

# **Radiation Therapy**

Doisy College of Health Sciences



**SAINT LOUIS UNIVERSITY**

—  
**DOISY COLLEGE OF HEALTH SCIENCES**

Revised September 2023

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## Accreditation Status

The Radiation Therapy Program at Saint Louis University is fully accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), having been awarded an eight-year accreditation. It is the only JRCERT accredited Radiation Therapy program in the state of Missouri. The program's next scheduled reaccreditation review by the JRCERT will be July 2025.

For further information on the Joint Review Committee on Education in Radiologic Technology, or to view the program's current accreditation status, go to

<https://www.jrcert.org/>

### Joint Review Committee on Education in Radiologic Technology

20 N. Wacker Drive, Suite 2850

Chicago, IL 60606

312-704-5300

[mail@jrcert.org](mailto:mail@jrcert.org)

## Program Mission

The Radiation Therapy Program is the only radiation therapy program in the state of Missouri. Due to its location at Saint Louis University, it gives students the opportunity to interact with students majoring in many health care fields including medicine, nursing, nuclear medicine technology, magnetic resonance imaging, physical therapy, physician assistant, occupational therapy, health information management, nutrition and dietetics, and clinical lab science. The Radiation Therapy Program strives to produce graduates that will excel in their professional field. We provide the development and knowledge that will allow the student to pursue a variety of paths when they enter the workforce, whether it is working as a staff therapist, pursuing an advanced or professional degree, or pursuing managerial and corporate positions. Our graduates are sought after and are well regarded at the clinical sites where they train. Students receive premier clinical experiences at the finest hospitals in the Saint Louis Metropolitan Area. Students receive instruction from expert full-time and adjunct faculty in a diverse group of related disciplines including radiation therapists, certified medical dosimetrists, nuclear medicine technologists, magnetic resonance imaging technologists, physicians, nurses, physicists, managers and other professionals.

**Programmatic Mission:** The Radiation Therapy Program at Saint Louis University, Doisy College of Health Sciences is dedicated to preparing liberally educated, competent, caring and socially responsible radiation therapists, committed to clinical and scholarly excellence.

## Program Goals and Student Learning Outcomes

- Goal A: Students will be clinically competent
  1. The radiation therapy student will position patients as directed in treatment record
  2. The radiation therapy student will set treatment machine as indicated in patient treatment record.
  3. The radiation therapy student will practice patient confidentiality.
  4. The radiation therapy student will practice proper radiation protection and safety.
- Goal B: Students will demonstrate problem solving and critical thinking skills
  1. The radiation therapy student will demonstrate complex radiation therapy procedures.
  2. The radiation therapy student will present a complex radiation therapy treatment procedure to an audience.
  3. The radiation therapy student will demonstrate appropriate problem solving skills for the practice of radiation therapy when provided with a case for analysis.
- Goal C: Students will demonstrate effective communication skills
  1. The radiation therapy student will appropriately communicate with patients.

2. The radiation therapy student will show evidence of appropriate written communication for the profession of radiation therapy.
  3. The radiation therapy student will demonstrate proper presentation skills.
- Goal D: Students will demonstrate professional growth and development
    1. The radiation therapy student will demonstrate professional behaviors.
    2. The radiation therapy student will be able to articulate ethical behaviors in clinical practice.
    3. The radiation therapy student will have knowledge of professional organizations.
    4. The radiation therapy student will demonstrate the concepts of compassionate care.

The program annually tracks student learning outcomes as they relate to the above student goals. This learning outcomes report for the past academic year can be found in the Appendix.

## Program Outcomes/Effectiveness Data 2018-2022

The following is the most current program outcomes/effectiveness data. Our programmatic accreditation agency, the Joint Review Committee on Education in Radiologic Technology (JRCERT), defines and publishes this information. [Click here](#) to go directly to the JRCERT webpage.

**Credentialing Examination:** The number of students who pass, on the first attempt, the American Registry of Radiologic Technologists (ARRT) certification examination, or an unrestricted state licensing examination, compared with the number of graduates who take the examination within six months of graduation. The five-year average benchmark established by the JRCERT is 75%.

Credentialing Examination Rate	Number passed on 1 <sup>st</sup> attempt divided by number attempted within 6 months of graduation
Year	Results
Year 1 – 2018	<b>11 of 11 - 100%</b>
Year 2 – 2019	<b>8 of 13 - 62%</b>
Year 3 – 2020	<b>7 of 9 - 78%</b>
Year 4 – 2021	<b>10 of 12 - 83%</b>
Year 5 – 2022	<b>8 of 13 - 62%</b>
<b>Program 5-Year Average</b>	<b>44 of 58 - 75.9%</b>

**Job placement rate:** The number of graduates employed in the radiologic sciences compared to the number of graduates actively seeking employment in the radiologic sciences within twelve months of graduating. The five-year average benchmark established by the JRCERT is 75%.

Job Placement Rate	Number employed divided by number actively seeking employment within 12 months of
Year	Results
Year 1 – 2018	<b>9 of 9 - 100%</b>
Year 2 – 2019	<b>10 of 10 - 100%</b>
Year 3 – 2020	<b>10 of 10 - 100%</b>
Year 4 – 2021	<b>9 of 9 - 100%</b>
Year 5 -- 2022	<b>11 of 11 - 100%</b>
<b>Program 5-Year Average</b>	<b>50 of 50 - 100%</b>

**Program completion rate:** The number of students who complete the program within the stated program length. The annual benchmark established by the program is.

Program Completion Rate	Number graduated divided by number started the program
Year	Results
Year - 2022	<b>13 of 13</b>
Annual Completion Rate	<b>100%</b>

## Clinical Obligations

Prior to the senior professional year in radiation therapy in preparation for the clinical component of the program, all senior students are required to complete the following: criminal background check, drug screening, respirator fit test, annual Tb test (two-step process), proof of updated immunizations (including COVID-19, Hepatitis B, Varicella, Tdap and MMR vaccines and annual flu shot) and receipt of acknowledgement and understanding of program technical standard, pregnancy policy and drug screen policy. Additional required training for all students in the profession year includes CPR certification and MRI screening, proof of completion of the following training modules provided by SLU – electrical safety, fire safety and prevention, hazard communication, bloodborne pathogens, HIPPA Privacy Essentials, and emergency preparedness for SLU.

For department-specific policies and procedures, each clinical site provides the student a department specific clinical orientation. In addition, SLU provides indemnification to all students while they are in clinical practicum. A letter of verification for student indemnification while they are in clinical practicum is kept on file with the program and is provided to any clinical site who requests this verification. Most clinical sites require a COVID-19 vaccination or exemptions documented by the clinical site. Vaccine exemption processes vary by clinical site and are the responsibility of the student.

Specific information detailing clinical obligations are provided to the student in a mandatory mentoring meeting with the Program Director and Clinical Coordinator in the Spring semester just prior to the beginning of the professional year (Fall semester). This allows students time to complete these obligations.

In addition to the requirements listed, students are required to attend Program Clinical Orientation to introduce them to their clinical requirements. This orientation communicates all clinical obligations to the students prior to their clinical practicum. Clinical Orientation details all requirements for the completion of clinical courses including required clinical competency exams, competency evaluation procedure, rotation evaluations, grading system and grade requirements, progression, clinical rotation placement, transportation requirements, clinical hours, dress code, direct supervision policy and introduction to eValue (Clinical Management System). Clinical sites are all within the St. Louis Metropolitan area and are close enough not to require re-location. Students are informed that they are required to have transportation to clinical sites.

The Clinical Coordinator makes all clinical rotation placements. Students attend clinical rotations Monday – Friday with no night or weekend clinical assignments. Students do not attend clinicals when the



University is officially closed. Students are provided with a list of official university holidays during Program Orientation.

## Clinical Sites

Clinical education requirements will place the student in the patient care setting in various clinical areas throughout the St. Louis Metro area; therefore, a student must have reliable transportation to get to the clinical sites. Students will travel to several of the following sites for their clinical rotations:

### **Mercy South Cancer Center**

Department of Radiation Oncology  
10050 Kennerly Road  
St. Louis, MO 63128

### **SSM Health Saint Louis University Hospital**

Radiation Medicine and Cyberknife  
3635 Vista Ave.  
PO Box 15250  
St. Louis, MO 63110-0250

### **Siteman Cancer Center – Memorial East**

Memorial and St. Elizabeth's Healthcare Services, LLP  
4000 North Illinois  
Swansea, IL 62226

### **Mercy Medical Center**

David C. Pratt Cancer Center  
607 S. New Ballas Road  
St. Louis, MO 63141

### **St. Joseph's Medical Park**

1475 Kisker Rd, Suite 180  
St. Charles, MO, 63304-8781

### **SSM Health St. Joseph Hospital West St. Louis**

400 Medical Plz Ste. 100  
Lake St. Louis, MO 63367

### **Mercy Jefferson Cancer Center**

Radiation Oncology  
1350 US HWY 61  
Festus, MO 63028

### **BJC Healthcare-Christian Hospital**

Siteman CC at Northwest Healthcare  
1255 Graham Road, St. Louis, MO 63031

### **Siteman Cancer Center South County**

5225 MidAmerica Plaza  
St. Louis, MO 63129

### **Phelps Regional Medical Center**

#### **Delbert Day Cancer Institute**

1060 West 10<sup>th</sup> Street  
Rolla, MO 65401

### **Missouri Baptist Medical Center**

3015 N. Ballas Rd.  
St. Louis, MO 63131

### **SSM Health St. Clare Hospital- Fenton**

1011 Bowles Ave. Suite G50  
Fenton, MO 63026

**Siteman Cancer Center -St. Peters.**

Barnes-Jewish Hospital - St. Peters  
Siteman Cancer Center - Department of Radiation Oncology  
150 Entrance Way  
St. Peters, MO 63376

**Siteman Cancer Center - Barnes-Jewish Hospital**

Barnes Jewish Hospital - Siteman Cancer Center  
Department of Radiation Oncology  
One Barnes-Jewish Hospital Plaza  
St. Louis, MO 63110

**SSM Health St. Mary's Hospital- St. Louis**

6420 Clayton Rd.  
Richmond Heights, MO 63117

**VA St. Louis Health Care - John Cochran**

915 North Grand  
St. Louis, MO 6310

# Technical Standards

**Purpose:** This is a non-discriminatory policy that describes the intellectual, social, and physical capabilities required to perform the tasks of a radiation therapist. The mission of the Program is to educate a therapist in Radiation Therapy. Therefore, students must meet these standards to pursue the program coursework and work within the field.

All applicants and students of the Radiation Therapy Program must be able to perform each of the standards stated in this policy.

In some cases, the use of adaptive devices may be permitted in order for the student to meet selected technical standards.

## **Radiation Therapists are required to:**

- Intellectually understand the conceptual, integrative and quantitative ability to analyze information and data. Comprehend three-dimensional relationships and the spatial relationships of structure. Understand and apply clinical instructions given by departmental personnel.
- Think critically: Identify cause and effect relationships, predict outcomes, interpret situation contexts and have the ability to make sufficient judgments.
- Tolerate physical and emotional stress and continue to function effectively. Demonstrate emotional stability and psychological health in day-to-day interaction with patients, staff, family members, and others. They must be adaptable, flexible and able to function in the face of uncertainty. A student must be able to develop mature, sensitive and effective relationships with patients and colleagues. They must have a high level of compassion for others, motivation to serve, integrity and a consciousness of social values. A student must possess sufficient interpersonal skills to interact with people from all levels of society, all ethnic backgrounds and all belief systems.
- Clearly communicate, verbally and in writing, with the patient, families, personnel and others to disseminate information about patient care and work duties. Candidates must be able to speak and hear at a level that allows them to elicit and convey information, accurately perceive nonverbal communication and describe changes in patient mood, activity posture and recognize and respond to an emergency or urgent situation. Must demonstrate normal or corrected hearing to discern audible signals on accelerators, imaging equipment, phones, and timing devices.

- See with normal or device corrected vision. They must possess the ability to discriminate among various color combinations in dimly lit conditions including blacks, grays and whites. Must possess the ability to read graphs, scales, computers and oscilloscopes. Recognize emergency signals. Adjust, move and manipulate variety of machines in dimly lit locations and have the ability to see both display devices and recorded images. Observe patient responses. A student must be able to observe patients accurately and completely, both from a distance and at close range.
- Read, extract and apply appropriate information and instructions contained in patient requisitions, notes and medical charts. Have the ability to read and comprehend technical and medical information.
- Have the manual dexterity to perform various radiation therapy procedures. Motor skills must include the ability to extend hands and arms in any direction. You must be able to hold, grasp and turn with the hands, and possess the ability to coordinate eyes, hands, and feet rapidly and accurately.
- Lift, transfer and move patients from wheelchairs/stretchers/beds to treatment tables. Lift, move, reach or push equipment weighing approximately 30-35 lbs. Endure an eight-hour clinical day with a minimum of four to six hours of standing or walking.
- Submit to and receive a satisfactory report on criminal background checks and drug testing for substance abuse.

## Additional Program Requirements and Fees

Criminal Background Check	Drug Screen	Respiratory Fit Test	Two Step Tb/PPD Screening	Annual Flu Shot	Poster Fee	CPR Fee
\$76.00 (domestic)	Part of CBC fee	\$15	\$56	\$80	\$25-35	\$21

### Criminal Background Check

#### Fees: \$76.00

A majority of the Doisy College of Health Science's learning experience facilities mandate that criminal background checks be performed on all persons having any opportunity for patient/client interaction. This includes employees and volunteers, as well as students. A CBC revealing a charge and/or conviction for certain crimes could result in a ban from participation in learning experiences and thus prevent graduation. Therefore, every student in the Doisy College of Health Sciences whose academic program requires her/him to participate in learning experiences in an affiliate facility will be required to undergo the level of CBC required by their major department and/or the affiliate facility.

The timing of a CBC will be in concert with the student's program/department or affiliate facility policies. A single negative check does NOT preclude the requirement of additional checks at a future time. Students should be aware that any affirmative results from a CBC could restrict ability to participate in a learning experience and therefore restrict ability to complete degree requirements. In addition, the lack of an acceptable report on a CBC could bar the student from sitting for licensure examinations and thus from practice in certain professions.

In the event that a student's CBC is reported "affirmatively" the student will have the opportunity to contest the report by requesting an additional CBC. In the event that an Affirmative CBC is confirmed, the compliance officer will notify the designated program/department official and the student.

### Drug Screen

#### Fees: Included in the Criminal Background Check Fee

A pre-placement drug screen is required for accreditation standards in the affiliated hospitals in which University faculty and staff work. To comply with these standards and federal regulations, Saint Louis University will require that a pre-placement drug screen occur for students in clinical placement where there will be occupational activities in a University affiliated hospital, clinical site, direct patient contact, or employment.

The student will be advised of the pre-placement drug screen requirement prior to beginning the program. The candidate will be provided with instructions for scheduling the drug screen through the services of CastleBranch.

Candidates who have a positive drug screen will be interviewed by an independent Medical Review Officer who determines if there is a legitimate reason for the presence of a controlled substance. The results of this interview are provided to Student Health and made available to the program.

In the event of a positive result, the Program Director, Clinical Coordinator and student will be notified of the positive drug screen. The student will be counseled, and further action regarding the student's enrollment in the program will be considered. The student will be advised that a positive test may result in immediate dismissal from the program.

Other **required immunizations/screenings required** for clinical placement:

**Respirator Fit Test**

Provided at SLU Student Health

Approximate Fees: \$15.00

**Two Step Tb/PPD Screening**

Provided at SLU Student Health

Approximate Fees: \$56.00

**Annual Flu Shot**

Provided at SLU Student Health

Approximate Fees: \$80.00

**Poster Printing**

Provided at SLU Instructional Media Center fees: \$25.00-\$35.00

Students are required to prepare and present a research poster as part of their coursework. Students must pay for the cost of printing this poster which is provided at the SLU Instructional Media Center

**CPR Certification**

Provided inter-departmentally

Approximate Fees: \$21

# Grievance Policy and Procedures

When the student is completing general education pre-requisite courses at the University prior to the start of the senior professional program year, they are to follow the policies and procedures of the University Grievance Procedure: <https://www.slu.edu/provost/accreditation-compliance/student-complaints.php>

Once the student begins the professional year in the Radiation Therapy Program they are to follow the grievance procedure outlined by the Department of Clinical Health Sciences (CHS) first, and then the Doisy College of Health Sciences (DCHS) to follow:

[https://www.slu.edu/doisy/dchs\\_academic\\_grievance\\_policy.pdf](https://www.slu.edu/doisy/dchs_academic_grievance_policy.pdf)

Before initiating an appeal/grievance to the DCHS Dean and DCHS Academic Grievance Committee consideration, the student must have completed the policy and process outlined by the CHS Department first, as detailed below:

## **Department of Clinical Health Sciences Academic Grievance Policy**

### **Grade Appeal:**

If a student believes that a final grade for a course has been assigned unfairly, the student must initiate the appeal within 90 days after final grades have been posted.

- Student discusses with the course instructor the concerns about the grade and reasons he/she believes the grade is incorrect. The course instructor renders a decision regarding the grade appeal as the instructor of record in that course.
- If the dispute is not satisfactorily resolved, the student may present his/her concerns to the Program Director of the program in which the course is offered. The Program Director reviews the case and renders a decision regarding the grade appeal.  
(NOTE: If the course instructor is the Program Director, then the student will go directly to the Chair.)
- If the dispute is not satisfactorily resolved at the Program level, the student may present his/her concerns to the Chair of the department of which the course is offered.
- If the dispute is not satisfactorily resolved at the departmental level, the student may present his/her concerns to the Associate Dean for Academic and Student Affairs for the College of which the course is offered. If the dispute is not satisfactorily resolved at the Associate Dean level, the Associate Dean will confer with the Dean. The Dean is the final arbitrator in the grade dispute.

### **Guidelines for Failure to Progress in a Program:**

- When a student has not met the academic eligibility requirements of the Program and is *subject to program dismissal* the student will be notified by the Chair of the department of their academic status within 30 days of the official and final grade posted on Banner. Academic status and programmatic progression letters will be sent via SLU email to the student. The progression letter will be attached as a letter on official University letterhead. This email will have a subject of “Progression Letter” and will have a read-receipt. Acceptance of the read-receipt will indicate that the student has received the Program’s letter of status and/or progression. If the read-receipt **does not** appear in the sender’s email inbox after 10 calendar days from the day the email was sent, the paper form of the same letter will be mailed via US Mail to the student’s permanent mailing address.
- The notification will be sent to the student’s Program Director, faculty mentor, and Doisy College of Health Sciences (DCHS) Associate Dean for Academic and Student Affairs.
- The student has the right to appeal the ruling of failure to progress in the program. The appeal gives the student the opportunity to explain circumstances or conditions which adversely impacted his/her academic success.
- The student appealing the academic eligibility status must submit a letter of appeal in writing to the Chair of the department. The request must be made promptly (**within 3 working days**) by the student after the Chair of the department receives confirmation that the notification of program dismissal was received.
- The appeal letter from the student should, at a minimum, include the following information:
  - Description of the extenuating circumstances which the student believed to have interfered with his/her academic performance,
  - How these circumstances have been, or will be alleviated, and
  - The student’s plan for academic improvement.
- \*If a student is simultaneously appealing a course grade and progressions, the course grade appeal must be resolved prior to the progressions status. Refer to Grade Appeal Policy\*

The appeal meeting will proceed as follows:

- The appeal is reviewed by the Program Director and the Chair of the department who makes a joint decision regarding the student’s appeal. If the Program Director and the Chair do not agree, they will enlist the tiebreaking vote from the Associate Dean for Academic and Student Affairs of DCHS.
- The decision will be communicated to the student by the Chair of the Department.

If the appeal is denied, then the student will be dismissed from the program. If the student believes that stated policies and procedures were not followed, the student can file an academic grievance with the Associate Dean for Academic and Student Affairs of the DCHS as stipulated in the College Academic Grievance Policy.



The Radiation Therapy Program maintains records of all formal grievances and their resolution.

**Department of Clinical Health Sciences  
Non-Academic Grievance Policy**

This policy for addressing any departmental or programmatic complaints excludes complaints for which there is an established University, College, or Program policy or procedure, such as grade appeals, academic dismissal appeals, or allegations of harassment based on sex, race, color, religion, national origin, ancestry, disability, age, sexual orientation, marital status, military status, veteran status, gender expression/identity, genetic information, pregnancy, or any other characteristics protected by law.

An individual who has a concern/complaint regarding issues that involves classrooms (cleanliness, temperature), building (access), grounds or operations (shuttle bus) is welcome to communicate their complaint. Program complaints are recognized as an opportunity for improvement and should be expressed with this end in mind. A complainant can choose to communicate a complaint either informally or formally. The issue must occur within one (1) week of the date the complaint is filed.

If the complainant chooses, the complaint can be communicated informally by contacting a faculty member, Program Director, Clinical Coordinator, or staff member to discuss the issue. In this case, there is no documentation of the complaint. The individual to whom the complaint is discussed verbally or informally through an email will forward that complaint to the individual(s) most relevant to addressing the concern.

If the complainant prefers, a formal written complaint outlining the specific issue can be filed with the Program Director. Such a complaint must be communicated in writing. The complaint should state with specificity the facts giving rise to the complaint, the names of persons who have knowledge of the events surrounding the complaint, and the relief sought. It should be signed by the person filing the complaint. All parties to the process will seek to maintain the confidentiality of the process; however, it is recognized that circumstance may compel further disclosure to other persons, particularly if the facts implicate possible violations of law, University policy, or foreseeable risk of harm to any person. The Program Director will maintain a file of all formal, written complaints for a period of five (5) years.

Complaints should be addressed to:  
Department of Clinical Health Sciences  
Attn: Program Name/Program Director or Department Chair  
Suite 3025, Allied Health Building  
3437 Caroline Ave  
Saint Louis, MO 63104

The Program Director will respond in writing to the complaint and move it to the individual(s) responsible for addressing the issue within 10 working days. However, depending on the nature of the complaint and the individuals involved who may be beyond the Program Director, or the Department/College, the complaint may require a reasonable time frame to be resolved. All updates to requests for action towards resolving the complaint will be communicated to all parties in writing, including the appropriate individual(s) responsible for addressing the topic(s) of complaint.

As appropriate, the Program Director or Chair will forward a written summary of the situation to date to the Chair of the Department and the Dean of the Doisy College of Health Sciences within ten (10) working days of receipt of the complaint. Upon receipt of the complaint, the Chair or the Dean, depending on the content of the complaint, shall evaluate within one calendar month whether the action was appropriate and addressed to the satisfaction of the complainant as well as within the feasibility of resolution.

# Grading System

The grading system at Saint Louis University follows a 0 - 4.00 point scale. Quality Points for grades are assigned as follows:

Grade	Quality Points
A	4.00
A-	3.7
B+	3.30
B	3.00
B-	2.70
C+	2.30
C	2.00
C-	1.70
D	1.00
F	0.00
FQ	0.00

The grade of FQ should be given to those students who had ceased attending/participating in a course and as a result earned a failing grade.

## Undergraduate In-Progress Parameters

- Maximum period of time to accomplish In-Progress coursework is one year. Instructors may set a deadline of less than one year.
- A student will be dropped from all courses for which an In-Progress course is a prerequisite if a grade is not submitted prior to the first day of the course's term.
- An "IP" grade converts to a grade of "F" (or "U" for Satisfactory/Unsatisfactory grading scale) if coursework is not completed within one year.
- Once an "IP" grade has converted to an "F" (or "U") the "F" (or "U") may not be revised by the instructor but must be appealed through the Academic Records Revision Committee.

NOTE: In-progress courses for a graduating student must be completed and graded within 30 days of the date that the course grade was posted.

Students are to note that as part of the radiation therapy professional curriculum, two courses, XRT 4340 Treatment Planning and XRT 4440 Clinical Dosimetry, are delivered in a synchronous, hybrid blended-learning format. These courses follow the above grading scale.

**SAINT LOUIS UNIVERSITY  
DOISY COLLEGE OF HEALTH SCIENCES  
ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES  
APPENDIX A**

Program: Radiation Therapy - Professional Year

Academic Year: **2021-2022**

Graduates: 13

Mission: *The Radiation Therapy Program at Saint Louis University, Doisy College of Health Sciences is dedicated to preparing liberally educated, competent, caring and socially responsible Radiation Therapists, committed to clinical and scholarly excellence.*

Outcome	Measurement Tool/ Reporting Strategies	Threshold (Benchmark)	Time Line/ Responsible Person	Data/Status/ Action Plan
<p><b>Goal A: Students will be clinically competent</b></p> <p>1. The radiation therapy student will position patients as directed in treatment record</p> <p>2. The radiation therapy student will set treatment machine as indicated in patient treatment record</p> <p>3. The radiation therapy student will practice patient confidentiality</p> <p>4. The radiation therapy student practice proper radiation protection and safety</p>	<p>1. Linear Accelerator Clinical Rotation Performance Evaluation, Patient Treatment Section, Ques 22: Positions treatment machine to reproduce set-up indicated in treatment chart.</p> <p>2. Linear Accelerator Clinical Rotation Performance Evaluation, Patient Treatment Section Question 37: Sets appropriate controls on treatment machine console for patient treatment.</p> <p>3. Linear Accelerator Clinical Rotation Performance Evaluation Section, Formative Scale Section Question 10: Ensures confidence of privileged information and is honest and forthright at all times.</p> <p>4. Linear Accelerator Clinical Rotation Performance Evaluation, Patient Treatment Section, Question 21: Positions patient to reproduce set-up indicated in treatment chart, practicing radiation protection and patient safety.</p>	<p>1. Each student will Score <math>\geq 2</math> on a 3 point scale, 3 = Excellent, on their last linac evaluation (equivalent of <math>\geq 85\%</math>)</p> <p>2. Each student will Score <math>\geq 2</math> on a 3 point scale, 3 = Excellent, on their last linac evaluation (equivalent of <math>\geq 85\%</math>)</p> <p>3. Each student will Score <math>\geq 2</math> on a 3 point scale, 3 = Excellent, on their last linac evaluation (equivalent of <math>\geq 85\%</math>)</p> <p>4. Each student will Score <math>\geq 2</math> on a 3 point scale, 3 = Excellent, on their last linac evaluation (equivalent of <math>\geq 85\%</math>)</p>	<p>1. Spring Evaluation Review and Summer Evaluation Review by Clinical Coordinator/Instructor</p> <p>2. Spring Evaluation Review and Summer Evaluation Review by Clinical Coordinator/Instructor</p> <p>3. Spring Evaluation Review and Summer Evaluation Review by Clinical Coordinator/Instructor</p> <p>4. Spring Evaluation Review and Summer Evaluation Review by Clinical Coordinator/Instructor</p>	<p>1. 13/13 or 100% of students scored <math>\geq 2</math> on a 3 point scale where 3=excellent. Average score was 2.82/3 or 94%, therefore met benchmark of <math>\geq 85\%</math></p> <p>2. 13/13 or 100% of students scored <math>\geq 2</math> on a 3 point scale where 3=excellent. Average score was 2.94/3 or 98%, therefore met benchmark of <math>\geq 85\%</math></p> <p>3. 13/13 or 100% of students scored <math>\geq 2</math> on a 3 point scale where 3=excellent. Average score was 2.99/3 or 99%, therefore met benchmark of <math>\geq 85\%</math></p> <p>4. 13/13 or 100% of students scored <math>\geq 2</math> on a 3 point scale where 3=excellent. Average score was 2.89/3 or 96%, therefore met benchmark of <math>\geq 85\%</math></p>

Outcome	Measurement Tool/ Reporting Strategies	Threshold (Benchmark)	Time Line/ Responsible Person	Data/Status/ Action Plan
<p><b>Goal B: The students will demonstrate problem solving and critical thinking skills</b></p> <p>1. The radiation therapy student will demonstrate complex radiation therapy treatment procedures. <b>(DCHS PLO #3)</b></p> <p>2. The radiation therapy student will present a complex radiation therapy treatment procedure to an audience. <b>(DCHS PLO #4)</b></p> <p>3. The radiation therapy student will demonstrate appropriate problem</p>	<p>1.a. XRT 4440 Clinical Dosimetry: Calculation Competencies</p> <p>1.b. 2. XRT 4960 Capstone Case Study presentation</p> <p>2.a. XRT 4420 Radiation Therapy Practice II: In class presentation</p> <p>2.b. XRT 4960 Capstone Case Study presentation, rubric #8</p> <p>3.a. XRT 4420 Ethical Dilemma Paper</p>	<p>1. a. Each student will score <math>\geq 85\%</math></p> <p>1.b. Each student will score <math>\geq 85\%</math></p> <p>2. a. Each student will score <math>\geq 85\%</math></p> <p>2.b. Each student will score <math>\geq 85\%</math></p> <p>3.a. Each student will score <math>\geq 85\%</math></p>	<p>1a. Fall Semester by Course Instructor</p> <p>1b. Summer Semester by Program Director and Clinical Coordinator</p> <p>2a 2b.. Spring Semester by Clinical Coordinator and Program Director</p> <p>3.a. Spring Semester by Course Instructor</p>	<p>1a. 10/13 or 77% of students achieved <math>\geq 85\%</math>, 3 students scored below 85%. No student scored below 80% and the average score for the class was 91%. Even though benchmark of <math>\geq 85\%</math> was not achieved for every student, a ranking of knowledge/application or higher is assumed for this assignment.</p> <p>1b. 13/13 or 100% of students achieved <math>\geq 85\%</math>. The average for the class was 99%, therefore the benchmark was achieved and a ranking application/synthesis was reached.</p> <p>2a. 13/13 or 100% of students earned 100% on this assignment, meeting the benchmark and therefore achieved a ranking of application/synthesis.</p> <p>2b. 13/13 or 100% of students achieved a score of <math>\geq 5</math> out of 6, (ave of 6/6 or 100%) meeting the benchmark and therefore achieving a ranking of application/synthesis.</p> <p>3a. 13/13 or 100% of students earned 100% on this assignment, meeting the</p>

Outcome	Measurement Tool/ Reporting Strategies	Threshold (Benchmark)	Time Line/ Responsible Person	Data/Status/ Action Plan
solving skills for the practice of radiation therapy when provided with a case for analysis	3.b. XRT 4420 Course Discussion Board	3.b. Each student will appropriately post to every case as required for the course, scoring $\geq 85\%$	3b. Spring Semester by Course Instructor	benchmark and therefore achieved a ranking of application/synthesis.  3b.13/13 or 100% of students earned 100% on this assignment, meeting the benchmark and therefore achieved a ranking of application/synthesis.
<p><b>Goal C: Students will demonstrate effective communication skills</b></p> <p>1. The radiation therapy student will appropriately communicate with patients</p> <p>2. The radiation therapy student will evidence appropriate written communication for the profession of radiation therapy. <b>(DCHS PLO #2)</b></p>	<p>1.a. Linear Accelerator Clinical Rotation Performance Evaluation, Formative Section, Question 5: Patient interaction: Establishes rapport with and gains confidence, cooperation of patients, communicates readily.</p> <p>1. b. Employer Survey Question 8: 'Speak so that clients or colleagues can understand the meaning of the message'</p> <p>2.a. XRT 4330 Clinical Critical Reflection Paper</p> <p>2.b. XRT 4350 Poster Project Evaluation</p>	<p>1.a. Each student will Score <math>\geq 2</math> on a 3 point scale, 3 = Excellent, on their last linac evaluation (equivalent of <math>\geq 85\%</math>)</p> <p>1.b. Response will be <math>\geq 80\%</math> in the excellent or above average category</p> <p>2.a. Each Student will score <math>\geq 85\%</math></p> <p>2.b. Each Student will score <math>\geq 85\%</math></p>	<p>1.a. Summer Semester by Clinical Coordinator</p> <p>1.b. 6 months after graduation by Program Director</p> <p>2 a. Fall Semester by Didactic Instructor</p> <p>2.b. Spring Semester by Didactic Instructor</p>	<p>1a. 13/13 or 100% of students scored <math>\geq 2</math> on a 3 point scale where 3=excellent. Average score was 2.88/3 or 96%, therefore met benchmark of <math>\geq 85\%</math></p> <p>1b. Of those reporting (2/6), or 100% responded excellent, therefore benchmark was met.</p> <p>2a. 13/13 or 100% of students earned 100% on this assignment, meeting the benchmark and therefore achieved a ranking of knowledge/application or higher.</p> <p>2b. 11/13 or 85% of students achieved <math>\geq 85\%</math>, 2 students scored below 85%. The average score for the class was 94%. Even though benchmark of <math>\geq 85\%</math> was not achieved for every student, a ranking of application/synthesis. higher is assumed for this assignment.</p>

Outcome	Measurement Tool/ Reporting Strategies	Threshold (Benchmark)	Time Line/ Responsible Person	Data/Status/ Action Plan
3. The radiation therapy student will demonstrate proper presentations skills	3. XRT 4980 Capstone Case Study Project rubric item: Technical Competence #20	3. Each Student will score $\geq 5$ on a 6 point scale. (equivalent of $\geq 85\%$ )	3. Summer Semester by Didactic instructor	3. 13/13 or 100% of students achieved a score of $\geq 5$ out of 6, (ave of 5.8/6 or 96%) meeting the benchmark and therefore achieving a ranking of application/synthesis.
<p><b>Goal D: Students will demonstrate professional growth and development</b></p> <p>1. The radiation therapy student will demonstrate professional behaviors in the clinical setting <b>(DCHS PLO #5)</b></p> <p>2. The radiation therapy student will be able to articulate ethical behaviors in clinical practice. <b>(DCHS PLO #1)</b></p>	<p>1a. XRT 4350 &amp; 4450 Clinical Practicum I &amp; II: Linear Accelerator Clinical Rotation Performance Evaluation Attitude Assessment Section, Ques 46: Professionalism</p> <p>1b. XRT 4450 Clinical Practicum II – Site Visit Evaluation Summary</p> <p>2.a. XRT 4320 Ethical Dilemma in class exercise</p> <p>2.b. XRT 4420 Ethical Dilemma Reflection Paper</p>	<p>1.a. Each student will Score <math>\geq 3</math> on a 4 point scale for their last linac evaluation (equivalent to 85%)</p> <p>1.b. Each student will score <math>\geq 85\%</math></p> <p>2 a. Each student will score <math>\geq 85\%</math></p> <p>2.b. Each student will score <math>\geq 85\%</math></p>	<p>1.a. Summer Evaluation Review by Clinical coordinator/Clinical Instructor</p> <p>1.b. Summer Evaluation Review by Clinical coordinator/Program Director</p> <p>2.a. Spring Semester by Didactic Instructor</p> <p>2.b. Spring Semester by Didactic Instructor</p>	<p>1a 13/13 or 100% of students scored <math>\geq 3</math> on a 4 point scale where 4=excellent. Average score was 3.71/3 or 93%, therefore benchmark was met and students achieved a ranking of application/synthesis.</p> <p>1b. 5/12 (one Incomplete) or 42% of students achieved <math>\geq 85\%</math>. 7/12 received a score of below 85%, however all passed with <math>\geq 74</math> and the class average was 83%. Benchmark was not met, action plan attached as <b>appendix a</b> below this table. It is assumed that not all students achieved a ranking of application /synthesis based on these results.</p> <p>2a. 13/13 or 100% of students earned 100% on this assignment, meeting the benchmark and therefore achieved a ranking of knowledge/application or higher.</p> <p>2b. 13/13 or 100% of students earned 100% on</p>



Outcome	Measurement Tool/ Reporting Strategies	Threshold (Benchmark)	Time Line/ Responsible Person	Data/Status/ Action Plan
<p>3. The radiation therapy student will have knowledge of professional organizations</p> <p>4. The radiation therapy student will demonstrate the concepts of compassionate care</p>	<p>3. XRT 4960 Capstone Course: 5 Year Professional Growth Plan</p> <p>4. a. XRT 4330 Clinical Observation Paper</p> <p>4.b. XRT 4420 Critical Reflection Paper</p>	<p>3. Each student will score <math>\geq 85\%</math></p> <p>4.a. Each student will score <math>\geq 85\%</math></p> <p>4.b. Each student will score <math>\geq 85\%</math></p>	<p>3. Summer Semester by Didactic Instructor</p> <p>4.a. Fall Semester by Didactic Instructor</p> <p>4.b. Spring Semester by Didactic Instructor</p>	<p>this assignment, meeting the benchmark and therefore achieved a ranking of application/synthesis.</p> <p>3. 13/13 or 100% of students earned 100% on this assignment, meeting the benchmark and therefore achieved a ranking of knowledge/application or higher.</p> <p>4a. Not completed in AY 21-22 due to clinical site scheduling restrictions and as a result, no clinical observations were completed.</p> <p>4b. 100% of students (10/10) achieved a ranking of knowledge/application or higher.</p>

Appendix a Action Plan for Goal D.1b.

As a result of not having met the benchmark (>85%) for Goal D.1.b, we will make the following changes in the Site Visit Evaluation grading scheme, implemented with 23-24 cohort:

1. The student must achieve  $\geq 75\%$  average score for all site visit evaluations for both clinical courses, XRT 4350 and XRT 4450 in order to successfully pass the clinical courses.
2. The student must achieve  $\geq 75\%$  average score for each individual site visit evaluation and oral exam.
3. If the student is not prepared for the oral examination and evaluation at the time of the site visit, the student will receive a grade of 0% and will be given another evaluation exam that must be completed with a  $\geq 75\%$  average score.
4. The Site Visit Evaluation grade will be weighted as 25% of the overall clinical courses – XRT 4350 Clinical Practicum I and XRT 4450 Clinical Practicum II. This is up from 20% of the total grade.

Making these changes to the grading scheme of the Site Visit Evaluations and the necessary change in the course where Poster projects are evaluated (as a result of these changes) will convey to students the importance of the Site Visit Evaluation in terms of overall clinical course and the need for them to be prepared for the oral exam and Site Visit Evaluation. Students will be made aware that our data indicates that success on site visit evaluations are a good indicator of successful ARRT registry exam results.