

**Mississippi Delta Community College
Outcomes Assessment Plan
Radiologic Technology Program
AY23**

Revised 7/2023

Goal 1– Students will be clinically competent							
Student Learning Outcomes	Measurement Tools	Timeframe –	Benchmark-	Actual Data Results	Past 3 – 5 years of Data Results		
					Year	Clinical III	Clinical V
1.1 The student will apply technical skills without guidance.	Trajecysy- Final Evaluation Question 1 Clinical III & Clinical V	Measured end of summer semester (clinical III) and Spring semester (Clinical V)	students will score a 3.8 or higher (5 point scale)	Goal Met n-11 CIII 100% of student scored above 3.8 n-9 CV 100% of students score a 3.8 or higher	2016/2017	4.41	4.95
					2017/2018	4.47	4.91
					2018/2019	4.34	4.66
					2019/2020	4.28	5.0
					2020/2021	4.38	4.6
					2021/2022	4.08	4.66
					2022/2023	4.0	4.61
1.2 The student will access patient’s needs for emotion and comfort	Trajecysy- Room Evaluation Question 4 patient care section Clinical III	Measured in the 1 st year - summer semester	students will score a 3.7 or higher (4 point scale)	Goal met n-11 100% of students scored a 3.7 or higher	2016/2017	4.0	
					2017/2018	4.0	
					2018/2019	4.0	
					2019/2020	4.0	
					2020/2021	4.0	
					2021/2022	3.91	
					2022/2023	3.97	

Trajecsys- Room Evaluation Question 4 patient care section Clinical V	Measured in the 2 nd year –spring semester	students will score a 3.7 or higher(4.0 scale)	Goal met n-9 100% scored a 3.7 or higher	Year	Clinical V
				2016/2017	3.95
				2017/2018	4.0
				2018/2019	4.0
				2019/2020	4.0
				2020/2021	3.99
				2021/2022	4.0
2022/2023	4.0				

Student Learning Outcome 1.1

Analysis: Include key findings, 5-year trending comparison, steps to take to enhance student learning

Goal 1, SLO 1 Measurement tool 1: (Clinical III room evaluation question 4, *student will be able to apply technical factors without guidance*) benchmark for the class of 2024 was met with Faculty are concerned that clinical preceptor and radiology staff may not be grading students according to their skills. Faculties have spoken to clinical preceptors about being too lenient and not grading students according to their performance

Goal 1, SLO 1 Measurement tool 1: (Clinical V room evaluation question 4, *student will be able to apply technical factors without guidance*) benchmark for the class of 2023 was met with all 9 students scoring a 3.8 or higher on evaluation. Faculty are concerned that clinical preceptor and radiology staff may not be grading students according to their skills. Faculties have spoken to clinical preceptors about being too lenient and not grading students according to their performance.

Goal 1, SLO 2 Measurement tool 2: (digital imaging Develop a CR & DR technique Chart in campus lab) Benchmark met for class of 2024. Data analysis shows a variation in scores, students are weak in the area of setting technical factors in the clinical and lab setting. Faculty and Clinical staff and technologist will continue to work with students so they can properly set technical factors

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Benchmarks met. Faculty will discuss with advisory committee about increasing current measurement tools or changing measurement tool at next meeting

Re-evaluation Date: Summer 2024

Student Learning Outcome 1.2

Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning

Goal 1, SLO 2. Measurement tool 1 (Trajecsys room evaluation question 4 Clinical III *student attends to patient's physical and emotional needs,*) benchmark met for class of 2024. Faculty will continue to monitor data. In the fall advisory committee meeting faculty will discuss with Clinical instructor the importance of accurate feedback on evaluations

Goal 1, SLO 2, Measurement Tool 2 (Trajecsys room evaluation question 4 Clinical V *student attends to patient's physical and emotional needs,*) benchmark met for class of 2023. Faculty will continue to monitor data. In the fall advisory committee meeting faculty will discuss with Clinical instructor the importance of accurate feedback on evaluations

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and assessment committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: Summer 2024

Goal 2– Students will communicate effectively

Student Learning Outcomes	Measurement Tools	Timeframe –	Benchmark-	Actual Data Results	Past 3 – 5 years of Data Results		
2.1 The student will use effective oral communications	Trajecysy- Final Evaluation Question 10 (Communication skills) Clinical III & Clinical V	Measured end of 1 year- summer semester (clinical III) and 2 nd year- Spring semester (Clinical V)	students will score a 3.7 or higher on a 5 point scale	Goal met n-11 CIII 100 % scored above 3.7 n-9 CV 100% scored a 3.7 or higher	Year	Clinical III	Clinical V
	Radiographic Pathology Oral Presentation	Measured end of 2 nd year spring semester	students will score a 90 or higher	Goal not met n-9 8 of 9 students scored a 90 or above (88%)	Year	Score	
2.2 The student will practice written communication skills	Radiographic Procedures III situational Question	Measured end of 2 nd year fall semester	students will score a 90 or better on a situational question correctly	Goal not met n-9 7 of 9 students scored a 90 or above (77%)	Year	Score	
	Radiographic Procedures IV situational Question	Measured end of 2 nd year spring semester	students will score a 95 or better situational question correctly	Goal not met n-9 8 of 9 students scored a 90 or above (88%)	Year	Score	

Student Learning Outcome 2.1**Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning**

Goal 2, SLO 1 (Trajecysy Final Evaluation Clinical III, Communication skills) benchmark met for class of 2024. Faculty will monitor data for accuracy and meet with Clinical instructors at fall advisory meeting about the importance of accurate data on evaluations.

Goal 2, SLO 1 (Trajecysy Final Evaluation Clinical V Communication skills) benchmark met for class of 2023. Faculty will monitor data for accuracy and meet with Clinical instructors at fall advisory meeting about the importance of accurate data on evaluations.

Goal 2, SLO 2: (Pathology oral presentation) Benchmark not met for class of 2023. The instructor of the Pathology class will provide students with a more detailed rubric and provide an example of what the presentation should include

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and advisory committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: Summer 2024

Student Learning Outcome 2.2**Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning**

Goal 2, SLO 1: (Radiographic Procedure III test situational question) benchmark not met for class of 2024. Past data analysis shows that score have varied over time and the faculty feel that the measurement tool should be changed for the upcoming Y24

Goal 2, SLO 2 (Radiographic Procedure IV test situational question) benchmark not met for class of 2023. Data analysis shows that the score has varied over time and that students would be better evaluated with a different measurement tool for Y24

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and assessment committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: Summer 2024

Goal 3– Students will use critical thinking skills						
Student Learning Outcomes	Measurement Tools	Timeframe –	Benchmark-	Actual Data Results	Past 3 – 5 years of Data Results	
3.1 The student will effectively evaluate radiographic images	Radiographic Procedures II test (AP Pelvis)	Measured end of 1 st year spring semester	80 % of students will answer question correctly	Goal met n-15 12 of 15 students scored a 90 or above (80%)	Year	Score
					2016/2017	90%
					2017/2018	98%
					2018/2019	95%
					2019/2020	80%
					2020/2021	88%
					2021-2022	71% NM
					2022/2023	80%
	Radiographic Procedures II test(Thoracic Spine)	Measured end of 1 st year spring semester	students will score a 85 or better on thoracic spine question	Goal met n-15 13 of 15 students scored a 90 or above (86%)	Year	Score
					2016/2017	92%
					2017/2018	90%
					2018/2019	95%
					2019/2020	86%
					2020/2021	78%(NM)
					2022/2023	86%
3.2 The student will synthesize a situational question on a written test	Radiographic Procedures I test (question upper extremity)	Measured end of 1 st year fall semester	students will score a 85 or better on situational question on upper extremity	Goal not met n-18 14 of 18 students scored a 90 or above (77%)	Year	Score
					2016/2017	90%
					2017/2018	95%
					2018/2019	85%
					2019/2020	83%(NM)
					2020/2021	79%(NM)
					2021/2022	82%(NM)
					2022/2023	77 % (NM)
	Radiographic Procedures IV test(question mobile radiography)	Measured end of 2 nd year spring semester	students will score a 92 or better on situational question on mobile radiography	Goal met n-9 100% of students scored a 90 or above (100%)	Year	Score
					2016/2017	100%
					2017/2018	90%
					2018/2019	75% (NM)
					2019/2020	92%
					2020/2021	100 %
					2021-2022	100%
					2022-2023	100%

Student Learning Outcome 3.1
<p>Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning</p> <p>Goal 3, SLO 1: (Radiographic Procedures II Test AP Pelvis) Benchmark met for class of 2024. Data analyses show that students still struggle with effectively evaluating radiographic images. The purpose of evaluating student twice in procedures in one semester was to see if students progressed in ability during the semester. Data shows that students continue to struggle with evaluating radiographic images</p> <p>Goal 3, SLO 2: (Radiographic Procedures II Test AP Thoracic Spine) Benchmark met for class 2024. Data shows a variation in score when evaluating student’s skills twice in one semester. Even though t benchmark was met students scores are not were faculty believes they should be. Faculty still sees a weakness in A & P knowledge from radiology students. A large percentage of students take A & P 1 and 2 through e-learning classes.</p>

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and assessment committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: /Summer 2024

Student Learning Outcome 3.2

Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning

Goal 3, SLO 1(Radiographic Procedures I test (question upper extremity) Benchmark not met. Class of 2024, data analysis shows that incoming students are weak in A & P knowledge. Faculty believes this is due to more students taking the class through e-learning.

Goal 3, SLO 2(Radiographic Procedures IV test (question mobile radiography) Benchmark met. Data analysis shows that the classes of 2023 are able to synthesize situation questions on a written test.

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and assessment committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: Spring/Summer 2024

Goal 4– The student will model professionalism

Student Learning Outcomes	Measurement Tools	Timeframe –	Benchmark-	Actual Data Results	Past 3 – 5 years of Data Results		
					Year	Clinical III	Clinical V
4.1 Students will demonstrate professionalism in the clinical environment	Trajecysy- Final Evaluation question 8 (Exhibits professional performance in clinical setting) Clinical III & Clinical V	Measured end of 1 year-summer semester (clinical III) and 2 nd year-Spring semester (Clinical V)	students will score at least a 4.0 or higher (5 point scale)	Goal met n-11 CIII 100% scored above 4.0 n-9 CV 100% scored a 4.0 or higher	2016/2017	5.0	4.95
	Trajecysy- Room Evaluation Question 8 (Behavioral Section) Clinical II & Clinical IV	Measured end of 1 year-spring semester (clinical II) and 2 nd year-Fall semester (Clinical IV)	students will score a 4.8 or higher (4point scale)	Goal met n-15 CII 100% scored a 4.8 or higher n-9 CV	2017/2018	5.0	5.0
					2018/2019	5.0	4.97
					2019/2020	4.63	5.0
					2020/2021	4.86	4.73
					2021/2022	5.0	4.87
					2022-2023	5.0	4.96
					Year	Clinical II	Clinical IV
					2016	3.94	3.9
					2017	4.0	4.97
					2018	3.97	4.0
					2019	4.0	4.0
					2020	3.97	5.0
					2021/2022	4.0	4.0
					2022/2023	4.0	3.987

				100% scored a 4.8 or higher																	
4.2 Students will recognize unethical behavior	Ethic & Legal test Chapter 2 & 3 ethics scenario Question 4	Measured in 2 year- fall semester	98 % of students will answer question correctly	Goal met n-9 100% answered the question correctly	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2016/2017</td> <td>100%</td> </tr> <tr> <td>2017/2018</td> <td>100%</td> </tr> <tr> <td>2018/2019</td> <td>100%</td> </tr> <tr> <td>2019/2020</td> <td>100%</td> </tr> <tr> <td>2020/2021</td> <td>100 %</td> </tr> <tr> <td>2021/2022</td> <td>100%</td> </tr> <tr> <td>2022/2023</td> <td>100%</td> </tr> </tbody> </table>	Year	Score	2016/2017	100%	2017/2018	100%	2018/2019	100%	2019/2020	100%	2020/2021	100 %	2021/2022	100%	2022/2023	100%
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Clinical Journal (Ethics Class)	Measured in 2 year- fall semester	85 % of students will recognized unethical behavior	Goal met n-9 100% recognized unethical behavior	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2016/2017</td> <td>100%</td> </tr> <tr> <td>2017/2018</td> <td>100%</td> </tr> <tr> <td>2018/2019</td> <td>94%</td> </tr> <tr> <td>2019/2020</td> <td>100%</td> </tr> <tr> <td>2020/2021</td> <td>100 %</td> </tr> <tr> <td>2021/2022</td> <td>100%</td> </tr> <tr> <td>2022/2023</td> <td>100%</td> </tr> </tbody> </table>	Year	Score	2016/2017	100%	2017/2018	100%	2018/2019	94%	2019/2020	100%	2020/2021	100 %	2021/2022	100%	2022/2023	100%	
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Student Learning Outcome 4.1

Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning

Goal 4, SLO 1 (Trajecysy final evaluation)(Exhibits professional performance in clinical setting)Benchmark met for Clinical III class of 2024 and Clinical V class of 2023. Faculty plan to change measurement tool for Y24

Goal 4 SLO 2 (Trajecysy room evaluation)(Exhibits professional performance in clinical setting) Benchmark met Clinical II class of 2024 and Clinical IV class of 2023. Faculty plan to change measurement tool for Y24

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and assessment committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: Summer 2024

Student Learning Outcome 4.2

Analysis: Include key findings, 5 year trending comparison, steps to take to enhance student learning

Goal 4, SLO 1 (ethics test chapter 2 & 3 ethics scenario question 4) benchmark for the class of 2023 was met with all 9 students recognizing unethical behavior on the scenario question on the test. Faculty will change the measurement tool for Y24

Goal 4, SLO 2 (ethics clinical journal) benchmark met for the class of 2023. All nine students could recognize unethical behavior in the clinical setting. Faculty will change the measurement tool for Y24

Action Plan based on Analysis: No current action at this time. Faculty will review measurement tools and possible change tools for each SLO for Y24.

Results/Improvement(s) noted based on the action plans that were implemented: Faculty and assessment committee will discuss possibly increasing or changing measurement tool at next meeting

Re-evaluation Date: Summer 2024

Goal 5– Graduates will successfully write the American Registry of Radiologic Technology (ARRT)

Student Learning Outcomes	Measurement Tools	Timeframe –	Benchmark-	Actual Data Results	Past 3 – 5 years of Data Results														
5.1 Students (Graduates-2022) will be able to pass the ARRT examination (17 students)	ARRT	Completed six months after graduates	75% of graduates will pass the registry on the first attempt	Goal met n-17 (82%) 14 of 17 passes first attempt	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>70%</td> </tr> <tr> <td>2019</td> <td>79%</td> </tr> <tr> <td>2020</td> <td>86%</td> </tr> <tr> <td>2021</td> <td>85%</td> </tr> <tr> <td>2022</td> <td>82%</td> </tr> <tr> <td>5 Yr. Av.</td> <td>80%</td> </tr> </tbody> </table>	Year	Score	2018	70%	2019	79%	2020	86%	2021	85%	2022	82%	5 Yr. Av.	80%
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2022	82%																		
5 Yr. Av.	80%																		

Goal 6– The program will be effective in the education process

Student Learning Outcomes	Measurement Tools	Timeframe –	Benchmark-	Actual Data Results	Past 3 – 5 years of Data Results														
6.1 Of those pursuing employment, students will be gainfully employed within 6 months post-graduation. (2022 graduates) (17 students)	Graduate survey	completed 6 months post-graduation	60 % will be employed within 6 months of graduation	Goal Met n-17 13 of 13 (100%) employed 2- ultrasound school 2-not seeking	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>80%</td> </tr> <tr> <td>2019</td> <td>88%</td> </tr> <tr> <td>2020</td> <td>100 %</td> </tr> <tr> <td>2021</td> <td>100%</td> </tr> <tr> <td>2022</td> <td>100%</td> </tr> <tr> <td>5 YR. Av.</td> <td>93%</td> </tr> </tbody> </table>	Year	Score	2018	80%	2019	88%	2020	100 %	2021	100%	2022	100%	5 YR. Av.	93%
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5 YR. Av.	93%																		

6.2 The student will complete the program within 25 months (Class of 2022-17 students)	Graduate survey	completed 6 months post-graduation	50% of students starting program will finish within 25 months	Goal Met n-17 19 started 17 graduated (89%)	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>55%</td> </tr> <tr> <td>2019</td> <td>69%</td> </tr> <tr> <td>2020</td> <td>66 %</td> </tr> <tr> <td>2021</td> <td>72 %</td> </tr> <tr> <td>2022</td> <td>89%</td> </tr> </tbody> </table>	Year	Score	2018	55%	2019	69%	2020	66 %	2021	72 %	2022	89%				
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6.3 Students will be satisfied with their education (2022 graduates) 17 students	Graduate survey	completed 6 months post-graduation	85% will be satisfied with their education	Goal Met n- 9 (100%) 9 of the 17 graduates completed survey.	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100 %</td> </tr> <tr> <td>2021</td> <td>100%</td> </tr> <tr> <td>2022</td> <td>100%</td> </tr> </tbody> </table>	Year	Score	2018	100%	2019	100%	2020	100 %	2021	100%	2022	100%				
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6.4 Employers will be satisfied with the graduate's performance. (2022 graduates) (17 students)	Graduate survey	completed 6 months post-graduation	80% of employers satisfied with graduate's performance	Goal Met n- 9 (100%) 4 of the 9 graduate's employer completed survey and satisfied.	<table border="1"> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>100%</td> </tr> <tr> <td>2017</td> <td>100%</td> </tr> <tr> <td>2018</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100 %</td> </tr> <tr> <td>2021</td> <td>100%</td> </tr> <tr> <td>2022</td> <td>100 %</td> </tr> </tbody> </table>	Year	Score	2016	100%	2017	100%	2018	100%	2019	100%	2020	100 %	2021	100%	2022	100 %
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