Southern Illinois University Carbondale College of Health and Human Sciences School of Health Sciences Medical Dosimetry Program Assessment Plan Summer 2023 Analysis and Actions

MISSION: The mission of the Medical Dosimetry Program through Southern Illinois University Carbondale is to provide a quality program integrating education, research and service in order to meet the needs of the profession and improve the delivery of health care for the people and communities we serve.

GOAL #1: Prepare the student to practice as a competent entry level professional Medical Dosimetrist by offering a comprehensive curriculum and quality didactic/clinical instruction. (i.e. Clinical Competency)

Outcomes	Assessment Method	Assessment Tool	Benchmark	Time Frame for Evaluation	Person/Group Responsible	Data	Analysis and Action
SLO 1. Students will be clinically competent upon graduation	Assessment Tool 1. Review of student clinical competencies.	Clinical Competency Check Lists	Each student will complete 97% of the suggested competencies	Summer Semester	Program Director	2021/2022 19/19 students - 100% 2020/2021 22/22 students - 100%	2022- SLO 1 was modified for new JRCERT format – Data previously collected but assessment plan modified. 2021/2022 – Added semester benchmarks to try and get students to complete comps on a more frequent basis. Benchmark met. Continue to monitor.
	Assessment Tool 2. Graduates will pass MDCB certification exam on first attempt Graduates will sit for MDCB certification exam the year following graduation.	MDCB Report if available/Graduate Feedback	A five-year average of 80% of the graduates will pass the credentialing exam on first attempt	Spring Semester post- graduation	Program Director	2021/2022 19/19 students - 100% 2020/2021 20/20 Students 100% (2 did not test)	Benchmark met. Continue to monitor. Will encourage students to test as soon as possible.

SLO 2. Employer indicates graduate was adequately prepared to perform as an entry-level dosimetrist.	Assessment Tool 1. Employers will be surveyed approximately 6 months following graduation of student. Question 3.	Employer Survey Question 3 – "The graduate has the Medical Dosimetry knowledge necessary to function in a healthcare setting."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree") response to item Survey Monkey Question 3	Spring Semester	Program Director	2021/2022 - #3 - 4.77 - 13/16 surveys 2020/2021 - #3 - 4.83 - 6/11 surveys	2022- SLO 2 was modified for new JRCERT format – Data previously collected but assessment plan modified. Benchmark met. Continue to monitor. 2021/2022 – two students were evaluated average which lowered the scores. Both issues will be discussed in the advisory meeting. Employers indicate satisfaction.
	Assessment Tool 2. Employers will be surveyed approximately 6 months following graduation of student. Question 4.	Employer Survey Question 4 – "The graduate has the general medical knowledge necessary to function in a healthcare setting."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") response to item Survey Monkey Question 4	Spring Semester	Program Director	2021/2022 - #4 - 4.69 - 13/16 surveys 2020/2021 - #4 - 4.83 - 6/11 surveys	2021/2022 – slightly lower scores due to two students being ranked average. Benchmark met. Continue to monitor.
	Assessment Tool 3. Employers will be surveyed approximately 6 months following graduation of student. Question 11.	Employer Survey Question 11 – "The graduate possesses the skills to perform Medical Dosimetry procedures (adequately prepared for dosimetry duties)."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") response to item Survey Monkey Question 11	Spring Semester	Program Director	2021/2022 - #11 - 4.85 - 13/16 surveys 2020/2021 - #11 - 4.83 - 6/11 surveys	2021/2022 – slightly lower scores due to two students being ranked average. Benchmark met. Continue to monitor.

Assessment Tool 4. Employers will be surveyed approximately 6 months following graduation of student. Question 16.	Employer Survey Question 16 – "The graduate functions effectively as a member of the health care team."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") response to item Survey Monkey Question 16	Spring Semester	Program Director	2021/2022 - #16 - 4.77 - 13/16 surveys 2020/2021 - #16 - 4.83 - 6/11 surveys	Benchmark met. Continue to monitor. Feedback consistent throughout this SLO.

GOAL #2: Provide avenues for students to develop and apply skills in effective communication necessary for successful medical dosimetry practice. (i.e. Communication)

Outcomes	Assessment Method	Assessment Tool	Benchmark	Time Frame for Evaluation	Person/Group Responsible	Data	Analysis and Action
SLO 1. Students demonstrate effective communication skills.	Assessment Tool 1. Growth Evaluations are performed during each clinical rotation. Final Growth Evaluation – Question 1	Final Growth Evaluation. Question 1 – "Demonstrates good rapport/communication skills with Patient, Clinical Supervisor, Department Personnel, Radiation Oncologist/Physicist	Students will achieve an average score of 4.0 on a scale of 0-5 ("Acceptable" to "Excellent") on question 1.	Summer Semester	Program Director	2021/2023 - #1 - Avg 5.00 2020/2021 - #1 - Avg 4.95	2022- SLO 1 was modified for new JRCERT format – Data previously collected but assessment plan modified. 2021/2022 Final growth evaluation scores remain positive. Met benchmark. Continue to monitor.
	Assessment Tool 2. Students will undergo a Mock Interview Assignment. Question 6	Mock Interview Evaluation Question 6 - "Was able to discuss pertinent aspects of a dosimetry position"	Students will achieve an average score of 8 or higher on a 10 point scale. (10 = "Excellent")	Spring Semester	Program Faculty	2021/2023 – #6 – Avg 9.68 2020/2021 – #6 – Avg 9.65	2021/2022 - Scores in on the mock interview assignment continue to remain strong. Met benchmark. Continue to monitor.

	Assessment Tool 3. Students will undergo a Mock Interview Assignment. Question 7	Mock Interview Evaluation Question 7 – "Answered impromptu questions appropriately"	Students will achieve an average score of 8 or higher on a 10 point scale. (10 = "Excellent")	Spring Semester	Program Faculty	2021/2023 - #7 - Avg 9.74 2020/2021 - #7 - Avg 9.65	Met benchmark. Continue to monitor. Students scored well throughout.
	Assessment Tool 4. Students will undergo a Mock Interview Assignment. Question 8	Mock Interview Evaluation Question 8 – "Asked proper interview questions"	Students will achieve an average score of 8 or higher on a 10 point scale. (10 = "Excellent")	Spring Semester	Program Faculty	2021/2023 – #8 – Avg 9.68 2020/2021 – #8 – Avg 9.50	Met benchmark. Continue to monitor. Students continue to rank the mock interview assignment high as it helps prepare them for their future.
SLO 2. Graduates demonstrate effective communication skills.	Assessment Tool 1. Employers will be surveyed approximately 6 months following graduation of student. Question 13	Employer Survey Question 13 – The graduate communicates effectively within a healthcare setting (verbal).	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") Survey Monkey questions 13 (verbal).	Spring Semester	Program Director	2021/2022 - #13 - 4.77 - 13/16 surveys 2020/2021 - #13 - 5.0 - 6/11 surveys	2022- SLO 2 was modified for new JRCERT format – Data previously collected but assessment plan modified. Benchmark met. Continue to monitor.
	Assessment Tool 2. Employers will be surveyed approximately 6 months following graduation of student. Question 14	Employer Survey Question 14 – The graduate communicates effectively within a healthcare setting (written).	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") Survey Monkey question 14 (written).	Spring Semester	Program Director	2021/2022 – #14 - 4.77 - 13/16 surveys 2020/2021 – #14 – 5.0 - 5/11 surveys	Benchmark met. Continue to monitor. Employers ranked graduates very well. Faculty continuously receive unsolicited employment opportunities for SIU students.

GOAL #3: Provide avenues for students to develop and apply skills in critical thinking and problem-solving necessary for successful medical dosimetry practice. (i.e. Critical Thinking)

Outcomes	Assessment Method	Assessment Tool	Benchmark	Time Frame for Evaluation	Person/Group Responsible	Data	Analysis and Action
SLO 1. Students demonstrate effective problem solving and critical thinking skills.	Assessment Tool 1. Growth Evaluations are performed during each clinical rotation. Final Growth Evaluation – Question 10	Final Growth Evaluation. Question 10 – "Exercises good judgment in determining treatment technique/approach for desired patient outcome per the physician's prescription. i.e. palliative or curative intent."	Students will achieve an average score of 4.0 on a scale of 0-5 ("Acceptable" to "Excellent") on question 10.	Summer Semester	Program Director	2021/2023 – #10 – Avg 5.00 2020/2021 – #10 – Avg 4.95	2022- SLO 1 was modified for new JRCERT format – Data previously collected but assessment plan modified. 2021/2022 – Growth evaluation scores remain positive. Met benchmark. Continue to monitor.
	Assessment Tool 2. Growth Evaluations are performed during each clinical rotation. Final Growth Evaluation – Question 12	Final Growth Evaluation. Question 12 – "Demonstrates an understanding of the concepts needed for the rotation being evaluated."	Students will achieve an average score of 4.0 on a scale of 0-5 ("Acceptable" to "Excellent") on question 12.	Summer Semester	Program Director	2021/2023 – #12 – Avg 5.00 2020/2021 – #12– Avg 4.95	Met benchmark. Continue to monitor. Evaluators believe students demonstrate an understanding of dosimetry concepts.
	Assessment Tool 3. A passing score must be achieved on the Comprehensive Final Exam in RAD 555 to successfully complete the program.	Final Exam in RAD 555	Students will achieve an average score of ≥80% out of 100%.	Summer Semester	Program Director	2021/2022 – Avg 90.5% 2020/2021 – Avg 88.21%	Benchmark met. Continue to monitor.
SLO 2. Graduates demonstrate effective problem solving and critical thinking skills.	Assessment Tool 1. Employers will be surveyed approximately 6 months following graduation of student. Question 6	Employer Survey Question 6 – "The graduate is able to interpret patient data."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") Survey Monkey Question 6	Spring Semester	Program Director	2021/2022 – #6 - 4.85 - 13/16 surveys 2020/2021 – #6 – 4.83 - 6/11 surveys	2022- SLO 2 was modified for new JRCERT format – Data previously collected but assessment plan modified. 2021/2022- Slightly lower scores due to two students being ranked slightly lower. Benchmark met. Continue to monitor.

Assessment Tool 2. Employers will be surveyed approximately 6 months following graduation of student. Question 7	Employer Survey Question 7 – "The graduate uses sound judgment while functioning in a healthcare setting."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") Survey Monkey Question 7	Spring Semester	Program Director	2021/2022 – #7 - 4.69 - 13/16 surveys 2020/2021 – #7 – 4.83 - 6/11 surveys	2021/2022 - Employers continue to evaluate program graduates positively. Benchmark met. Continue to monitor.
Assessment Tool 3. Employers will be surveyed approximately 6 months following graduation of student. Question 8	Employer Survey Question 8 – "The graduate is an effective problem solver and critical thinker."	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Strongly Agree" or "Generally Agree") Survey Monkey Question 8	Spring Semester	Program Director	2021/2022 – #8 - 4.54 - 13/16 surveys 2020/2021 – #8 – 4.67 - 6/11 surveys	Benchmark met. Continue to monitor.

PROGRAM EFFECTIVENESS OUTCOMES

Outcomes	Assessment Tool	Benchmark	Time Frame for Evaluation	Person/Group Responsible	Data	Analysis and Action
1. Graduates will pass MDCB certification exam on first attempt.	MDCB Report if available/Graduate Feedback	A five-year average of 80% of the graduates will pass the credentialing exam on first attempt	Fall Semester	Program Director	2001/2002 1/1 Students 100% BJH 2002/2003 2/2 Students 100% BJH 2003/2004 2/2 Students 100% BJH 2004/2005 1/1 Students 100% BJH 2005/2006 5/5 Students 100% SIUC 2006/2007 3/3 Students 100% SIUC 2007/2008 7/7 Students 100% SIUC 2008/2009 9/10 Students 90%SIUC 2009/2010 9/11 Students 82% SIUC (two did not test) 2010/2011 13/14 Students 93% SIUC (one did not test) 2011/2012 13/13 Students 100% 2012/2013 15/16 Students 93.8% 2013/2014 17/17 Students 100% (one did not test) 2014/2015 14/14 Students 100% (five did not test) 2015/2016 17/20 Students 100% (1 did not test) 2017/2018 19/19 Students 100% (1 did not test) 2017/2018 19/19 Students 100% (1 did not test) 2019/2020 26/26 Students 100% (2 did not test) 2020/2021 20/20 Students 100% (2 did not test) 2021/2022 19/19 Students 100% (0 did not test)	2013- Concerned that the MDCB report does not break out by class. Also concerned about students not testing when eligible. 2015- one did not test due to application error. 2017 – one did not test 2019 – Exam results released 5/21/19. 2019/2020 – one did not test due to COVID in 2021. 2021/2022 – We are very pleased to continue the excellent pass rates. Met Benchmark. Continue to monitor. Very pleased with student performance on MDCB exam.

2. Graduates will have employment within the medical dosimetry profession post-graduation.	End of program paperwork	50% of the graduates will have employment at time of graduation.	Summer Semester	Program Director	2006/2007 100% of students had employment at time of graduation. 3/3 students 2007/2008 100% of students had employment at time of graduation. 7/7 students 2008/2009 70% of students had employment at time of graduation 2009/2010 50% of students had employment at time of graduation 2010/2011 11/15 73% of students had employment at time of graduation 2011/2012 5/13 38.5% of students had employment at time of graduation 2011/2012 5/13 38.5% of students had employment at time of graduation 2012/2013 9/16 56.3% of students had employment at time of graduation 2013/2014 7/18 38.8% of students had employment at time of graduation 2014/2015 7/11 63.6% of students had employment at time of graduation, 8 did not respond. 2015/2016 7/14 50% of students had employment at time of graduation, 6 did not respond. 2016/2017 17/20 85% of students had employment at time of graduation. 1 did not respond 2017/2018 9/12 75% of students had employment at time of graduation. 7 did not respond 2018/2019 13/13 100% of students had employment at time of graduation. 8 did not respond 2019/2020 19/20 95% of students had employment at time of graduation. 7 did not respond 2020/2021 9/12 75% of students had employment at time of graduation. 10 did not respond 2021/2022 16/16 100% of students had employment at time of graduation. 10 did not respond	2012 and 2015 -Did not meet benchmark. Will start discussing the need to look for employment earlier in program. 2015- Starting to see more job advertisements but we are tracking 6 months and 12 month dates and meeting benchmarks. 2017- Still have many job advertisements coming in weekly. 2019- Still have many job advertisements coming in weekly. 2021 - Met Benchmark - Continue to monitor. — Will continue to share job posting as they come in. Noticing an increase in openings. 2022- Still having many job announcements come in and share with the last three cohorts of students/graduates.
	Graduate Survey.	80% of the graduates will have employment within six months post graduation. Five year average.	Approximately 6 months post graduation. Spring Semester	Program Director	2002/2003 2/2 Students 100% 2003/2004 2/2 Students 100% 2004/2005 1/1 Students 100% 2005/2006 5/5 Students 100% 2006/2007 3/3 Students 100% 2007/2008 7/7 Students 100% 2008/2009 10/10 Students 100%	2017- Modified survey question for 2015/2016 cohort. Not yet completed. 2021- Met benchmark. Continue to monitor. Will send out more emails to try

				2009/2010 12/12 Students 100% 2010/2011 15/15 Students 100% 2011/2012 12/13 Students 92.3% 2012/2013 16/16 Students 100% 2013/2014 18/18 Students 100% 2014/2015 13/13 Students 100% (13 responded but sure other 6 do too) 2015/2016 11/11 Students 100% (11 of 20 responded.) 2016/2017 20/20 Students 100% (1 accepted a therapy position to stay local) 2017/2018 19/19 Students 100% (1 did not respond) 2019/2020 21/21 Students 100% (6 did not respond) 2020/2021 12/12 Students 100% (10 did not respond) 2021/2022 18/18 100% of students had employment at six months, 1 did not respond. Overall 90/90 Students for Five year average of 100%.	and increase response rate. However, students are gaining employment. 2022- Still having many job announcements come in and share with the last three cohorts of students/graduates.
Graduate	85% of the graduates will have employment within twelve months post-graduation. Five-year average.	Approximately 12 months post-graduation. Fall semester.	Program Director	2012/2013 class surveyed in 2014 16/16 of students 100% 2013/2014 class surveyed in 2015 18/18 of students 100% 2014/2015 class surveyed in 2016 11/11 responded. 2015/2016 class surveyed in August 2017. 13 of 20 responded, 7 did not respond. 100% 2016/2017- class surveyed in August 2018. 16 of 20 responded, 4 did not respond. 100% 2017/2018- class surveyed in August 2019. No new employment changes reported. All 19 employed. 100% 2018/2019- class surveyed in August 2020. No new employment changes reported. All 20 employed. 100% (1 did not respond) 2019/2020- class surveyed in August 2021. No new employment changes reported. All 25 employed. 100% (2 did not respond) 2020/2021 12/12 Students 100% (10 did not respond – no new responses from spring report) 2021/2022 18/18 100% of students had employment at six months, 1 still did not respond.	2017- Modified survey question for 2015/2016 cohort. 2021- Met benchmark. Continue to monitor. Will send out more emails to try and increase response rate. However, students are gaining employment. 2022- Will review in August 2023.

					Overall 94/94 Students for Five year average of 100%.	One student removed for
3. Students who start the program will complete the program.	Program Completion Rate/Student Retention Rate.	80% of the students starting the program will graduate from the program. Five-year average.	Summer Semester	Program Director	2001/2002 1/1 Students 100% 2002/2003 2/2 Students 100% 2003/2004 2/2 Students 100% 2004/2005 1/1 Students 100% 2005/2006 5/5 Students 100% 2006/2007 3/4 Students 75% 2007/2008 7/7 Students 100% 2008/2009 10/10 Students 100% 2009/2010 12/12 Students 100% 2010/2011 15/16 Students 93.8% 2011/2012 13/14 Students 92.9% 2012/2013 16/17 Students 94.1% 2013/2014 18/18 Students 100% 2014/2015 19/19 Students 100% 2015/2016 20/22 Students 90.1% 2016/2017 21/22 Students 95.5% 2017/2018 19/22 Students 86.4% 2018/2019 21/24 Students 87.5% 2019/2020 27/31 Students 87.1% 2020/2021 22/22 Students 100% 2021/2022 19/19 Students 100%	poor performance in 2011/2012. One student left for personal reasons 2012/2013. One student left for personal reasons 2013/2014. 2014/2015- one student dropped day one and does not count as not in official 10 day count. 2015/2016 -one student dropped in middle of fall semester and one did not complete the program. 2016/2017 – one student left at beginning of spring semester. 2018/2019 – Two student left during fall semester and one did not pass comprehensive exam. 2020/2021 – Three left program for non-academic reasons. No penalty to program. New JRCERT criteria. 2021/2022 – started with 23 and four left for personal reasons. For current year, started with 25 and have 24 remaining. Met benchmark.

4. Graduates will evaluate the program positively.	Graduate survey.	The returned graduate surveys will reflect average score of ≥4 on a scale of 1-5 on ("exceptional" or "adequate") response on item #10. Survey Monkey #11 for 2016 and beyond.	Spring Semester	Program Director	2006/2007 #10 average score of 4.67 on 3/3 surveys sent out 2007/2008 #10 average score of 5 on 7/7 surveys sent out 2008/2009 #10 average score of 4.7/5 on 10/10 surveys sent out 2009/2010 #10 average score of 4.86/5 on 7/12 surveys sent out 2010/2011 #10 average score of 5/5 on 6/15 surveys sent out 2011/2012 #11 average score of 4.5/5 on 8/13 surveys sent out 2012/2013 #12 average score of 4.82 on 11/16 surveys sent out 2013/2014 #8 average score of 4.71 on 14/18 surveys sent out 2014/2015 #11 average score of 4.60 on 10/19 surveys sent out 2015/2016 #11 average score of 4.82 on 11/20 surveys sent out 2016/2017 #11 average score of 4.89 on 9/21 surveys sent out 2017/2018 #11 average score of 5.0 on 8/19 surveys sent out 2018/2019 #11 average score of 4.92 on 13/21 surveys sent out 2019/2020 #11 average score of 4.9 on 9/27 surveys sent out 2020/2021 #11 average score of 4.67 on 6/22 surveys sent out 2021/2022 #11 average score of 4.69 on 16/19 surveys sent out	2021- Met benchmark. Continue to monitor. Will send out additional emails to try and improve response rate. 2022 – Scores are consistent with an increased response rate which is a better representation of graduate satisfaction.
5. Employers will evaluate the program positively.	Employer survey.	The returned employer surveys will reflect average score of ≥4 on a scale of 1-5 on ("Excellent" or "Very Good") response to item #IV. Survey Monkey question #20 "Please rate and comment on the OVERALL quality of this program's	Spring Semester	Program Director	2006/2007 #IV average score of 4.5 on 2/3 surveys sent out 2007/2008 #IV average score of 4.6 on 5/7 surveys sent out 2008/2009 #IV average score of 4.6 on 5/10 surveys sent out 2009/2010 #IV average score of 4.67 on 6/12 surveys sent out 2010/2011 #IV average score of 4.57 on 7/10 surveys sent out	2021- Met benchmark. Continue to monitor. Employers continue to rate students excellent which is good to see. 2022 – Have an increased response rate from employers. Concerns were received on two students. One for

		graduate."			2011/2012 #IV average score of 5.00 on 4/10 surveys sent out 2012/2013 #20 average score of 4.75 on 5/9 surveys sent out 2013/2014 #20 average score of 5.0 on 4/10 surveys sent out 2014/2015 #20 average score of 5.0 on 8/13 surveys sent out 2015/2016 #20 average score of 4.75 on 4/11 surveys sent out 2016/2017 #20 average score of 5.00 on 8/13 surveys sent out 2017/2018 #20 average score of 5.00 on 5/9 surveys sent out 2018/2019 #20 average score of 4.71 on 8/13 surveys sent out 2019/2020 #20 average score of 5.0 on 5/21 surveys sent out 2020/2021 #20 average score of 5.0 on 6/11 surveys sent out 2021/2022 #20 average score of 4.61 on 13/16 surveys sent out	personality and another for lack of diverse planning experience.
6. Employers will evaluate the program positively.	Employer survey.	The returned employer surveys will have an 80% "yes" response for the following question: "If given the opportunity, would you hire a graduate of this program again? Yes or No" Survey Monkey question #25	Spring Semester	Program Director	2006/2007 Yes 2 No 2/3 surveys sent out 2007/2008 Yes 5 No 5/7 surveys sent out 2008/2009 Yes 5 No 5/10 surveys sent out 2009/2010 Yes 5 No 0 6/12 surveys sent out (one left blank but gave high marks) 2010/2011 Yes 6 No 0 7/10 surveys sent out (one left blank but gave high marks) 2011/2012 Yes 4 No 0 4/10 surveys sent out 2012/2013 Yes 4 No 0 5/9 surveys sent out (one skipped) 2013/2014 Yes 3 No 0 4/10 surveys sent out 2014/2015 Yes 8 No 0	2021- Met benchmark. Continue to monitor. 100% of employers would hire a SIU graduate in the future. Many reach out to us annually. 2021/2022 – The one no was from an employer that hired a graduate that attended a small clinic.

	8/13 surveys sent out
	2015/2016 Yes 4 No 0
	4/11 surveys sent out
	2016/2017 Yes 7 No 0
	7/13 surveys sent out (one respondent skipped the question)
	2017/2018 Yes 5 No 0
	5/9 surveys sent out
	2018/2019 Yes 7 No 0
	8/13 surveys sent out (one did not answer)
	2019/2020 Yes 4 No 0
	5/21 surveys sent out (one did not answer)
	2020/2021 Yes 6 No 0
	6/11 surveys sent out
	2021/2022 Yes 12 No 1
	13/16 surveys sent out