

PROGRAM INFORMATION	Program	Radiation Therapy
	Submitted by:	Paula Freeman
	Year	2023-2024
	Date of Review	2024-01-05
	Form Key	e7c21d63-2889-4742-9d5e-c4acbcfa4144
PROGRAM OUTCOMES	Explain how program outcomes were reviewed this year (i.e., input from advisory board, instructors, students, etc.) and changes made, if any:	<p>Program outcomes were reviewed and analyzed by the assessment committee On November 21, 2023. Data from the 2023 student cohort, analysis of the results, and action plans were shared with advisory board prior board meeting on Dec 28, 2023. Five learning goals: competency in clinical setting, critical thinking, communication, professionalism, graduate success in the field. Three specific areas were discuss with the board for their feedback.</p> <p>1b. Competency in Treatment Delivery 2b. Recognizing Discrepancies and Developing Solutions 4a. Ethical and Professional Manner</p>
	Outcomes are up to date in WIDS and on the program's web page	Yes
SYLLABI	ADA Statement	Yes
	Competencies	Yes
	Course Description	Yes
	Course Title and Number	Yes
	Credit Hours	Yes
	Freedom of Expression Statement	Yes
	Grading Criteria	Yes
	Instructor	Yes
	Academic Integrity Policy	Yes
	Nondiscrimination Statement	Yes
	Office Hours/Contact Information	Yes
	Prerequisites	Yes
	Required Text(s)	Yes
	Syllabi Up to Date in WIDS	Yes
Explain which syllabi were reviewed this year; input received from advisory board, instructors, students, etc. regarding course objectives and textbooks used; and changes made, if any.	<p>The Advisory Board was asked to review the syllabus for RTH 206 Simulation and Medical Imaging at the fall meeting. Paula went over the syllabus and the topics covered in the course. The lab portion of the course introduces students to the CT simulation equipment and techniques. Students complete five simulation competencies (whole brain, head and neck, chest, breast, and pelvis). Students are given a lab hand-out that describing each procedure requirements. An 11-performance criteria test-out score sheet is used to assure students have mastered competencies. The board noted that the score sheet and lab documents are effective in preparing the student for simulation in the clinical setting.</p> <p>The program director reviews each syllabi at the completion of each semester as needed. Changes are made or discussed with the advisory board.</p>	
PROGRAM COMPETENCIES	Explain how competencies were reviewed this year (i.e., input from advisory board, instructors, students, etc.) and changes made, if any:	<p>1. The Advisory Board was asked to review the syllabus for RTH 206 Simulation and Medical Imaging at the fall meeting. Paula went over the syllabus and the topics covered in the course. The lab portion of the course introduces students to the CT simulation equipment and techniques. Students complete five simulation competencies (whole brain, head and neck, chest, breast, and pelvis). Students are given a lab hand-out that describing each procedure requirements. An 11-performance criteria test-out score sheet is used to assure students have mastered competencies. The board noted that the score sheet and lab documents are effective in preparing the student for simulation in the clinical setting.</p> <p>The program director reviews each syllabi at the completion of each semester as needed. Changes are made or discussed with the advisory board.</p>

		<p>2. Five learning goals: competency in clinical setting, critical thinking, communication, professionalism, graduate success in the field. Were discussed at the fall advisory board meeting. Three specific areas were discussed with the board for their feedback.</p> <p>1b. Competency in Treatment Delivery The revised Clinical Evaluation - Treatment Machine assessment tool was used for the first time this year, which is a factor in the 3.26 average for this cohort. For this reason, we do not have trend data because the assessment tool was new. Faculty examined the scores in Trajecsys to determine a pattern. It was noted the lowest area was in using the patient chart to recognize treatment changes. Students do not have access to treatment charts prior to the start of clinical except during fall shadow rotations. The board discussed whether students would benefit from an additional learning activity in conjunction with the shadow rotation that would reinforce this skill. The board agreed it would be more beneficial to give students experience with charts when they get into clinicals rather than in the fall semester. A checklist will be designed to reinforce recognizing treatment changes.</p> <p>2b. Recognizing Discrepancies and Developing Solutions The revised Clinical Evaluation - Treatment Machine assessment tool was used for the first time this year. It was noted the lowest area was in recognizing when a patient should be referred to the physician or nurse for abnormal treatment reactions. The board indicated that students do not have the experience need to “recognize” abnormal reactions and the wording should be changed, so that it doesn't imply that the student has to be the person responsible for recognizing the need. Changes were made to the tool to read: Understands the need for the patient to be referred to the physician or nurse for abnormal treatment reactions; responds when appropriate.</p> <p>4a. Ethical and Professional Manner The final exam on the HIPAA Training.com module has been used as an assessment tool for this outcome. Because the assignment requires students to retake the exam until they achieve a 90% on the test, the data will always be at or above our benchmark. This particular assessment is not meaningful or helpful in improving student learning. This tool will be with the treatment machine clinical evaluation (Q12. Respects patient's rights to privacy and confidentiality, by following HIPAA guidelines). Board members agreed with this change, so the assessment plan will be adjusted and presented for approval at the spring 2024 advisory board meeting.</p>
	WIDS Up to Date	Yes
COURSE ASSESSMENTS USED IN PROGRAM CHECKLIST	Capstone	No
	Class Participation	Yes
	Clinical/internship observations	Yes
	Examinations	Yes
	Comprehensive Final Exams	Yes
	Journals	Yes
	Lab Demonstrations	Yes
	Oral Examinations/Presentations	Yes
	Other Projects	Yes
	Peer Evaluations	No
	Portfolio Projects	No
	Quizzes	Yes
	Self-Evaluations	No
	Simulations	Yes
	Videos of Student Mastery	No
	Written Essays	Yes
Written Reports	No	

ALIGNED AND APPROPRIATE ASSESSMENTS	Assessments used in the program are matched to the outcomes/competencies for the program.	Yes
	Explain changes in the assessments used in your program since your last review (include input received and rationale).	<p>A change was made to include the teaching of treatment delivery equipment. This topic had previously been taught in the physics course. As part of a lesson, students drew the linear accelerator complete with a description of each component. The end result of the drawing depicted the creation of a photon or electron beam.</p> <p>Two new textbooks were added this year.</p> <ol style="list-style-type: none"> 1. Radiation Therapy Calculations Manual - RTH 202 Radiation Therapy Physics 2. Comprehensive Review Guide for the Radiation Therapy - RTH 212 Registry Review I and RTH 214 Registry Review II
	Give examples of how assessments used in the program reflect higher-level thinking skills, such as applications, analysis, synthesis, and evaluation.	<p>Drawing was a new type of assessment this year. As a result of the drawing activity described above, students synthesized their understanding of how the accelerator operates and formulated questions as they drew and studied each component.</p>
INDUSTRY CERTIFICATIONS	Explain any changes made or planned in the program based on assessment of industry certifications used in the program.	<ol style="list-style-type: none"> 1. The program's 5-year average is 91.6% (number passing on first attempt), well above JRCERT's benchmark of 75% pass rate. (FYI -- The 2023 cohort's passing rate is 100% (9 of 9 graduates)) 2. Program faculty look at ARRT exam scaled scores to see if students score lower in any content areas. We have been monitoring Radiation Protection and Prescription and Dose Calculation; the 2023 graduates did well in both these areas. In fact, this cohort's average scores in all content areas met or exceeded the average scores from the previous year. The highest performing area is once again Patient Interactions (8.87 average). 3. The physics course was modified for fall 2022 due to a change in adjunct faculty. This year's exam data(2023 cohort) in the areas of radiation physics and dose calculation showed increases over past years, which is a good indicator that the physics changes have been good for the program. Having a therapist teaching that class is really helpful. A new registry review textbook was adopted which may also be a factor in the strong exam results.
INTERNSHIPS/ CLINICALS	How do you evaluate program competencies or learning objectives during internship/externship experiences?	<p>Specific treatment machine, simulation and dosimetry competencies are completed. Portions of these competencies are tied to the program assessment plan benchmarks. Changes to the benchmarks for outcomes 1a. and 1b. which are assessed with the Simulation Competency Form and the Treatment Machine Competency Form were made. As discussed at past advisory board meetings, students were passing 100% of their competencies, but not all students were getting perfect scores on each competency. Instead of using a percentage of students passing competencies for a benchmark, we want to average the students' total scores on their competencies in the semester and use those averages as benchmarks for 1a. and 1b. These changes were made with the 2023 cohort</p> <p>In addition, clinical staff complete monthly evaluation on student performance in the area of treatment delivery and simulation. A new scoring method was implemented for the spring 2023 cohort for the simulation and treatment machine evaluations. Changes were made to improve the effectiveness of the tool in differentiating between program strengths and areas with room to improve. The clinical preceptor completes a bi-semester professional development evaluation which focuses on the affective dimension.</p>
	As you reviewed results of internship/externship evaluations, what curriculum changes were made or are planned in your program?	<p>Trajecsys, a cloud based paperless clinical tracking software and report system is in place to aid in the tracking of data. See the above narrative for changes made. Refer to section C for changes made based on clinical feedback.</p>

ENROLLMENT	Does the most recent year's data meet this benchmark? If not, explain a single-year anomaly or explain what strategies your program will implement to address a pattern (two or more years) of not reaching this benchmark.	Enrollment was at 100% following the 10 day count. Benchmark met.
RETENTION	Does the most recent year's data meet this benchmark? If not, explain a single-year anomaly or explain what strategies your program will implement to address a pattern (two or more years) of not reaching this benchmark.	90% of the students completed the program. One student left the program at the start of the 2023 spring semester. Benchmark met.
GRADUATION	Does the most recent year's data meet this benchmark? If not, explain a single-year anomaly or explain what strategies your program will implement to address a pattern (two or more years) of not reaching this benchmark.	90% of the students completed the program with an Associate degree. Benchmark met.
PLACEMENT	Does the most recent year's data meet this benchmark? If not, explain a single-year anomaly or explain what strategies your program will implement to address a pattern (two or more years) of not reaching this benchmark.	Placement for the 2022-2023 cohort was 100%
STUDENT SATISFACTION	If this benchmark is not met, what strategy or strategies will be implemented to address this measure?	N/A Not assessed this cycle
ALUMNI SATISFACTION	If this benchmark is not met, what strategy or strategies will be implemented to address this measure?	N/A Not assessed this cycle
EMPLOYER SATISFACTION	If this benchmark is not met, what strategy or strategies will be implemented to address this measure?	N/A Not assessed this cycle
PROFESSIONAL DEVELOPMENT	What professional development activities have instructors in this program completed in the last year?	24 hours of continuing education credits were completed with the American Society of Radiologic Technologists(ASRT) along with MTC educational staff opportunities.

	How were these activities used to improve this program?	The ASRT continuing education offerings enhanced the instructors knowledge of up-to-date industry topics such as breast cancer treatment, providing individualized care to patients on the spectrum, and imaging for malignancies. MTC offerings assist faculty with instruction.
PROFESSIONAL ORGANIZATIONS	Do faculty members belong to professional organizations associated with this program?	Yes
	If no, explain why.	
	Are students made aware of the professional organizations for their career field?	Yes
ADVISORY BOARD RECOMMENDATIONS	What changes were or will be made to this program based on feedback provided at the past year's advisory board meeting(s)?	Refer to sections A, C, and F.
	Implementation Date	2024-01-05
	Indicate the personnel responsible for implementing the change(s):	Paula Freeman
PROGRAM IMPROVEMENT PLANS AND BUDGET	As you review this past year, what changes do you propose for the next school year that will affect the program's budget?	I do not anticipate any large budget items impacting the next school year budget. Recently, the pixy phantom and thermoplastic oven were replaced.
	Cost	