formative)	90%	83.30%	83.30%	82%	76%
	2.1.2: DMI 68, Student Clinical Evaluation, section 2.7	Final Semester (summative)	2.7	2.7	2.87	3	2.77
2.2: Students will manipulate technical factors	2.2.1: DMI 50A, written lab, Three-Dimensional Thinking – Part Two	1st Semester (formative)	90%	100%	100%	100%	100%
	2.2.2: DMI 68, Student Clinical Evaluation, section 2.3	Final Semester (summative)	2.7	2.7	2.89	2.89	2.77

## Analysis

**2.1.1:** Benchmark not met. Students scored 14% lower than the benchmark. This semester's average is about 7% lower than baseline. The assessment committee previously discussed reducing the benchmark; however, the committee rejected the idea to review this assessment tool further.

**2.1.2:** Benchmark met. DMI 68 students present a case study called a "site visit presentation." In this presentation, they go over every aspect of radiography, including analyzing radiographic images. This presentation helps solidify student knowledge of the area.

**2.2.1:** Benchmark met. This lab demonstrates the importance of spatial reasoning and how to manipulate technical factors to visualize an image. Students must take images of different objects with varying densities to discuss how technical factors change the image quality.

**2.2.2:** Benchmark met. DMI 68 students are encouraged, and in many cases required, to use manual techniques. Even if AEC is available, students use manual techniques. These techniques are also discussed during site visits, and students are randomly asked how they would manipulate technical factors for a given situation.

## Action Plan

**2.1.1:** The assessment committee will continue to monitor the data. The faculty and the assessment committee agree the current score is appropriate when compared to similar scores spanning the past 20-years. If there is a significant change to this score, the faculty and the assessment committee will discuss the change.

**2.1.2:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**2.2.1:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**2.2.2:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**Goal 3: Students will demonstrate an understanding of PROFESSIONALISM**

Student Learning Outcomes	Assessment Tool	Timeframe	Benchmark	Spring 2020	Fall 2020	Spring 2021	Fall 2021
3.1: Students will demonstrate professional ethics	3.1.1: DMI 52: ethics exam	2nd Semester (formative)	90%	95%	97%	90%	no data
	3.1.2: DMI 68, Student Clinical Evaluation, section 3	Final Semester (summative)	2.7	2.9	2.92	2.9	2.9
3.2: Students will demonstrate an appreciation for radiologic sciences	3.2.1: Number of DMI graduates who continue to a Bachelor's degree program	Post-Graduation	20%	37.5%	22.22%	data available July 2022	data available Dec 2022
	3.2.2: Number of current students who are members of a professional radiologic society	All students	25%	47.90%	25.60%	51%	51%

## Analysis

**3.1.1:** No data available. Due to time restraints, the instructor did not give the ethics exam. Instead, the students wrote a paper on ethics. The ethics paper grade is not used to assess this SLO.

**3.1.2:** Benchmark met. DMI 68 students demonstrate ethics by following policy and procedures. If a student receives counseling on their behavior, their grade in section three of the student clinical evaluation will be lowered.

**3.2.1:** Benchmark met. The students achieved program-level student learning outcomes by furthering their formal education. It was noted some students come into the DMI program with advanced level degrees already and may not pursue an additional bachelor's degree.

**3.2.2:** Benchmark met. The students achieved program-level student learning outcomes by faculty encouraging students to register for professional organizations. The faculty discussed the benefits and importance of radiologic societies. A few students have mentioned they are interested in the ASRT's Student Leadership Program.

## Action Plan

**3.1.1:** The instructor will give the exam in Spring 2022.

**3.1.2:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**3.2.1:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO. Ideas looked at were student participation in professional society competitions or on-time assignments.

**3.2.2:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**Goal 4: Students will demonstrate effective COMMUNICATION skills in the medical environment**

Student Learning Outcomes	Assessment Tool	Timeframe	Benchmark	Spring 2020	Fall 2020	Spring 2021	Fall 2021
4.1: Students will demonstrate oral communication skills	4.1.1: DMI 51A Lab, final positioning practical, section 1	2nd Semester (formative)	90%	90%	100%	100%	100%
	4.1.2: DMI 68, Student Clinical Evaluation, section 1.1, 1.2, and 1.3	Final Semester (summative)	2.7	2.87	2.85	2.85	2.92
4.2: Students will practice written communication skills	4.2.1: DMI 50A, Research paper	1st Semester (formative)	90%	76.70%	87%	79%	92.40%
	4.2.2: DMI 66, Research paper	Final Semester (summative)	2.7	93%	no data	no data	no data

## Analysis

**4.1.1:** Benchmark met. The students achieved program-level student learning outcomes by practicing exam introductions.

**4.1.2:** Benchmark met. The students achieved program-level student learning outcomes by communicating clearly with patients, physicians, co-workers, peers, and other departments and is readily understood.

**4.2.1:** Benchmark met. The students achieved program-level student learning outcomes with the help of library workshops and a lecture given by the librarian.

**4.2.2:** Benchmark not analyzed. When the new research papers were introduced in Fall 2020, the assessment committee decided to wait until Spring 2022 to assess DMI 66's research paper. By waiting, the assessment committee will have better summative data on this assessment tool.

## Action Plan

**4.1.1:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**4.1.2:** Faculty will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**4.2.1:** The librarian's lecture and workshops helped student understand APA in-text citations and references. The lecture also helped students learn how to use databases to gather information. will continue to monitor this outcome. We will continue to gather data and monitor this trend. If it continues to stay above benchmarks, the Assessment Committee will find a new assessment tool for this SLO.

**4.2.2:** Results from this assessment will be available for Spring 2022's assessment plan.

## Re-Evaluation Date

At the conclusion of Spring 2022