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Section A: Information Regarding Radiation Therapy

A-1 Radiation Therapy: A Description of the Profession

Radiation therapists are health care professionals skilled in the art and science of medical radiation treatment delivery. The majority of patients receiving radiation therapy have cancer. Along with surgery and chemotherapy, radiation therapy offers these patients the best chance to succeed in the fight against their disease. The major focus areas of the profession are the care and assessment of patients, simulation, treatment planning and delivery of treatments utilizing linear accelerator produced radiation and radioisotopes. Aims of treatment include cure, relief of symptoms, and improvement of patients’ quality of life. High technology equipment and innovative treatment methods are utilized to maximize treatment effectiveness. Radiation therapists must have excellent technical skills, but must also be empathetic and effective communicators. Much satisfaction is gained from close patient interaction and the specialty’s team approach with radiation oncologists, physicists, nurses and other medical specialists. Radiation therapy is “technology with a human touch”.

A-2 Code of Ethics for Radiation Therapists

- The radiation therapist advances the principle objective of the profession to provide services to humanity with full respect for the dignity of mankind.
- The radiation therapist delivers patient care and services unrestricted by concerns of personal attributes or the nature of the disease or illness, and non-discriminatory with respect to race, color, creed, sex, age, disability or national origin.
- The radiation therapist assesses situations; exercises care, discretion and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.
- The radiation therapist adheres to the tenets and domains of the Scope of Practice for Radiation Therapists.
- The radiation therapist actively engages in lifelong learning to maintain, improve and enhance professional competence and knowledge.

A-3 Essential Functions of a Radiation Therapist

According to the American Society of Radiologic Technologists, the national professional society, the Scope of Practice of a Radiation Therapist includes, but is not limited to:

- Providing optimal patient care.
- Receiving, relaying and documenting verbal, written and electronic orders in the patient’s medical record.
- Corroborating a patient’s clinical history with procedure and ensuring information is documented and available for use by a licensed independent practitioner.
- Verifying informed consent for applicable procedures.
- Assuming responsibility for patient needs during procedures.
- Preparing patients for procedures.
- Applying principles of ALARA to minimize exposure to patient, self and others.
- Performing venipuncture as prescribed by a licensed independent practitioner.
- Starting, maintaining and/or removing intravenous access as prescribed by a licensed independent practitioner.
• Identifying, preparing and/or administering medications as prescribed by a licensed independent practitioner.
• Evaluating images for technical quality and ensuring proper identification is recorded.
• Identifying and responding to emergency situations.
• Providing education.
• Educating and monitoring students and other health care providers.
• Performing ongoing quality assurance activities.
• Applying the principles of patient safety during all aspects of patient care.

The scope of practice of the radiation therapist also includes:

1. Delivering radiation therapy treatments as prescribed by a radiation oncologist.
2. Performing simulation, treatment planning procedures and dosimetric calculations as prescribed by a radiation oncologist.
3. Using imaging technologies for the explicit purpose of simulation, treatment planning and treatment delivery as prescribed by a radiation oncologist.
4. Detecting and reporting significant changes in patients' conditions and determining when to withhold treatment until the radiation oncologist is consulted.
5. Monitoring doses to normal tissues within the irradiated volume to ensure tolerance levels are not exceeded.
6. Constructing/preparing immobilization, beam directional and beam modification devices.
7. Participating in brachytherapy procedures.

Domains of practice include: organizational and work role competencies, administering and monitoring radiation therapy treatments, care-giving, effective management of rapidly changing situations, and professionalism. Full Standards of Practice of standards document can be viewed at: https://www.asrt.org/docs/default-source/practice-standards-published/ps_rt.pdf?sfvrsn=2

A-4 Education, Accreditation, Certification and Job Market

Education
The major in radiation therapy provides students with an educational foundation in the sciences and humanities as well as clinical experience in a radiation therapy department. The curriculum requires a minimum of six semesters on campus in pre-professional and professional core courses prior to the senior clinical internship. The clinical internship begins in July of the senior year, extends for 13 months and is spent at an affiliated hospital internship site. Admission to the major is on a competitive basis. Upon acceptance, students may register for the professional core courses. Students who successfully meet program requirements will interview with the clinical sites during their junior year and upon selection by one of the sites will be placed for the senior clinical internship. All requirements for general education and the major must be met prior to graduation. Education continues post-graduation by individual research and reading and recognized continuing education opportunities offered by employers and professional societies and is required for maintaining professional credentials.

Accreditation
The University is accredited by North Central Association. The program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182. The telephone number is (312)704-5300. See also www.jrcert.org
Certification

A national certification exam is offered by American Registry of Radiologic Technologists. Students may apply to take the registry exam after meeting all requirements for graduation. The graduate will individually schedule the time and location of the computerized exam. Applicants and students are advised that “Rules of Ethics” are established by the ARRT. These are standards of minimally acceptable professional conduct for all Registered Technologists and applicants. They are intended to promote the protection, safety and comfort of patients. Violation of the Rules of Ethics carries sanctions, including, among others, not being allowed to sit for the exam or forfeiting certification. One issue addressed by the Rules of Ethics is the conviction of a crime, including a felony or a misdemeanor with the exception of speeding and parking violations. All alcohol and/or drug related violations must be reported. Convictions must be reported. All potential violations must be investigated by the ARRT in order to determine eligibility on a case by case basis. Individuals may file a pre-application with the ARRT to obtain a ruling on eligibility at any time prior to or after entry into an accredited educational program. The pre-application must be requested directly from the ARRT (telephone no. 612-687-0048). See also www.arrt.org

Job Market

Radiation therapists may work in hospital departments or free standing facilities. Options for diversification present in performing special procedures, dosimetry, management, and education. Therapists may also work in sales and technical support. The number of job openings varies with time and location. The graduate can enhance his/her success in securing a position by being open to relocation.
Section B: Program Information

B-1 University of Wisconsin System and UW-La Crosse Radiation Therapy Program Mission, Vision, and Goals

University of Wisconsin System Mission:
The mission of the system is to develop human resources, to discover and disseminate knowledge, to extend knowledge and its application beyond the boundaries of its campuses, and to serve and stimulate society by developing in students heightened intellectual, cultural, and human sensitivities; scientific, professional, and technological expertise; and a sense of value and purpose. Inherent in this mission are methods of instruction, research, extended education and public service designed to educate people and improve the human condition. Basic to every purpose of the system is the search for truth.

The Core Mission of the University of Wisconsin System Cluster Institution: Within the approved differentiation stated in their select missions, each university in the cluster shall:

a. Offer associate and baccalaureate degree level and selected graduate programs within the context of its approved mission statement.

b. Offer an environment that emphasizes teaching excellence and meets the educational and personal needs of students through effective teaching, academic advising, counseling, and through university-sponsored cultural, recreational, and extracurricular programs.

c. Offer a core of liberal studies that supports university degrees in the arts, letters, and sciences, as well as specialized professional/technical degrees at the associate and baccalaureate level.

d. Offer a program of pre-professional curricular offerings consistent with the university’s mission.

e. Expect scholarly activity, including research, scholarship and creative endeavor, that supports its programs at the associate and baccalaureate degree level, its selected graduate programs, and its approved mission statement.

f. Promote the integration of the extension function, assist the University of Wisconsin-Extension in meeting its responsibility for statewide coordination, and encourage faculty and staff participation in outreach activity.

g. Participate in inter-institutional relationships in order to maximize educational opportunity for the people of the state effectively and efficiently through the sharing of resources.

h. Serve the needs of women, minority, disadvantaged, disabled, and non-traditional students and seek racial and ethnic diversification of the student body and the professional faculty and staff.

i. Support activities designed to promote the economic development of the state.

UW-La Crosse Mission, Vision, and Values

Mission:
The University of Wisconsin-La Crosse provides a challenging, dynamic, and diverse learning environment in which the entire university community is fully engaged in supporting student success. Grounded in the liberal arts, UWL fosters curiosity and life-long learning through collaboration, innovation, and the discovery and dissemination of new knowledge.Acknowledging and respecting the contributions of all, UWL is a regional academic and cultural center that prepares students to take their place in a constantly changing world community. The university offers undergraduate programs and degrees in the arts and humanities, health and sciences, education, and business administration. The university offers graduate programs related to areas of emphasis and strength within the institution, including business administration, education, health, the sciences, and the social sciences.
Vision:
The University of Wisconsin-La Crosse aims to foster within each student the curiosity, creativity, and tenacity necessary to solve the regional, national, and international challenges of the 21st century. The university’s official motto mens corpusque (“mind and body”) will continue to guide our direction as a student-centered university committed to a quality education for the whole person. As such, it will continue to provide opportunities both inside and outside the classroom for the development of sound mental, emotional, and ethical skills, as well as general well-being. Our students, faculty, and staff will experience the world through constantly evolving technologies and cultures. Thus, the skills of effective communication, critical thought, leadership, and an appreciation for diversity must be the hallmarks of a UWL education.

Values:
Fassett Cotton, our institution’s first leader, serving from 1909-1924, conceived the original University of Wisconsin-La Crosse educational philosophy of the total development of the individual. Later, history professor and Dean of the College of Arts, Letters, and Sciences, William M. Laux (1922-1967), suggested the symbols of our official university seal along with the accompanying Latin phrase, mens corpusque, (“mind and body”), to exemplify our collective commitment to a high quality education for the whole person. The University of Wisconsin-La Crosse values:

- The mens corpusque educational philosophy that recognizes each student as a whole person and aspires to enhance both mind and body through the noble search for knowledge, truth, and meaning central to a wide range of high quality learning experiences and scholarly pursuits.
- Diversity, equity, and the inclusion and engagement of all people in a safe campus climate that embraces and respects the innumerable different perspectives found within an increasingly integrated and culturally diverse global community.
- A high quality of life and work balance, incorporating best practices for shared governance and the acquisition and efficient management of resources, equitable compensation, general wellness, and social, environmental, and economic sustainability.
- Civic engagement and a renewed commitment to the Wisconsin Idea, in which our socially responsible campus serves as a resource for our increasingly intertwined local, state, and global communities, collaborating and sharing resources and expertise to improve the human condition.

Radiation Therapy Program Mission and Goals

Mission: The mission of the Radiation Therapy Program at the University of Wisconsin-La Crosse is to educate and train radiation therapists who are knowledgeable, technically competent and dedicated to their profession and their patients, meeting the educational and personal needs of its students by emphasizing excellence in education and offering a broad based curriculum in liberal studies, professional courses and clinical internship. This program additionally seeks to promote research and provide a base for further professional development of graduates.

Goals:
1. Students will demonstrate critical thinking skills.
2. Students will grow and develop professionally.
3. Students will be clinically competent.
4. Students will demonstrate effective communication skills.
5. The program will successfully meet the needs of its students and communities of interest.
B-2 Academic Requirements for Admission

Pre-admission:
1. Students may apply to the Radiation Therapy Program in December prior to the year of intended admission, after completing and/or registering for pre-requisite and general education courses.
2. Applicants are required to have a minimum cumulative grade point average of 2.75 on a 4.0 scale and a grade of “C” or higher in all general education and pre-professional courses. Applicants are required to have a minimum pre-professional grade point average of 2.75 on a 4.0 scale.
3. Applicants are required to satisfactorily complete 40 hours of observation in a radiation therapy department.
4. Qualified applicants will be interviewed. A selection committee will make acceptance decisions.
5. Selected students will begin the program as a cohort in the fall semester of the year of admission.

Re-Application to the Program:
If a student is not accepted into the radiation therapy program, the student may opt to reapply to the program the following year. The following procedure must be followed for re-application:
1. The student must submit an entirely new application.
2. The student must repeat clinical hours of observation. However, the student is allowed to choose where the hours are spent. If the student wishes to repeat the hours at the same location as the previous year that is accepted, as is going to a different site.
3. Students also need to resubmit letters of reference.
4. The student must meet with advisor either via email or in person to discuss re-application.
5. Students are encouraged to pursue a different major after two applications to the program, and therefore should not apply more than twice to the program.
Pre-Requisite Professional Course Requirements:
The following courses are required for admission to the program, in addition to completion of the general education courses required by the University of Wisconsin-La Crosse. (Applicants need to have completed or have registered for in order to be an eligible candidate.)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIO 105</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 312-313</td>
<td>Human Anatomy &amp; Physiology I &amp; II</td>
<td>8</td>
</tr>
<tr>
<td>*CHM 103-104</td>
<td>General Chemistry I &amp; II</td>
<td>10</td>
</tr>
<tr>
<td>*MTH 151</td>
<td>Pre-calculus</td>
<td>4</td>
</tr>
<tr>
<td>*STAT 145</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>*PHY 125 or *PHY 103 &amp; 104</td>
<td>Physics for the Life Sciences or Fundamental Physics I or II</td>
<td>4-8</td>
</tr>
<tr>
<td>*PSY 100 or *SOC 110 or *SOC 120</td>
<td>General Psychology, Introduction to Sociology, or Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Students whose math placement exam score allows them entrance into MTH 207 (Calculus) are not required to take MTH 151 but should register for STAT 145 (Statistics).

*indicates courses which also meet general education requirements

Professional Core Courses:
The following courses are completed during the first year of the program on campus by admitted students. Students must maintain a grade of “C” or better to stay in good standing in the major. Retention of good standing in the program requires that students maintain a grade of “C” or higher in all required courses, as well as a semester and cumulative grade point average of 2.75 on a 4.0 scale.

<table>
<thead>
<tr>
<th>Term Taken</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>BIO 306</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>HP 250</td>
<td>Medical Terminology (online course)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PHY 386</td>
<td>Radiation Physics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 310</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 325</td>
<td>Radiation Therapy Readings, Writings, and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 330</td>
<td>Professional Issues in Radiation Therapy</td>
<td>2</td>
</tr>
<tr>
<td>Spring</td>
<td>BIO 333</td>
<td>Radiation Biology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIO 432</td>
<td>Biology of Cancer</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RT 350</td>
<td>Patient Care Issues</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 370</td>
<td>Health Care Systems and Human Resources in RT</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RT 390</td>
<td>Medical Imaging</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 400</td>
<td>Clinical Internship Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
Recommended Electives: Students should select from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 106</td>
<td>Introduction to Health Careers</td>
<td>2</td>
</tr>
<tr>
<td>PSY 212</td>
<td>Life-Span Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 334</td>
<td>Health Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 343</td>
<td>Group Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 347</td>
<td>Empathic Listening Skills</td>
<td>3</td>
</tr>
<tr>
<td>SOC 420</td>
<td>Health Care and Illness</td>
<td>3</td>
</tr>
<tr>
<td>SOC 422</td>
<td>Death, Grief and Bereavement</td>
<td>3</td>
</tr>
<tr>
<td>RT 499</td>
<td>Independent Study in Radiation Therapy</td>
<td>1-3</td>
</tr>
</tbody>
</table>

B-4 Clinical Internship Coursework:
The second year will be spent in clinical internship at one of the following sites:
- University of Wisconsin Hospital in Madison, Wisconsin
- Froedtert Hospital or Ascension-Columbia-St. Mary’s Hospital in Milwaukee, Wisconsin
- Gundersen Health System in La Crosse WI,
- Advocate Lutheran in Park Ridge, IL.
- Marshfield Health System-Marshfield Clinic in Marshfield, WI

The internship will start in early July following the first year and will continue until the end of July of the next year (approximately 13 months). Retention of good standing in the program requires that students maintain a grade of “C” or higher in all required courses, as well as a semester and cumulative grade point average of 2.75 on a 4.0 scale. Students will complete courses taught either online or by the Education Director at the respective site.

When students have completed the requirements for the University and the major they are eligible to graduate. An “intent to” graduate form must be submitted via WINGS and students who complete in the summer will participate in the May commencement ceremony.

Clinical Internship Courses:

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer I</td>
<td>RT 401</td>
<td>Introduction to Radiation Therapy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 471</td>
<td>Clinical Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>Fall</td>
<td>RT 411</td>
<td>Principles &amp; Practice of Radiation Therapy I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>RT 421</td>
<td>Cross Sectional, Topographic &amp; Radiographic Anatomy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 431</td>
<td>Radiation Therapy Physics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 472</td>
<td>Clinical Practicum II</td>
<td>6</td>
</tr>
<tr>
<td>Spring</td>
<td>RT 412</td>
<td>Principles &amp; Practice of Radiation Therapy II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>RT 435</td>
<td>Dosimetry &amp; Treatment Planning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 437</td>
<td>Quality Management in Radiation Therapy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RT 473</td>
<td>Clinical Practicum III</td>
<td>6</td>
</tr>
<tr>
<td>Summer II</td>
<td>RT 481</td>
<td>Seminar in Radiation Therapy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RT 474</td>
<td>Clinical Practicum IV</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>
B-5 Radiation Therapy Course Descriptions
First Year: On-campus Professional Courses

HP/RT 310 Cr.3
Pathophysiology
This course focuses on the pathophysiologic disorders that affect healthy systems across the life span. Theories of disease causation are introduced. Areas of emphasis include cellular and systemic responses, clinical manifestations and the response of tissue to radiation damage. Acquired, immune, infectious, carcinogenic and genetic alterations in body systems are included.

RT 325 Cr.3
Radiation Therapy Readings, Writing, and Research
This course introduces radiation therapy students to the language of radiation therapy and professional issues in the field by the use of selected readings. The Radiation Therapy Writing in the Major program will be introduced along with the types of writing practiced in the field. Students will learn basic research techniques and begin to apply them to their professional education.

RT 330 Cr.2
Professional Issues in Radiation Therapy
This course will provide students with knowledge related to the professional issues pertinent to the field of radiation therapy. Course topics will include: professional development, career advancement/options, radiation therapist scope of practice and practice standards, certification and licensure, radiation therapy professional organizations, legislative issues in radiation therapy, as well as ethics and introductory law in radiation therapy.

RT 350 Cr.3
Patient Care Issues
This course will prepare students to work directly with patients in a health care setting. It will cover such topics as: communication and patient education, assessment, examination and monitoring of patients, body mechanics and patient handling skills, infection control, management of medical emergencies and CPR, nutritional counseling.

RT 370 Cr.2
Health Care Systems and Human Resources in Radiation Therapy
This course will provide entry-level radiation therapists with the basic health system and human resource knowledge. Course topics will include characteristics of U.S. Health Care System, insurance, health care access, reimbursement in radiation therapy, and applicable human resource topics.

RT 390 Cr.3
Medical Imaging
This course will provide radiation therapy students with theory and information regarding medical imaging procedures. Radiation therapists play a crucial role in imaging for treatment planning and treatment field verification. The course will provide instruction on analog and digital imaging, as well as various imaging modalities.
Radiation Therapy Program Student Handbook

RT 400 Cr.1  
**Clinical Internship Seminar**
This course will prepare students for the clinical internship portion of the program. Course topics will include: professional development, team building skills, radiation therapy terminology, basic clinical concepts, immobilization device construction, CPR, and radiation therapy equipment basics.

Second Year- Clinical Internship Courses

RT 411 Cr.4  
**Principles and Practice of Radiation Therapy I**
This course, taught during the clinical internship year, addresses the concepts of cancer treatment, focusing primarily on radiation therapy. Methods of improving therapeutic advantage are investigated. Students learn safe and effective use of equipment and accessories along with the rationale for their clinical application. Technical aspects of treatment simulation and delivery are developed. Treatment related side effects and their management and special patient situations are addressed.

RT 412 Cr.4  
**Principles and Practice of Radiation Therapy II**
This course, taught during the clinical internship, advances the student’s knowledge of neoplastic disease management. Cancers and some benign conditions of various body sites are discussed in relation to natural history, treatment and prognosis. Technical aspects related to radiation planning and delivery are closely investigated as well as pertinent anatomical considerations, combination therapy, treatment results and the therapist’s role in disease management.

RT 421 Cr.3  
**Cross Sectional, Topographic & Radiographic Anatomy**
This course, taught during the clinical internship, revisits anatomy specifically from an imaging perspective. Students will learn to identify structures and pathology on x-rays, CT and MRI scans and locate topographic landmarks on diagnostic and simulation films.

RT 431 Cr.3  
**Radiation Therapy Physics**
This course, taught during the clinical internship, expands the student’s understanding of physics related to radiation therapy. Topics include the components and operation of linear accelerators and other treatment machines, brachytherapy, specification and modification of beam quality and characteristics, measurement of absorbed dose, treatment machine calibration, beam geometry and treatment with particles.

RT 435 Cr.3  
**Dosimetry and Treatment Planning**
This course, taught during the clinical internship, focuses on the characteristics, measurement and manipulation of radiation dose delivery in treatment. This involves advanced concepts of methods of altering dose to optimize the effectiveness of the radiation treatment. Treatment planning for a variety of tumor sites and situations is discussed.
RT 437 Cr.2
Quality Management in Radiation Therapy
This course, taught during the clinical internship, focuses on the purpose and techniques of quality management in a radiation oncology program. The importance of documentation, consistent application of specified protocols and assessment of outcomes are addressed. The responsibilities of the radiation therapist within the radiation oncology team for quality functions are highlighted.

RT 471 Cr.3
Clinical Practicum I
This course, offered the first summer session of the clinical internship, will orient students to the clinical operation of the internship site. Students will observe staff operations in the radiation therapy clinic, simulation, treatment planning, and treatment delivery areas.

RT 472 Cr.6
Clinical Practicum II
This course, offered fall semester of the clinical internship, will progress students’ clinical skills from observation in simulation, treatment planning and treatment delivery to the point of participation and development of basic competencies.

RT 473 Cr.6
Clinical Practicum III
This course, offered spring semester of the clinical internship, will offer students the opportunity to continue the process of developing competence and confidence in the areas of simulation, treatment planning and treatment delivery. They will demonstrate competence in intermediate and some advanced procedures. Students will also be given opportunity to work in dosimetry.

RT 474 Cr.4
Clinical Practicum IV
This course, offered during the final summer session of the clinical internship, will complete the students’ clinical education experience. By the end of this course, students will have developed proficiency and confidence in areas of simulation, treatment planning and treatment delivery. They will complete all required competencies. Opportunities to broaden the experience and work with different equipment, techniques and advanced procedures will be offered.

RT 481 Cr.3
Seminar in Radiation Therapy
The course, offered during the clinical internship, is a capstone course in which students present patient case information, discuss application of radiation science theory, review and critique journal articles and prepare for the national certification exam.

RT 499 Cr.1-3
Independent Study in Radiation Therapy
Independent study in radiation therapy may include individual readings and writing, projects, or research under the direction of a radiation therapy instructor. Repeatable for credit – maximum six.
The mission of the Radiation Therapy Program at University of Wisconsin-La Crosse is to educate and train radiation therapists who are knowledgeable, technically competent and dedicated to their profession and their patients, meeting the educational and personal needs of its students by emphasizing excellence in education and offering a broad based curriculum in liberal studies, professional courses and clinical internship.

To effectively meet the mission and goals of the program, students must be taught in all three learning domains; cognitive, psychomotor, and affective. Professional development of students fits within the affective domain and is required in order for students to be successful in their educational program and for graduates to be effective practitioners. This development must be progressive throughout the radiation therapy curriculum. In order to facilitate such development, it is necessary to define what the word “professional” means in regard to Radiation Therapists and what professional behavior consists of.

The following listing, Characteristics and Abilities Essential to the Development of the Professional Radiation Therapist, has been compiled by the program to guide its approach to professional development of its students. Resources for this listing included The ASRT Radiation Therapy Standards of Practice (Professional Performance Standards). Progress toward development of professional behavior is expected in all radiation therapy courses and is included in course syllabi.

**Characteristics and Abilities Essential to the Development of the Professional Radiation Therapist**

**Commitment to Learning: (Evidenced by)**
- Showing respect to all instructors and being attentive at all times in class and in professional meetings.
- Eagerness to acquire understanding of concepts and development of skills.
- Use of ongoing self-assessment to evaluate personal performance, knowledge and skills.
- Seeking out constructive feedback and effectively using it for personal and professional improvement.
- Exploration and Investigation to advance the professional knowledge base.
- Maintaining competence in professional practice and development of competence with new technology.
- Continuing education after graduation to maintain and update knowledge.

**Interpersonal and Communication Skills: (Evidenced by)**
- Development of effective oral, written and non-verbal communication skills.
- Implementation of effective communication skills in practice with patients, their families and radiation therapy team members.
- Appropriate interactions with patients, families, colleagues and other health practitioners.
- Empathy and compassion for patients and their families.
- Promotion of a positive, collaborative practice atmosphere.
Problem solving and Critical thinking: (Evidenced by)
Ability to recognize and define problems, analyze data, develops and implement solutions and evaluate outcomes
Ability to assess and evaluate situations, logically question, distinguish relevant from irrelevant issues and make appropriate judgments
Application of problem solving and critical thinking skills to personal, patient related or work related issues.

Effective use of time and resources: (Evidenced by)
Ability to take initiative and make the most of personal, classroom, and clinical time to maximize their educational value
Adaptability and creativity in making adjustments to schedule changes and resource availability

Professional conduct: (Evidenced by)
Use of appropriate dress and appearance to enhance patient and peer confidence
Adherence to the professions accepted ethical standards
Commitment to providing optimal care to all patients
Dependability in attendance
Responsibility in fulfilling commitments and in reporting errors
Being accountable for decisions and actions
Support of, and participation in professional organizations
Providing a positive role model and professional image of Radiation Therapists to others in public and private settings

Stress Management
Ability to identify sources of stress and cope effectively with them
<table>
<thead>
<tr>
<th>Midterm</th>
<th>Course Completion</th>
<th>The student demonstrates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>U</td>
<td>1. Eagerness to acquire understanding of concepts and development of skills</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>2. Being prepared for, and alert at all times during class, clinical rotations, and at professional meetings.</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>3. Effective use of ongoing self-assessment to evaluate personal performance, knowledge and skills</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>4. Seeking out constructive feedback and effectively using it for personal and professional improvement</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>5. Exploration and Investigation to advance the professional knowledge base (reading and seeking information about the profession and in regard to clinical assignments and research questions)</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>6. Development of effective oral, written and non-verbal communication skills</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>7. Appropriate and respectful interactions with instructors, fellow students, and other health practitioners.</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>8. Promotion of a positive, collaborative learning atmosphere</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>9. Ability to recognize and define problems, analyze data, develop and implement solutions and evaluate outcomes</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>10. Ability to assess and evaluate situations, logically question, distinguish relevant from irrelevant issues and make appropriate judgments</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>11. Taking initiative and making the most of personal, classroom, and clinical time to maximize their educational value</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>12. Adaptability and creativity in making adjustments to schedule changes and resource availability</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>13. Use of appropriate dress and appearance to enhance patient and peer confidence.</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>14. Honesty and integrity in academic work and exams and in clinical activities</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>15. Uses electronic devices (cell phones, iPads, iPods) only at appropriate and/or designated times.</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>16. Adherence to the profession’s accepted ethical standards, including confidentiality</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>17. Dependability in attendance</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>18. Responsibility in fulfilling commitments</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>19. Being accountable for decisions and actions</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>20. Support of, and participation in professional organizations</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>21. Providing a positive role model and professional image of Radiation Therapists to others in public and private settings.</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>22. Ability to identify sources of stress and cope effectively with them</td>
</tr>
<tr>
<td>S</td>
<td>U</td>
<td>23. Meets semester clinical expectations.</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>24. Follows hospital customer service policies.</td>
</tr>
</tbody>
</table>

Explain any unsatisfactory marks:
Student Name: ___________________________ Date: ___________________________

<table>
<thead>
<tr>
<th>Midterm</th>
<th>Course Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>U</td>
</tr>
</tbody>
</table>

**The student demonstrates:**

- Eagerness to acquire understanding of concepts and development of skills
- Being prepared for, and alert at all times during class and at professional meetings.
- Exhibits professional behaviors
- Development of effective oral, written and non-verbal communication skills
- Appropriate and respectful interactions with instructors and fellow students.
- Promotion of a positive, collaborative learning atmosphere in group work and classroom setting
- Taking initiative and making the most of personal, classroom, and clinical time to maximize their educational value
- Adaptability and creativity in making adjustments to schedule changes and resource availability
- Honesty and integrity in academic work and exams and in clinical activities
- Uses electronic devices (cell phones, iPads, iPods) only at appropriate and/or designated times.
- Dependability in attendance
- Responsibility in fulfilling commitments
- Being accountable for decisions and actions
- Support of, and participation in professional organizations (RTOW, RT Club, CAC, Relay for Life)
- Providing a positive role model and professional image of Radiation Therapists to others in public and private settings.
- Ability to identify sources of stress and cope effectively with them.

Please use the back side to explain any unsatisfactory marks.

Signature/Date of Review: __________________________________________________________

Area(s) of noticed improvement or growth:

Area(s) for improvement:
**B-7 “Writing in the Major”**  
**Goals for Student Writing**

The Radiation Therapy Program acknowledges the value of writing skills in the development and professional life of a radiation therapist. Formal writing is defined, by the major, as writing that is intended to communicate information, ideas or feelings with another person or persons. Skill in formal writing is required for effective communication with patients, the members of the radiotherapy team and professional colleagues near and far. Sharing information and expressing ideas is essential in providing radiation therapy services. Informal writing, defined as writing intended for the self as audience, is also important. Though its presentation may be less complete and polished than formal writing, it is used to help the writer remember items of importance or to organize and clarify his/her own thinking. Informal writing is particularly important in the learning process of students and professionals.

A comprehensive and integrated approach to writing involves all of the courses in the major. The plan for writing supports the mission and goals of the Radiation Therapy program. Students completing the requirements for a degree in Radiation Therapy will have met the writing requirement for the University.

**B-8 Program Officials and Their Roles**

<table>
<thead>
<tr>
<th>Program Director:</th>
<th>Melissa Weege, MS, RT(T), CMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office:</td>
<td>4094 Health Science Center, 1725 State St.</td>
</tr>
<tr>
<td></td>
<td>La Crosse, WI 54601</td>
</tr>
<tr>
<td>Telephone:</td>
<td>(608) 785-6979</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:mweege@uwltax.edu">mweege@uwltax.edu</a></td>
</tr>
</tbody>
</table>

Ms. Weege works full-time at UW-La Crosse in the health professions department as a clinical assistant professor. Responsibilities are as follows:

1. Organization, administration, review and development of program.
2. Assurance of program effectiveness through outcome assessment and post graduate surveys.
3. Participation in budget planning.
5. Course development and scheduling.
6. Coordination of student application and selection process.
7. Student counseling and advisement in coordination with the on-campus advisor.
8. Representation of student and program needs to department, college, university and community.
9. Instruction and evaluation of students in professional core classes on campus.
10. Chair of Advisory Committee for the major, duties include scheduling, notification of meeting, preparation of agenda and management of meeting.
11. Service to University through various campus committees.
   Maintenance of knowledge of the profession of Radiation Therapy and educational methodologies through continuing professional development and pursuit of scholarly activities.
Clinical Coordinator: Amanda Carpenter, MS, RTT  
Office: 4052 Health Science Center, 1725 State St.  
La Crosse, WI 54601  
Telephone: (608)785-5164  
fax: (608)785-8460  
Email: acarpenter@uwlax.edu

Ms. Carpenter works full-time at UW- La Crosse in the health professions department as a clinical assistant professor. Responsibilities are as follows:

1. Correlation of clinical education with didactic education at clinical sites and on campus.
2. Collaborate with program director in ongoing design, instruction, assessment, revision, and implementation of the curriculum.
3. Coordinates clinical education and evaluates its effectiveness in cooperation with program director and clinical supervisors.
4. Oversee all clinical supervisors and instructors at internship sites.
5. Evaluation of student progress in clinical competency process.
6. Teaches courses as assigned by program director and chair of Health Professions Department.
7. Responsible for course development, instruction, assessment of student learning, and assessment of assigned courses.
8. Advises radiation therapy program students
10. Maintenance of knowledge of program policies and procedures, and student progress.
11. Participation in selection of students for admission and assignment to clinical internship sites.
12. Maintains current knowledge of program policies, procedures, and student progress.

Medical Advisor: Patrick Conway, MD  
Gundersen Health System  
La Crosse, Wisconsin  54601  
Email: pdconway@gundersenhealth.org

Dr. Conway is a radiation Oncologist at Gundersen Lutheran Medical Center in La Crosse, Wisconsin. He travels to campus occasionally, as needed. Responsibilities are as follows:

1. Advisement to the Program Director and Clinical Coordinators as requested regarding the operation of the program and in particular the clinical education of students.
2. Maintenance of an understanding of program goals, objectives and policies.
3. Participation in student selection and assignment to clinical internship sites.
4. Advocating for the program and its students in the medical community and at the clinical affiliates.
5. Member of the Advisory Committee for the major.
6. Maintenance of knowledge of the profession of Radiation Oncology and its relationship to Radiation Therapy through continuing professional development and pursuit of scholarly activities.
Responsibilities of Educational Directors/Clinical Supervisors:

1. Manage the educational program at the assigned clinical internship site.
2. Provide didactic and/or clinical instruction in radiation therapy courses.
3. Evaluate student competence and progress on an ongoing basis, providing feedback on a periodic basis.
4. Counsel and coach students as required.
5. Coordinate clinical and didactic instruction.
7. Report to the clinical coordinator and program director regularly and as needed.
8. Maintain knowledge of program policies and procedures.
9. Educational Directors and Clinical Supervisors may serve on the Advisory Committee.
10. Maintain knowledge of the profession of radiation therapy and educational and evaluative methodologies through continuing professional development and pursuit of scholarly activities.

**UW-La Crosse Program Assistants:** Shauna Salow, Peter Amann, Emilee Mielke
4031 Health Science Center, UWL
Telephone: (608)785-8470

**B-9 Advisory Committee for the Major in Radiation Therapy**

*Members:*
- Melissa Weege, Program Director, Chair
- Amanda Carpenter, Clinical Coordinator
- Patrick Conway, MD, Medical Advisor, Radiation Oncologist, Gundersen Lutheran
- Jim Bauml, Educational Director at Advocate Lutheran
- Karen Mannisto, Educational Director at Froedtert Hospital
- Amy Heath, Educational Director at University of Wisconsin Hospital
- Mindy Kren, Educational Director at Marshfield Clinic
- Daina Drath, Clinical Supervisor, Gundersen Health System
- Tracy Katzer, Ascension- Columbia St. Mary’s Hospital
- Aileen Staffaroni, Nuclear Medicine Program Director, UW-La Crosse
- Mark Sandheinrich, Dean, College of Science and Health, UWL
- Tom Kernozek, Chair of Health Professions Department
- Carla Burkhardt, Academic Services Director, College of Science and Health
- Joshua Bench, Coordinator, Pre-Health Advising Center, UWL
- Student Members (Representative of RT Club and 1 student from clinical internship)
The Role of the Advisory Committee is to:

1. Develop, revise and approve Mission and Goals of major
2. Review, revise and approve program printed materials.
3. Discuss, adjust and approve program curriculum, policy and procedures.
4. Provide guidance to program officials as requested.
5. Assist in the process of student discipline and grievance when concerns are brought to it.
7. Review selection and admission practices.
8. Participate in program outcome assessment.
9. Promote the major in radiation therapy within the college, university and community.
10. Advocate for program officials and students as necessary.

B-10 Program Advisement

1. Students admitted to the major are assigned to Melissa Weege (the Program Director) or Amanda Carpenter (Clinical Coordinator) for advisement on campus, help with registration, and course concerns. Students are to meet either in person or over email with their advisor prior to registration each semester while on campus.
2. During the clinical internship year, the Radiation Therapy Program Officials are available for advisement.
   - Students will meet at mid-semester, and at the end of each semester or summer session with the Education Director/Clinical Supervisor at the clinical site, to evaluate progress in clinical and didactic courses.
   - Following each clinical rotation, students will conference with clinical instructors and/or the Education Director/Clinical Supervisor or Clinical Coordinator regarding clinical progress.
   - Students are required to meet with the Education Director/Clinical Supervisor during their internship should their final grade in a course be less than a “C” or if the instructor has noted in a progress report that this is likely. Following this meeting, the program director will be notified and the Radiation Therapy Student Progress Committee will meet with the student.

B-11 Expenses and Financial Aid

1. Tuition and fees are established by the university for each academic year and are published in UW-L Undergraduate Course Catalog for each semester and summer session. Questions about tuition and fees may be directed to the Cashier’s Office at 121 Main Hall.
2. The Board of Regents reserves the right to change tuition and fees without published notice.
3. The Clinical Internship will start in early July for students in good standing in the major who have met all of the pre-clinical required courses. The internship continues through the end of July of the next year (approximately 13 months). Tuition and fees will be assessed for two semesters and two summer sessions.
4. Tuition deposits and payment plans are described in the UW-L Undergraduate Course Catalog.
5. Student services are funded through segregated fees determined by student government.
6. Students in their internship will be assessed a “Clinical Experience Fee” for each term except the final summer term. This amount will be communicated to the students during the spring semester of their first year in the program. The amounts approximately $7000; spread out over the first three terms of internship. The College of Science and Health determines the fees each year based on student enrollment in all undergraduate health professions programs. Additionally, at the start of internship, students will be assessed a one-time fee of $150 for access to the program’s clinical management system, Trajecsys. This fee will be assessed as a special course fee for RT 471.

7. Undergraduate course textbooks are available on a rental basis through the Textbook Rental Service. A rental fee is included in segregated fees. Students may purchase their textbooks, at reduced prices, if desired. Students will purchase additional reading material throughout the program as well as directed by instructors.

8. Student health service is available for students on campus or local internship (distant if a day off is taken to come to campus to utilize services). Some medical services are not provided and students are advised to maintain health insurance to make sure that all health care needs can be met. Students who are in their clinical internship year will be distant from the Health Center and must carry health insurance to cover medical expenses. Proof of health insurance must be provided to the site’s Education Director.

9. Living expenses are the responsibility of the student. University housing and food service is available while students are attending the UW-La Crosse campus. Students must make their own arrangements for room and board during the clinical internship period in Milwaukee, Madison, La Crosse or Park Ridge, IL.

10. Financial aid information and programs are available through the Student Financial Aid office. See the Undergraduate Course Catalog for application instructions and programs available.

11. Refund of tuition upon withdrawal depends on the timing of withdrawal, dropping from 100% in the first few days of the semester to 50% for an additional time period and to zero after that. Specifics can be found in the current UW-L Undergraduate Course Catalog.

12. Students will be required to carry liability insurance for their clinical internship. A group policy rate has been obtained. The premium is paid as a course fee for RT 471.

13. Students will be subject to a criminal background check prior to admission to the first year of the program, as well as the clinical internship. The fees for these checks are added as special course fees in RT 471.
Background

The Joint Commission (TJC) in compliance with standards HR 1.20 and EP 5, and the current Wisconsin Caregiver Law with the Department of Health and Family Services (chapters 48 and 50 of the Wisconsin Statutes) background checks are now required for all students in the allied health areas working in clinical settings. To ensure compliance with these rules, the results of criminal background checks must be obtained for all current students before the program begins (early summer). As a representative of the University of Wisconsin-La Crosse, you are expected to practice sound professional ethics and to conduct yourself in a professional, responsible, and reliable manner at all times. You are expected to maintain high professional standards and a part of this professional standard is a criminal background check.

Important Notice

Individuals who have been convicted of a felony or misdemeanor may be denied certification or licensure as a health professional. Information regarding individual eligibility may be obtained from the appropriate credentialing bodies. Clinical internship sites require a criminal background check and Caregiver check in order to permit participation in the clinical internship. Participation in clinical internship is a required part of the curriculum and a requirement for graduation. Clinical internship sites may deny a student’s participation in the clinical internship because of a felony or misdemeanor conviction. Failure to produce a criminal background check would result in delayed graduation or in the inability to graduate from the program. If you have a question, please contact the clinical education coordinator or program director.

Derogatory information can include but is not limited to the following:

- Conviction of a felony offense.
- Misdemeanor convictions probated sentences or felony deferred adjudications involving crimes against person (including physical or sexual abuse);
- Misdemeanor convictions related to moral turpitude (including prostitution, public lewdness, exposure etc)
- Felony conviction/deferred adjudications for the sale, possession, distribution, or transfer of narcotics or controlled substances;
- Inclusion on the list of Ineligible Persons;
- Providing a false statement on the application

Initial Background Check (Student Completes)

Students are responsible to arrange for a criminal background check using a company that is capable of providing the service in an orderly and timely manner. The Health Professions Department has established a relationship with CertifiedBackground (www.certifiedbackground.com). The company charges between $20.00 and $45.00 depending on how many places you have lived prior to attending UW-L.
Background checks are required for clinical internship placements in many facilities. Thus all students in the Health Professions Department will have a criminal background check done prior to the first day of class to facilitate fieldwork assignments. All costs incurred by the students for this background check are the responsibility of the student. CertifiedBackground.com makes the results available to the Health Professions Department electronically.

**Re-Check Prior to Clinical Internship (Program Completes)**
Most facilities require a current criminal background check (done within the past 6 months) and a caregiver background check. The Health Professions Department will conduct a follow-up Criminal History Background Check for Wisconsin and Minnesota and a Caregiver background check before the student’s first full time rotation/clinical/fieldwork assignment. All students are required to have this re-check and it will be charged to the student as a special course fee. Criminal Background Checks (CBCs) completed at other facilities may not be accepted as a substitute for this process.

**Recordkeeping**
Students are advised to keep a copy of the results for their personal files to take with on their clinical/fieldwork rotations.

**Confidentiality**
Results of all background searches will be kept confidential and will be disclosed only to the extent necessary to administer and enforce this policy or pursuant to appropriate legal process. Students are required to complete and sign the authorization, acknowledgement, and release form that permits sharing necessary criminal background information to the placement facility(s) (Attachment 1). Criminal background records are stored in a secure place and kept separate from the student’s academic file. Criminal background check information is destroyed once the student is no longer a student in the Health Professions Department.

**Disclosure**
The student will be notified if the background check information raises a potential concern for placement or consequences for credentialing or licensure. The Program Director will also be notified of any record that raises a potential concern for the student. The Director will then discuss the potential impact of the record and options with the student.

**Obligation to Report**
All students admitted to the Health Professions Department have an ongoing obligation to report any criminal conviction that may impact upon the student’s continued ability to participate in the clinical program to the program director/chair of the program no later than the next day of its occurrence. Failure to comply with any aspect of this policy will result in immediate dismissal from the students’ program.
Section C- Program Policies

C-1 Campus Class Attendance Policy
Prompt and regular attendance at all classes is expected. This is the start of your professional development and should be treated as reporting to a job. If you need to miss a class, you should contact the instructor prior to the class either by phone or email. Class should only be missed for illness or unforeseen circumstances. Skipping classes for reasons other than illness or unforeseen circumstances is not permitted. You are not allowed to have more than 2 separate occurrences of absenteeism. Additionally, if you are absent for 3 or more consecutive days, you will need to provide acceptable medical documentation. See additional policies regarding clinical internship attendance later in this document.

C-2 Grading Policy
The following grade scale will be used for Radiation Therapy didactic coursework whenever possible:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
<th>Grade</th>
<th>Score Range</th>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100</td>
<td>A/B</td>
<td>92-93</td>
<td>B</td>
<td>86-91</td>
</tr>
<tr>
<td>4.0</td>
<td></td>
<td>3.5</td>
<td></td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>84-85</td>
<td></td>
<td>77-83</td>
<td></td>
<td>70-76</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td>2.0</td>
<td></td>
<td>1.0</td>
<td></td>
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<td>----</td>
<td></td>
<td>----</td>
<td></td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td></td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An instructor may use a different grading scale or grade an exam on a curve if he/she consults with the Program Director and can justify the rationale.

C-3 Academic Honesty Policy
Any form of cheating or claiming credit for work other than your own will automatically result in a grade of a ZERO for the applicable assignment or exam.

C-4 Assignment Policy
All assignments will be due by date and time as indicated by instructor. There will be 10% points deducted for each day that the assignment is late.

C-5 Cell phone policy
Professional development includes being focused on the tasks at hand and the patient. Cell phone use causes distraction during clinic and classroom time, keeping you from being focused. Therefore, cell phones are not allowed to be seen or heard in the classroom or clinical setting. They should be stored for use during non-work or classroom time as determined by clinical instructor or supervisor, or classroom instructor. Other electronic portable devices may also be prohibited per the instructor, such as iPods, iPads, etc. Failure to comply with this policy will result in unsatisfactorily met expectations on the professional development evaluation.

C-6 Laptop Computers vs. tablets
Students in the radiation therapy program are encouraged to own a laptop computer or mobile tablet for access to Canvas, the student learning management system.
C-7 Academic and Graduation Policies

1. Permanent student records are kept by the Records and Registration Office. These are confidential between the student and the University. Students may request transcripts of their permanent academic records at any time, but transcripts will not be released without the student’s authorizing signature. Rights of access are in accordance with the U. S. Family Educational Rights and Privacy Act of 1974 as amended.

2. Transfer of credits earned at colleges and universities accredited by an acceptable regional accreditation agency will be governed by University rules as presented in the Undergraduate Course Catalog and/or by established articulation agreements for the major.

3. Grades are assigned according to the program’s grading system on a four-point scale (detailed in the Undergraduate Course Catalog along with definitions and policies for pass/fail, incomplete, withdrawal and credit by examination).

4. **Graduation Requirements**: Candidates for the bachelor in science degree in radiation therapy must accomplish the following prior to graduation. See also UWL Undergraduate Course Catalog, http://catalog.uwlax.edu/undergraduate/degreerequirements/#baccalaureate-degree
   
   a. Fulfill the general education requirements.
   b. Complete at least one ethic studies (diversity course).
   c. Be a student in good standing (“not in good standing” or “probation” status must be cleared)
   d. Complete the courses prescribed by the Undergraduate Curriculum Committee for the degree in radiation therapy with at least a 2.75 grade point average. Grades below “C” in individual required courses require clearance of deficiency as judged by the Program Officials.
   e. Meet the requirements for clinical competency as described in the clinical practicum course syllabi.
   f. Earn at least 120 semester credits with 40 credits in 300 and 400 level courses.
   g. A minimum of 30 semester credits in residence at UWL is required for graduation.
   h. Submit an application for graduation via the “Apply for Graduation” link in the WINGS Student Center as soon as the student has registered for his or her final semester or summer term in residence. Students are scheduled to complete their requirements with the final summer session, but, if cleared by Program Officials, are allowed to participate in graduation exercises in May.

5. **Student Withdrawal and Reentry**
   
a. Withdrawal from a course is usually not possible without affecting status in the major. The curriculum is rigorous and strictly sequenced. If a student would withdraw from a course, he/she would be unable to proceed into the next semester or summer session and would have to appeal to the Student Progress Committee to be allowed to retake the course at a later time as members of future classes would be affected.

   b. Withdrawal from the major should be considered carefully prior to any action being taken. The student is strongly urged to talk with the on campus advisor as well as the Program Director. Program personnel will make every attempt to deal with the student’s concerns and facilitate
continuance. If the student determines that withdrawal is the best course of action after these discussions he/she is asked to submit a statement in writing that decision to the Program Director.

c. Reentry and Readmission: Students who feel they must withdraw from the radiation therapy major once accepted, are encouraged to speak to radiation program officials prior to withdrawal. Students are not guaranteed placement should they wish to reenter. They must re-apply to the major and be considered for placement by the Selection Committee.

d. A leave of absence approval is required of any student who will miss more than two consecutive weeks of training while in the professional phase of the major. A student must submit a request in writing for such a leave and speak with the Program Director. Together, the student and the Program Director will develop a plan for a return after leave of absence. If the leave is during the clinical internship, the Clinical Coordinator will also be involved in developing the plan. Approval of the plan must be granted by the Program Officials.

C-8 Radiation Therapy Program Student Retention, Probation, and Dismissal

In order to remain as a student in good standing in the Radiation Therapy program students must meet program requirements as per the following:

1. Students must maintain a grade of “C” or higher in all required courses, as well as a semester and cumulative grade point average of 2.75 on a 4.0 scale.
2. Students must comply with program and University policies.
3. Students must make satisfactory progress in development of clinical skills and professional behavior.

Academic Deficiencies

1. A student who does not meet didactic (classroom), clinical, or professional development program requirements for grades will be notified by the Program Director of the concern at the earliest possible time after grades are posted.
2. Following such notification, the Student Progress Committee, a sub-committee of the Radiation Therapy Advisory Committee, will meet within 10 working days to discuss the deficiency and make a determination of the action to be taken. It is preferred that the meeting be held in person with the student being given the opportunity to represent him/herself or to submit a written statement for the Committee’s review. Under certain circumstances a telephone or video conference call may be held instead of a face-to-face meeting.
3. A decision as to the student’s status in the program will be communicated in writing to the student within 5 working days of the Student Progress Committee meeting. The decision may involve remedial work, probation or suspension from the program.
4. If the decision involves remediation or probation, an explanation of the “plan to regain good standing” in the program (including time frames) will be included in the letter to the student. This is referred to as a learning plan as well.
5. If the student successfully follows the plan and meets program requirements within the timeframe specified, he/she will regain good standing in the program.
6. If the student is not successful in following the plan and meeting program requirements within the specified timeframe, the Student Progress Committee will meet to determine the appropriate action. This meeting will be held within 10 working days of the deadline specified in
Failure to comply with program and University policies

Academic Misconduct

1. Academic misconduct, and procedures to deal with it, have been defined by the Board of Regents of the University of Wisconsin System in UWS 14. The entire document can be found at: https://docs.legis.wisconsin.gov/code/admin_code/uws/14. Portions of that policy are included below.

2. Academic misconduct is an act in which a student:
   a. Seeks to claim credit for the work or efforts of another without authorization or citation;
   b. Uses unauthorized materials or fabricated data in any academic exercise;
   c. Forges or falsifies academic documents or records;
   d. Intentionally impedes or damages the academic work of others;
   e. Engages in conduct aimed at making false representation of a student's academic performance; or
   f. Assists other students in any of these acts.

3. The following are the disciplinary sanctions that may be imposed for academic misconduct in accordance with the procedures of UWS 14.05, 14.06 or 14.07: (One or more of the disciplinary sanctions may be imposed for an incident of academic misconduct.)
   a. An oral reprimand;
   b. A written reprimand presented only to the student;
   c. An assignment to repeat the work, to be graded on its merits;
   d. A lower or failing grade on the particular assignment or test;
   e. A lower grade in the course;
   f. A failing grade in the course;
   g. Removal of the student from the course in progress;
   h. A written reprimand to be included in the student's disciplinary file;
   i. Disciplinary probation;
   j. Suspension or expulsion from the university.

Procedures are detailed in the document referenced above.
Non-Academic Misconduct

1. Non-Academic misconduct, and procedures to deal with it, have been defined by the Board of Regents of the University of Wisconsin System in UWS 17. The entire document can be found at: https://docs.legis.wisconsin.gov/code/admin_code/uws/17. Portions of that policy are included below.

2. The university may discipline a student in nonacademic matters in the following situations:
   a. For conduct which constitutes a serious danger to the personal safety of a member of the university (or clinical internship site), community, or guest.
   b. For stalking or harassment.
   c. For conduct that seriously damages or destroys university (or clinical internship site) property or attempts to damage or destroy university (or clinical internship site) property, or the property of a member of such.
   d. For unauthorized possession of university (or clinical internship site) property or property of another member of such.
   e. For acts which violate the provisions of Ch. UWS 18, Conduct on University Lands, https://docs.legis.wisconsin.gov/code/admin_code/uws/18.
   f. For knowingly making a false statement to any university (or clinical internship site) employee or agent on a university-related matter, or for refusing to identify oneself to such employee or agent.
   g. For violating a standard of conduct, or other requirement or restriction imposed in connection with disciplinary action.

3. The following are the disciplinary sanctions that may be imposed for nonacademic misconduct, in accordance with the procedures of UWS 17.05 through 17.07:
   a. A reprimand; Denial of specified university privileges;
   b. Imposition of reasonable terms and conditions on continued student status;
   c. Restitution;
   d. Removal of the student from the course in progress;
   e. Disciplinary probation;
   f. Suspension; or
   g. Expulsion.

Process to be followed is covered in the document referenced above. Violations are reported to the Dean of Students and handled through the Office of Student Life.

Failure to comply with program policies or to make satisfactory progress in clinical skill and professional development.

1. A student who does not comply with program policies or is deficient in development of clinical skills or professional behavior will be notified of the concern by the Program Director at the earliest possible time after the non-compliance or deficiency is recognized and reported.

2. Following such notification, the Student Progress Committee, a sub-committee of the Radiation Therapy Advisory Committee, will meet within 10 working days to discuss the issue and make a determination of the action to be taken. It is preferred that the meeting be held in person with the student being given the opportunity to represent him/herself or to submit a written statement for the Committee’s review. Under certain circumstances a telephone or video conference call may be held instead of a face-to-face meeting.
3. A decision as to the student’s status in the program will be communicated in writing to the student within 5 working days of the Student Progress Committee meeting. The decision may involve remedial work, probation or suspension from the program.

4. If the decision involves remediation or probation, an explanation of the “plan to regain good standing” in the program (including time frames) will be included in the letter to the student.

5. If the student successfully follows the plan and meets program requirements within the timeframe specified, he/she will regain good standing in the program.

6. If the student is not successful in following the plan and meeting program requirements within the specified timeframe, the Student Progress Committee will meet to determine the appropriate action. This meeting will be held within 10 working days of the end of the deadline specified in the “plan for regaining good standing”. The meeting will be held as described in number 2 above. The Committee may dismiss the student from the program.

7. A student may be classified as on probation or dismissed in regard to the program, even if not on probation, suspended, or expelled from the University.
C-9 Student Appeal Processes

Grade appeal process
The process for appealing a grade in the radiation therapy program is consistent with the by-laws and process maintained by the Health Professions Department.

When the student questions or disputes a final grade, it is expected that the student and course instructor will informally meet to discuss the situation. The student should come to the meeting prepared to explain why he/she believes the grade does not reflect his/her work and the instructor will explain the reasons for the grade given. The outcome of this informal meeting could be:

- Instructor recognizes an error or accepts student’s and changes the grade
- Student acknowledges instructor’s rationale for grade and accepts the grade
- Instructor does not change the grade; student does not accept the decision and begins a formal grade appeal.

Instructor
The request to appeal the grade will be put in writing and addressed to the individual course instructor. The appeal will contain the reason for the grade appeal and supporting materials. Acceptable reasons for appeal are limited to the following:

- Instructor used different grading standards for student work than for other students in the class
- Grading for student was biased, arbitrary, or capricious.

The instructor will acknowledge the appeal was received via e-mail within 1 working day of receipt of the appeal. The instructor will contact the student within 5 working days of receipt of the appeal and schedule a formal meeting with the student. This meeting will be attended by the course instructor, another faculty member or program director, the student, and anyone else the student wishes to bring (if desired). If the course instructor is the program director, another faculty member or department chair will be asked to attend the meeting. The meeting will be recorded by notes and audiotape.

The possible outcomes of this appeal hearing are:

- Instructor accepts student’s and changes the grade
- Student acknowledges instructor’s rationale for grade and accepts the grade
- Instructor does not change the grade; student does not accept the decision and decides to appeal to the next level.

The outcomes of the appeal will be documented by the course instructor with a copy send to the student and placed in his/her file.

Program Director (optional step: may be skipped if the program director has been involved in the initial appeal hearing with the individual faculty member).
The request to appeal the grade will be put in writing and addressed to the program director. The appeal will contain the reason for the grade appeal and supporting materials. Acceptable reasons for appeal are limited to the following:

- Instructor used different grading standards for student work than for other students in the class
- Grading for student was biased, arbitrary, or capricious.
The program director will acknowledge the appeal was received via e-mail within 1 working day of receipt of the appeal. The program director will contact the student within 5 working days of receipt of the appeal and schedule a formal meeting with the student. This meeting will be attended by the program director, the student, and anyone else the student wishes to bring (if desired). The meeting will be recorded by notes and audiotape. The program director may seek additional information from the course instructor and/or student before rendering a judgment.

The possible outcomes of this appeal hearing are:

- Support for the instructor and a recommendation that the grade should stand as given.
- Recommendation to instructor to change the grade
- Student accepts the grade and ends the appeal process.
- Student does not accept the grading decision and decides to appeal to the next level.

The outcomes of the appeal will be documented by the program director with a copy sent to the student and placed in his/her file.

**Department Chair**

The request to appeal the grade will be put in writing and addressed to the department chair. The appeal will contain the reason for the grade appeal and supporting materials. Acceptable reasons for appeal are limited to the following:

- Instructor used different grading standards for student work than for other students in the class
- Grading for student was biased, arbitrary, or capricious.
- Program director recommended a grade change to the instructor; instructor did not change the grade.

The department chair will acknowledge the appeal was received via e-mail within 1 working day of receipt of the appeal. The program director will contact the student within 5 working days of receipt of the appeal and schedule a formal meeting with the student. This meeting will be attended by the department chair, the student, and anyone else the student wishes to bring (if desired). The meeting will be recorded by notes and audiotape. The department chair will speak to the course instructor after meeting with the student to gather information about the grading. The department chair may also formally seek additional information from the course instructor and/or student before rendering a judgment.

The possible outcomes of this appeal hearing are:

- Support for the instructor and a recommendation that the grade should stand as given.
- Recommendation to instructor to change the grade
- Student accepts the grade and ends appeal process.
- Student does not accept the grading decision and decides to appeal to the next level.

The outcomes of the appeal will be documented by the department chair with a copy sent to the student and placed in his/her file.
Health Professions Department Level

If the student wished to pursue an appeal, the request for a formal appeal at the Health Professions Department Level must be filed in writing with the department chair. The appeal will contain the reason for the grade appeal and supporting materials. Acceptable reasons for appeal are limited to the following:

- Instructor used different grading standards for student work than for other students in the class
- Grading for student was biased, arbitrary, or capricious.
- Department chair recommended a grade change to the instructor; instructor did not change the grade.

The department chair will acknowledge receipt of the written appeal within 1 working day. The department chair will appoint the five-member ad hoc committee to hear the appeal as indicated in the bylaws:

- Three faculty/staff of the program (whenever possible)
- The instructor
- One faculty/staff from outside of the program

The department chair will appoint one of the committee members (other than the course instructor) to chair the committee. The department chair shall not be a member of this committee but will attend the committee meeting as observer and witness. This appeals committee will meet within 1 week of receipt of the written grade appeal. The committee members will be given copies of the documentation of the previous 3 levels of appeal prior to the appeal hearing.

The appeals hearing will be conducted as follows:

- Student will be given 15 minutes to describe the basis for the appeal and provide supporting documentation to the committee.
- Involved teacher will be given 15 minutes to describe the rationale for the grade and reason for not changing the grade.
- Department chair will be asked to describe involvement in the situation and outcome of actions.
- Student will be excused and committee will deliberate actions.
- The committee may ask for additional information from any of the parties involved. The committee will specify the time frame for supplying the materials. The request for additional materials will be put in writing.
- If additional materials are requested, the committee meeting will be adjourned. The committee will reconvene within one week after deadline for receipt of the requested materials.
- The possible decisions the committee can make are:
  1. Support the appeal and make a recommendation to the course instructor to change the grade.
  2. Deny the appeal and support the grade as given.

The appeals committee chair will communicate the outcome of the appeal hearing in writing to the student, course instructor, and department chair within 5 days of the final committee hearing. A copy of the student written appeal and the response of the committee will be given to the student and placed in the student’s permanent record.
Non-Grade Appeal Process

The Student Academic Non-Grade Appeals process is designed to enable students to initiate and resolve complaints regarding faculty and instructional academic staff behavior. Complaints may be initiated within 90 days of the most recent incident of unprofessional behavior by university faculty and instructional academic staff that impairs students' ability to learn. The Radiation Therapy program will strictly adhere to the UWL Student Life informal and formal procedures.

Procedures

Informal Procedures

Any student or group of students who has a complaint about faculty or instructional academic staff behavior is encouraged to resolve the complaint informally. Informal attempts may include but are not limited to:

- meeting directly with the faculty member and/or instructional academic staff,
- meeting with the student's advisor,
- meeting with other faculty members and/or instructional academic staff,
- meeting with a departmental complaints committee,
- meeting with the department chair,
- meeting with any combination of such people.

The intention of such meetings is to clarify misunderstandings or miscommunications that may be the source of the complaint. If for any reason these meetings do not resolve the complaint or if the student chooses not to resolve the complaint using the informal procedures, the student(s) may pursue the formal procedures described below.

Formal Procedures

1. Initiating a Complaint

If informal procedures are unsuccessful (or within 90 days of the last incident), a student or group of students who wishes to pursue a complaint should inform the Student Life Office, either orally or in writing.

The Student Life Office shall:

a. provide a statement regarding academic freedom and pertinent sections of the "Statement to Improve Undergraduate Education";

b. advise the student(s) about the Formal Procedures for Student Academic Non-grade Appeals;

c. maintain current information on procedures and bodies handling complaints in all academic departments;

d. instruct the student to initiate the complaint by meeting with the chair of the department to which the faculty or instructional academic staff member is assigned or, if appropriate, with a departmental complaint committee. In the case that the complaint is lodged against the department chair and there is no appropriate committee or group within the department to bring the complaint to, the instructions shall be to meet with the dean of the college in which the department chair is assigned;

e. assist the student(s) in scheduling the meeting with the department chair or the departmental complaint committee, if one is available, or dean if the complaint is lodged against the department chair and there is no group within the department to receive the complaint; and

f. serve as an advisor to the student(s), as necessary, throughout the complaint process, keeping a confidential, written record of interactions with the student(s).
2. Discovery Stage of the Complaint

In the meeting, the chair or departmental complaint committee (or dean, in the case when the complaint is against a department chair and there is no departmental committee) shall collect information from the student(s) making the complaint and explain all the appropriate procedures and options to complainant. If a complaint is to be pursued, the chair or committee (or dean) who has received a complaint will inform the accused party of the nature of the complaint lodged, concealing the identity of the complainant (if that is desired) and seek approaches to mediation and resolution. Any attempt to penalize or in any way retaliate against a person bringing a complaint is prohibited and will be treated as a separate incident to be reviewed in its own right.

The goal of the discovery state is to clarify misunderstandings and miscommunications and establish what actions (if any) may be legitimate sources of complaint. The wishes of the student(s) making the complaint shall be respected regarding further investigation. A specific complaint shall not be carried forward without the complainant(s)'s explicit written permission and instruction.

If a complaint is resolved at the Discovery stage, no formal record will be retained in the faculty or instructional academic staff personnel file.

3. Mediation Stage of the Complaint

This stage will involve:
   a. separate confidential meetings(s) of the department chair or committee (or dean), with the complainant and the person against whom the complaint is filed, or
   b. joint confidential meeting(s) with the complainant and the person against whom the complaint is filed and the department chair or committee (or dean).

The goal of the Mediation Stage is conciliation. When these meetings are completed, the complainant will be asked to decide whether s/he is satisfied with the results or wishes to move to the Hearing stage of the complaint.

If a complaint is resolved at the Mediation stage, no formal record will be retained in the faculty or instructional academic staff personnel file.

4. Hearing Stage of the Complaint

If the Mediation Stage does not result in a satisfactory resolution of the problem, then the complainant will be referred to the Executive Director of Human Resources who will assist the complainant in filing a complaint with the Complaints, Grievances, Appeals and Academic Freedom Committee (CGAAF Committee). If the person lodging the allegation wishes to postpone such a confrontation, the CGAAF Committee will set a time-limit which appears reasonable, depending upon the circumstances and reasons given. The formal hearing proceeding may be terminated by mutual agreement of the complainant and the person against whom the complaint is filed at any step. Either party may seek the help of legal counsel at any stage of the hearing.
a. Complaint
The complainant must file a written complaint using the petition form available in each dean's office and in the Student Life Office.

1. The Petition
The petition, once completed by the complainant, shall provide:
   a. the complainant's name;
   b. the respondent's name;
   c. a brief statement of the problem and a detailed list of alleged actions or behaviors that are the basis of the complaint;
   d. additional information such as statements by witnesses and other documentation that supports the complainant's allegations;
   e. a summary of the outcomes of the informal procedures (if pursued) and the formal procedures prior to this point; and
   f. (optionally) a statement of the desired outcome(s) of the hearing.

2. Receipt of Petition and Duties of the Executive Director for Human Resources

The completed petition shall be submitted to the Executive Director for Human Resources. The Executive Director shall review the contents of the petition with the complainant(s). This information shall be forwarded to the chairperson of the CGAAF Committee, who is responsible for scheduling the hearing.

b. Time Lines
The CGAAF Committee shall proceed with the petition using its operating rules for processing and hearing complaints. The rules are available from the Faculty Senate Office, 323 Graff Main Hall and at /FacultySenate/committees/CGAAF/Complaints.htm

Reference is the UWL Student life policies on Student Non-Grade Appeals (https://www.uwlax.edu/student-life/student-resources/student-handbook/#tm-policies)
C-10 Fairness Policies

1. The University and the Clinical Internship sites believe strongly in their non-discriminatory policy, that admission and treatment of students in classes, campus life and clinical internship will not be affected by student characteristics of gender, race, color, creed, religion, national origin, disability, ancestry, age, sexual orientation, gender, pregnancy, marital or parental status or relationship to employees.

2. The University and its Clinical Affiliates believe in hiring and promoting faculty and employees according to the above non-discriminatory statement.

3. Due process will be followed in any complaints against students in academic or non-academic concerns as detailed in the Student Handbook on the UWL web page.

4. If a student has concerns about the program which are not resolved through the grievance policy and procedures and if he/she feels that the program is not in compliance with JRCERT accreditation standards or feels that quality of instruction or general welfare of students within the program is jeopardized, he/she may submit allegations of non-compliance directly to the JRCERT. Please see the JRCERT policy and allegations reporting form in appendix 1 of this handbook. The program will keep records of any complaints of this nature for review in regard to accreditation and quality audit.

5. A student’s behavior in the clinical setting must conform to policies and rules established by the affiliated institution. Failure to conform may result in probation, or dismissal from that site. The Advisory Committee and Program Officials will be consulted to protect the student and the institution’s interests as much as possible.

6. Number of students selected into the major will be limited by the number of clinical internship positions available for the upcoming senior year. It will be done following a successful interview process with the clinical internship sites. An offer of placement from one of the clinical internship sites will be given to each student.

7. Program Officials will make every effort to assure that activities assigned to students in academic and clinical courses will be for valid educational purposes.
C-11 Policy in Regard to Records and Release of Information

1. The release of information to and about students is in conformance with the Family Education Rights and Privacy Act, as amended in 1975.

2. A formal record of each student's grades is maintained. A student will be shown his/her internship record at the quarterly evaluation sessions which the Clinical Supervisor schedules. A student may also inspect his/her records upon making an appointment with the Clinical Supervisor at other times.

3. Student records are securely kept in the office of the Clinical Supervisor. Records will also be maintained under strict security by University of Wisconsin-La Crosse in perpetuity.

4. Any information regarding the student's academic or clinical performance is confidential. Authorization for release of any information must be made in writing by the student or graduate to the Records and Registration office. Clinical internship records must be requested from the internship site.

5. Government officials or officials of the school's accrediting bodies may have access to the student records for the purpose of official business upon presentation of identification and statement of the purpose of viewing the records.

6. Upon completion of the program a student may request a copy of his/her grade transcript. This copy will be marked "personal copy".

Exam Return Policy

1. All exams given in conjunction with the radiation therapy program may not be kept by students after grading.
2. Students may view the document to note concepts that were missed or not understood.
3. This viewing should be completed during class or under the supervision of a program official.
4. Graded exams must then be returned to program officials.
5. Students are not allowed to keep exams in their possession.
6. If the exam is given on Canvas, students are not allowed to print off completed exams and keep in their possession. Exams may be reviewed at the discretion of the instructor of the course.
7. Respondus Lockdown browser is required for all exams given on Canvas.
I, (print name) ________________________________, hereby grant permission to ________________________________ to serve as a reference and to release information to employers, educational institutions, and foundations for the purpose of assisting me in obtaining employment, admission to graduate or professional school, fellowships, and/or scholarships. I further consent to the disclosure of information regarding my academic and extracurricular performance, specifically including grades, attendance, demonstrated skills, and objectives.

Signature: ____________________________________________________________

Date: _______________________________

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Student has sent applications to the following institutions:

Record of References Given- To be Completed by Person Giving Reference

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<tr>
<th>Date</th>
<th>Place/Contact Name</th>
<th>Type of information given</th>
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C-12 Personal Student Use of Social Networking Sites

The University of Wisconsin-La Crosse Radiation Therapy Program recognizes that social networking websites and applications, including but not limited to Facebook, Instagram, Snapchat, Twitter and blogs, are an important and timely means of communication. Students, faculty and staff are reminded that they should have no expectation of privacy on social networking sites. Students, faculty and staff must also be aware that posting certain information is illegal. Violation may expose the offender to criminal and civil liability. Offenses may be considered non-academic misconduct and be subject to the appropriate policies and procedures.

The following actions are strictly forbidden:

- In your professional role as a caregiver, you may not present the personal health information of other individuals. Removal of an individual’s name does not constitute proper de-identification of protected health information. Inclusion of data such as age, gender, race, diagnosis, date of evaluation, or type of treatment or the use of a highly specific medical photograph (such as a photograph of a patient undergoing Radiation Therapy or a photograph of a patient treatment plan) may still allow the reader to recognize the identity of a specific individual.
- You may not report private (protected) academic information of another student or trainee. Such information might include, but is not limited to: course grades, narrative evaluations, examination scores, or adverse academic actions.
- In posting information on social networking sites, you may not present yourself as an official representative or spokesperson for the University of Wisconsin-La Crosse Radiation Therapy Program or affiliate organizations.
- You may not represent yourself as another person, real or fictitious, or otherwise attempt to obscure your identity as a means to circumvent the prohibitions listed above and below.

In addition to the absolute prohibitions listed above, the actions listed below are strongly discouraged. Violations of these suggested guidelines may be considered unprofessional behavior and may be the basis for disciplinary action.

- Display of vulgar language or slanderous behavior towards others.
- Display of language or photographs that imply disrespect for any individual or group because of age, race, gender, ethnicity or sexual orientation.
- Presentation of personal photographs or photographs of others that may reasonably be interpreted as condoning irresponsible use of alcohol, substance abuse or sexual promiscuity.
- Presentation of personal engagement in illegal activities including use of recreational drugs.
- Posting of potentially inflammatory or unflattering material on another individual’s website, e.g. on the “wall” of that individual’s Facebook site.

When using these social networking websites/applications, students are strongly encouraged to use a personal e-mail address, rather than their UWL email address, as their primary means of identification. Individuals also should make every effort to present themselves in a mature, responsible, and professional manner. Discourse should always be civil and respectful.
Student Organization Use of Social Networking Sites

Registered student organizations that use social networking sites are required to include their advisor and/or the Director of Student Affairs for continuity purposes. Student organizations are not to represent themselves as official representatives or spokespersons for the University of Wisconsin La Crosse or affiliate organizations and are subject to the university’s identity standards. Violation of this policy may be considered nonacademic misconduct in addition to the student organization losing their official registration status with the university.

*This policy was adapted with permission from the University of Kansas Medical Center for use in UWLa Crosse Health Professions Programs.

C-13 Health and Safety Policies

The University of Wisconsin La Crosse program in Radiation Therapy is interested in promoting good health for students, instructors and patients. The following policies have been developed to attain that goal. For sickness, students are asked to refer to the below “Too sick for clinicals” policy when determining if they should report to their internship site.

1. Student health service is available for students on campus who meet requirements and pay the segregated fee at registration and students at the Gundersen internship site. Students who are in their clinical internship will be distant from the Health Center and are encouraged to carry health insurance to cover medical expenses while in Milwaukee, Chicago, Madison, Marshfield or Park Ridge.

2. All applicants are apprised of the "Essential Functions of a Radiation Therapist". They are to consider whether the functions of the position of radiation therapist and radiation therapy student are within their abilities, with or without accommodation.

3. If it is determined that the student requires reasonable accommodation to perform the "Essential Functions", the clinical internship site and the University will make every effort to provide such accommodation.

4. Students beginning their clinical internship may receive a health screening exam within the first month at their internship site or the site may request that screening be done prior to attendance. Typically included are: a chicken pox titer if not previously done at the University, required immunizations and TB testing.

5. Should a student become injured during the clinical portion of training, he/she may be permitted to be treated on an emergency basis at the clinical site, with expenses billed to his/her insurance carrier. A University of Wisconsin system incident report must be submitted.

6. In orientation to the clinical internship students will be made aware of precautions to be taken in caring for patients. Universal precautions/standard precaution measures are to be strictly adhered to for safety of students, staff and patients.
7. If a student appears to need professional medical attention due to an issue with their ability and safety, the clinical supervisor/educator shall strongly recommend or require the student to seek medical attention.

8. If a student should be exposed to patient body fluid by a needle stick, OSHA recommendations will be followed and the student will be seen by hospital personnel. A University of Wisconsin system incident report must be submitted.

9. **Policy on reporting of communicable diseases**
   In the interest of protecting radiotherapy patients from exposure to communicable disease, the University of Wisconsin La Crosse and its clinical affiliate hospitals request that students contracting such diseases inform the clinical supervisor. Upon such notification, the program officials will advise the student on the appropriate steps to take to avoid patient exposure. Such steps may include counseling on proper hand washing technique, the wearing of a mask or physical absence from the treatment room when immune-compromised patients are treated. All such information given by students to program officials will be held in strict confidence and will not be used against the student.

10. If the student is exposed to a communicable disease at the clinical education site, for example by a needle stick, he/she must report the exposure to the Clinical Supervisor who will inform the Program Director and Medical Advisor. The student will be sent to Employee Health for evaluation and/or treatment. A University of Wisconsin system incident report must be submitted.

11. In orientation to the clinical internship, students will be educated in regard to hazardous materials used at the affiliate site. MSDS sheets for commonly used materials will be shared. Students are expected to use safe handling procedures as they are taught.

**C-14 University of Wisconsin – La Crosse Radiation Therapy Program Sickness Policy**

Interns are required to follow the below requirements regarding sickness. If an intern presents with the following conditions, it is the educational directors discretion to send the intern home or accept the intern into the clinical setting based on the below examples. The intern will have to take vacation time for his/her absence.

<table>
<thead>
<tr>
<th>General Illnesses</th>
<th>Too Sick for Clinicals</th>
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<tbody>
<tr>
<td>Fever</td>
<td>· No clinicals or patient care until fever is gone.</td>
</tr>
<tr>
<td>Hand dermatitis</td>
<td>· Skin is cracked and bleeding at any time prior to, during or after work shift.</td>
</tr>
<tr>
<td>Open wounds</td>
<td>· Wound is located on the hands or face and is draining or not healed over, and duties involve patient contact.</td>
</tr>
<tr>
<td></td>
<td>· Wound is located under clothing but dressings are saturated by the end of the shift and duties involve patient contact.</td>
</tr>
<tr>
<td>Rash</td>
<td>· Generalized rash with an unknown cause.</td>
</tr>
<tr>
<td></td>
<td>· Small blisters located on hands and face or a large area on body trunk.</td>
</tr>
<tr>
<td></td>
<td>· Rash appears like tiny broken blood vessels or bruises with mild fever.</td>
</tr>
<tr>
<td></td>
<td>· Rash has spots or pimples and is accompanied by a fever.</td>
</tr>
<tr>
<td>Disease</td>
<td>Symptoms</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Herpes simplex</td>
<td>· Lesion is located on hands.</td>
</tr>
<tr>
<td>(cold sores)</td>
<td>· Lesions are open and draining.</td>
</tr>
<tr>
<td></td>
<td>· Lesions are located on face and duties include patient contact in high risk areas.</td>
</tr>
<tr>
<td>Burns</td>
<td>· Burn is located on the face or hands and area is weeping or blistered.</td>
</tr>
<tr>
<td>Pediculosis</td>
<td>· No work until confirmed that transmission is not possible following appropriate treatment.</td>
</tr>
<tr>
<td>(lice)</td>
<td>· No work until medical treatment started.</td>
</tr>
<tr>
<td></td>
<td>· No skin to skin contact until resolved.</td>
</tr>
<tr>
<td>Impetigo</td>
<td>· No work until medical treatment started.</td>
</tr>
<tr>
<td></td>
<td>· No skin to skin contact until resolved.</td>
</tr>
<tr>
<td>Conjunctivitis</td>
<td>· Excessive tearing with discharge, sensitivity to light, itching, redness, or swelling. No work until discharge/drainage ceases.</td>
</tr>
<tr>
<td>Upper Respiratory</td>
<td><strong>Symptoms</strong></td>
</tr>
<tr>
<td></td>
<td>· Accompanied by a fever.</td>
</tr>
<tr>
<td></td>
<td>· Has a &gt;2 week duration and accompanied by night sweats, fever, weight loss, hemoptysis or a positive PPD (tuberculosis test).</td>
</tr>
<tr>
<td></td>
<td>· Severe or persistent coughing spells.</td>
</tr>
<tr>
<td>Cough</td>
<td>· Accompanied by fever, white spots on tonsils, swollen glands or skin rash.</td>
</tr>
<tr>
<td>Sore throat</td>
<td>· Following a positive throat culture, need 24 hours of medication and feeling better clinically.</td>
</tr>
<tr>
<td>Nasal congestion</td>
<td>· Nasal secretions are so persistent that hands can not be washed after each tissue use.</td>
</tr>
<tr>
<td></td>
<td>· Accompanied by a fever, sinus pain and colored discharge.</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>· No work until antimicrobial therapy completed and two cultures at least 24 hours apart are negative.</td>
</tr>
<tr>
<td>Influenza</td>
<td>· Combination of muscle aches, sore throat, cough, mild cough, runny nose, headache, light sensitivity or intestinal symptoms.</td>
</tr>
<tr>
<td>Upper Respiratory Infection</td>
<td>· Requires staying home until symptoms are resolved to prevent spread of disease to immunocompromised patients.</td>
</tr>
<tr>
<td>Pertussis (Whooping Cough)</td>
<td>· Requires staying home and being on medication for 24-48 hours.</td>
</tr>
<tr>
<td></td>
<td>· May return to clinical assignment with medical permission.</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td><strong>Symptoms</strong></td>
</tr>
<tr>
<td></td>
<td>· Present with yellowing of the skin or eyes.</td>
</tr>
<tr>
<td></td>
<td>· Accompanied with other general complaints (e.g. headache, fever, fatigue or yellowing of skin)</td>
</tr>
</tbody>
</table>
### Vomiting
- Difficulty maintaining hygiene practices or sanitary conditions.
- Accompanied by other intestinal symptoms (e.g. increase flatus, nausea, vomiting or other unusual stool characteristics).

### Diarrhea
- Difficulty in maintaining hygiene practices or sanitary conditions.
- An increased number of bowel movements with an acute onset due to an unknown cause (3 loose stools in 24 hour time period).
- Accompanied by a fever, headache, or fatigue.
- Accompanied by other intestinal symptoms.

### Convalescent Salmonella
- No work with high risk, immunocompromised patients until documentation of 2 consecutive negative stool cultures, 24 hours apart.

- If an intern is on narcotic prescription drugs, the intern will not be allowed to participate in clinical activities due to the potential side effects and altered mental status.
- The return to work protocol and other illness related clinical situations to follow hospital policy of the internship site.

#### C-15 Radiation Safety

- Orientation to the clinical internship will include review of radiation safety measures.
- Students will be provided a radiation dosimeter by the instructors of UW-L courses with radiation labs and by the clinical affiliates, which they will wear at all times while in the controlled area.
- Students, staff and visitors are not allowed in treatment rooms during the treatment.
- If the student is in the simulator or High-Dose Rate Afterloader room during fluoroscopy, he/she will wear a lead apron.
- Reports may be available per student request from the radiation safety officer.
- Students will be given counseling regarding radiation safety practices as necessary.
- The program threshold dose limit for incidents of exposure is 125-250 mrem. If such dose is reached and/or exceeded, investigation will be conducted by program officials and the appropriate radiation safety officer. On site radiation safety officer is required to notify program officials of such exposure.

#### C-16 Policy on student pregnancy

Students should understand that a pregnancy during the two years of the professional portion of the Radiation Therapy major may have an impact on their education and possibly upon the timing of graduation. Two important factors are involved.

- Courses are only offered once each year and time missed for pregnancy and/or delivery will likely necessitate make up work or perhaps delay of up to a year to maintain the proper sequence of courses, depending on the timing and amount of time missed.
- There are potential risks to an embryo or fetus secondary to radiation exposure that may require counseling and alteration of the clinical education experience.

*The following policy has been developed to guide the program and its students in the event of a student pregnancy.*
1. The U. S. Nuclear Regulatory Commission Regulatory Guide 8.13 regarding “Possible Health Risks to Children of Women Who are Exposed to Radiation During Pregnancy” can be found in Appendix A.

2. All students will be made aware of risks and hazards of prenatal radiation exposure during coursework at UW-L and upon orientation to the clinical internship.

3. A student who is pregnant, or suspects that she may be, has the option to voluntarily declare that condition to program officials.
   a. If the student decides to declare the pregnancy it shall be done in writing to the Program Director while on campus and/or the Education Director of her internship site if in the internship portion of the program. The notification shall also include the expected date of delivery.
   b. A student may “undeclare” her pregnancy at any time. The student should submit a written withdrawal of declaration of her pregnancy status. This should also be submitted to the Program Director while on campus and/or Education Director/Clinical Supervisor if attending internship.
   c. The program will comply with student confidentiality requests as per FERPA regulations.

4. If a student declares a pregnancy, a counseling session will be set up with the radiation safety officer at the University and/or the student’s clinical internship site to review radiation exposure risks and any additional monitoring practices which may be initiated.

5. A declared pregnant student may choose one of the options below (or may choose to change to a different option at a later time if desired, with written notice):
   a. She may take a leave of absence from the program. (See policy for leave of absence.) Should the declared pregnant student decide to leave the program during pregnancy and delivery, tuition will be refunded according to the Tuition Refund Policy. In this circumstance the student would be readmitted to the program at the first available opening after delivery.
   b. She may stay in the program, but make modifications in her clinical rotation schedules to reduce the chance of exposure to the fetus. She will not participate in site specific rotations during the time of the pregnancy as recommended by the Radiation Safety Officer of the site. Competency and experience in all required areas will be made up following delivery. This could delay graduation beyond the originally expected date.
   c. She may decide to stay in the program and/or internship during pregnancy and continue the program without modification of learning activities or clinical rotations. If she decides to do this, she does so in full knowledge of the potential hazard of embryo/fetal radiation exposure. If a student selects this option, it is recommended that she consult her personal physician in this regard. She must indicate in writing her intention to continue with the program without modification. A copy of documentation of this decision will be kept in the student’s file.

6. Pregnancy and/or delivery related time away from school during the junior year on campus will require make up of any coursework missed prior to beginning the internship, consistent with the leave of absence policy of the major.

7. If delivery occurs during clinical internship, all course work and clinical time must be completed before the student is eligible for graduation and to apply to take the ARRT certification examination.
Section D- Clinical Internship

D-1 The Clinical Internship Experience

All of the clinical internship sites affiliated with the Radiation Therapy program are state of the art regional cancer centers. Each affiliated clinical internship site employs an Education Director/Clinical Supervisor who is an Adjunct Faculty member to UW-La Crosse. Courses are taught either online or in a face to face setting. The same curriculum is taught at each site as mandated by the ASRT and the Advisory Committee of the Radiation Therapy Program. Course information is centralized on Canvas, including content, quizzes, discussions, and exams. While each internship site differs in terms of technologies used for delivery of radiation therapy, as well as department size, the relative pace of patient flow is consistent between all sites. Each site provides care for a wide variety of patient populations including geriatric and pediatric, and there are fluctuations in patient volume from time to time.

Clinical Internship Sites
Advocate Lutheran General Hospital

About the Facility:
- Varian IX and TrueBeam machines with OBI, Rapid Arc capabilities and DIBH
- Tomotherapy, Cyberknife, GE 16 Slice CT Simulator
- Three dimensional treatment planning
- Intensity modulated radiation therapy
- High Dose rate brachytherapy
- Hypofractionation for breast cancer treatment
- Grid Therapy, Total Body Irradiation
- Pediatric and Adult populations
- 2-3 Physicians/Day
- 7 Full time and 1 Part time therapist
- treat 35-50 patients per day
- We do not have opportunities for students to work during their internship
- We treat in a somewhat relaxed atmosphere; we give the students the opportunity to have as much “hands on” as they are comfortable with.

Education Director: Jim Bauml MHA, RT(R)(T)
- Graduated from the Michael Reese/University of Chicago Radiation Therapy School
- Bachelors in Health Arts from the University of St. Francis
- Master’s Degree in Health Services Administration from National Louis University
- Contact Information
  o Email: James.Bauml@advocate.com
  o Phone: (847)723-8254
- Fun fact: Pitched a no hitter in little league

Education information:
- Classes are held Tuesday –Thursday; but will reschedule based on clinic
- Machine rotations are divided equally
Students receive copies of all my material. The content is discussed and applied clinically. I have a “laid back” teaching style.

There are conference rooms available to students as well as multiple work stations.

Gundersen Health System- La Crosse, WI

About the Facility:

- Three Varian Linear Accelerators (6 Mv-18 Mv) with multi-leaf collimation, portal imaging, robotic couch and ARIA record and verify systems
  - 2100 EX, 2 True Beam V. 2.7
- Varian TruBeam with Advanced Imaging and FFF (flattening filter free) features
- Image guided radiation therapy using BrainLab’s Exactrac imaging system
- Image guided radiation therapy using Varian’s Cone Beam CT and kV imaging
- Varian’s Rapid Arc Technology
- Linac-based stereotactic radiosurgery and radiotherapy
- Respiratory gating
- GE Lightspeed RT 16 Slice Scanner and GE PET/CT scanner
- Three dimensional treatment planning with Eclipse planning systems
- Intensity modulated radiation therapy
- High dose rate brachytherapy
- Pediatric and adult populations
- 11 Radiation Therapists, 4 Radiation Oncologists, 3 Medical Physicists, 2 Medical Dosimetrists
- Treat about 65 patients per day
- No job available for students at Gundersen for internship.
- Type of learning environment: Fast paced environment on treatment machines with a variety of setups daily. Therapists are encouraged to set the bar high and push interns to their full potential. Great team to work with and extremely knowledgeable to go to for any questions. Other health professionals in the department very willing to teach as well, including the physicians whom are very approachable.

Clinical Supervisor, Lead Radiation Therapist, Daina Drath BS, RT(T):
- Education: BS from University of Wisconsin La Crosse (2012 Grad)
- Contact Information:
  - Email: dmdrath@gundersenhealth.org
  - Phone: 608-775-2158

Education information:

- In the fall and spring semesters, the majority of the course work will be taught online and the students will be given approximately 8 hours per week to complete. One course will be taught at the hospital by the physics and dosimetry staff each semester as well. In the summer sessions, 3-4 hours will be granted as course work time.
- Typical rotation on treatment machines: 6 weeks at each area, 3 different areas
- Can study at GHS library, in Rad/Onc conference room, each student has own cubical, and have computer access at cubicle and RTT room
About the Facility
- Marshfield Clinic Health System is a rural academic and research health system with over 80 medical specialties. There are approximately 800 physicians that provide care over 50 locations throughout Wisconsin. Marshfield Clinic is the largest private group medical practice in Wisconsin.
- One of four children’s hospitals in the state of WI, the only one in Northern WI
- At the Marshfield Center:
  - 2 Rad Onc departments at the Marshfield Center (one hospital based and one clinic based)
    - Pediatric and Adult populations
  - Varian TrueBeam with Advanced Imaging and FFF Features, Rapid Arc technology
  - Varian PerfectPitch 6 degrees of freedom couch
  - Vision RT
    - Deep Inspiration Breath Hold
    - Respiratory Gating
  - Stereotactic Body Radiotherapy
  - Eye plaque Brachytherapy
  - Aria Record and Verify
  - Pinnacle planning system
  - 2 Philips Big bore CTs
  - Varian Silhouette (not in clinical use)
  - Tomotherapy (not in clinical use)
  - High Dose Rate brachytherapy, Savii
  - Perfexion Gamma Knife
  - 5 Radiation Therapists, 2 Radiation Oncologist, 2 Medical Physicists, 1 Dosimetrist, 2 nurses, 1 MA
  - Treat about 20-25 patients a day
  - Therapists take call

Education information
- Educational department located within the Clinic
  - Library and study spots open to students, badge access to 24/7
  - Desktop computers and copier/printer for student use
  - Laptop rental
- Class times will be somewhat flexible depending on staffing and treatment schedules.
- Some course work will be taught online
- Possibility of rotating to Stevens Point Campus or other Marshfield Clinic locations
- Students will need to be flexible and take an active role in their clinical education.
Radioactivity is a process by which atoms decay into different elements. During radioactive decay, a nucleus emits radiation consisting of alpha particles, beta particles, or gamma rays. These particles or rays carry energy and can cause harm if they are not contained properly. This is why radiation therapy requires special precautions to ensure safety.

Educational Director: Mindy Kren BS, RT(T)
- Education: BS from University of Wisconsin La Crosse (2011 Grad)
- Contact info
  - Email: Kren.mindy@marshfieldclinic.org
  - Phone: Rad. Onc Front desk (715) 389-3339

Ascension Columbia St. Mary’s Hospital, Milwaukee, Wisconsin

Columbia St. Mary’s hospital is part of Ascension Health which is the largest non-profit health system in the United States and the world’s largest Catholic health system. Our mission is to commit ourselves to serving all persons with special attention to those who are poor and vulnerable. Our Catholic health ministry is dedicated to spiritually-centered, holistic care which sustains and improves the health of individuals and communities.

Ascension Columbia St. Mary’s – Milwaukee is identified as a tertiary center of excellence for the South Region of Ascension Wisconsin. In March 2017, Ascension CSM – Milwaukee began the transition to create the most effective and efficient system of care.

As a tertiary care center, Ascension CSM – Milwaukee will treat a greater number of acute cases and focus on higher levels of care. Ascension CSM – Milwaukee will become the regional referral center, receiving patients from other Ascension Wisconsin hospitals because of our expertise and the level of care we offer.

Our Cancer Center overlooks Lake Michigan and is located on Milwaukee’s east side. In addition to our Milwaukee campus, there is a Cancer Center at our Ozaukee Campus. The Radiation Oncology Department takes pride in its cutting edge technology combined with a highly integrated support component for patients. Major equipment and treatment programs include:

**Milwaukee Campus:**
- Varian Truebeam Linear Accelerator with Rapid Arc and Align RT Optical Surface Monitoring System
- Varian Trilogy Linear Accelerator with portal imaging and Align RT Optical Surface Monitoring System
- KV imaging and Cone Beam CT
- GE CT Scanner and GE Advantage Simulator with Respiratory Gated 4DCT
- Aria Record & Verify System
- CT/PET Scanner
- Elekta/Nucletron MicroSelectron v3 High Dose Rate Afterloader: Brachytherapy for GYN and Breast
- Varian Eclipse 3-D Treatment Planning System
- Stereotactic Radiosurgery, Head and Body
- Brachymesh
- Strong Participation in Research Studies
**Ozaukee Campus:**
- Varian Truebeam Linear Accelerator with Rapid Arc and Align RT Optical Surface Monitoring System
- KV Imaging and Cone Beam CT
- GE CT Scanner and GE Advantage Simulator with Respiratory Gated 4DCT
- Aria Record & Verify System
- Varian Eclipse 3-D Treatment Planning System
- Stereotactic Body Radiation Therapy
- Participation in Research Studies

**Overall:**
- Diverse, fast-paced environment
- 10 Radiation Therapists, 2 Radiation Oncologists, 2 Physicians Assistants, 2 Medical Physicists, 2 Medical Dosimetrists
- Treat between 30-50 patients a day
- No job available for students at CSM for internship.
- Type of learning environment: Medium sized clinic with a fast paced environment on the treatment machines. Our RTT’s have high expectations and are very vested in the education of our interns. RTT’s take extra time with interns to review clinical concepts as needed. The interns are expected to be independent and be an active participant in their own education.

**Clinical Supervisor:** Tracy Katzer BS, RT(T)
- Education: BS University of Wisconsin La Crosse (2008 Grad)
- Contact Information:
  - Email: tracy.katzer@ascension.org
  - Phone: 414-585-1595

**Education information**
- All course work will be taught at Froedtert Hospital which is approximately 20 minutes away.
- Classes are/or usually Mondays, Tuesday, or Friday (depends on semester)
- The interns will go to Breast Cancer Conference every Wednesday morning.
- Typical rotation on treatment machines: 3-4 weeks at each area, 2 different areas. This allows for our interns to get a great deal of experience in the CT sim.
- Clinic hours for students are 8-4:30pm.

Study areas will be provided.
Froedtert & the Medical College of Wisconsin Clinical Cancer Center is one of the most innovative cancer treatment facilities in the region and has been long regarded as a top quality radiation therapy provider. It is fast gaining national attention for the work its physicians continue to perform each year in significant cancer research and other advancements. The Department of Radiation Oncology is a Level 1 Regional Radiation Therapy Center in a Category 1 Cancer Program as designated by the American College of Surgeons. This means that the department has the staff, expertise and equipment to treat every type of cancer within our facility. The core mission of the Department of Radiation Oncology is its deep commitment to the education of future generations of all radiation oncology professionals; while focusing on patient care. Additionally, the cancer center is accredited by the American College of Radiology (ACR).

About the Facility: We are an Academic Cancer Center
730 – 1600, with rotating call, varied start times, 8-hour shifts
20+ Therapists
20 Radiation Oncologists
14 Physicists plus, 4 physics residents plus 7 physics postdocs
4 Nurses, 1 PA, 3 NP’s along with Supportive Staff

Equipment & Procedures:
- 2 Dual Energy Siemens, 2 Elekta Infinity Linear Accelerators; all with 3D imaging, cone beam, CT on rails, IMRT, IGRT, Gating techniques and/or portal imaging
- Accuray Radixact (Tomotherapy)
- Elekta Versa HD (MRI/Linac)
- HDR brachytherapy, Eye plaque brachytherapy & Prostate seed implants
- Stereotactic Radiation, Ra 223 and Samarium treatments
- GE CT Simulator and MRI Simulator
- Sensus Supervoltage x-ray unit
- Total Body Irradiation. Total Skin, Heterotopic Bone, Prone Breast
- Elekta Perfexion Gamma Knife/ Icon Stereotactic Radiosurgery unit
- Adult/Pediatric Radiation
- Total Body Irradiation, Total skin, Heterotopic bone, Prone brest
- Brachytherapy Program
- Protocols
*Treatment Average: 25-30/day/machine

Education information:
- Classes are/or usually Mondays and/or Tuesday (depends on semester)
- Clinical rotations are at Froedtert, Community Memorial Hospital & the VA Hospital
- Study areas are the Radiation Oncology conference room (when available), several small conference rooms within the Clinical Cancer Center and the Jetson chairs.
Radiation Therapy Program Student Handbook

*Will be hired on as an FMLH employee as a Radiation Therapy Assistant. Work will be before your clinical hours. Hours vary ~3-10 hours per pay period.

**Education Director: Karen J Mannisto BS, RT(R)(T)**
- Education: Certification in Radiology and Radiation Therapy
- Received by BS in Allied Health from the College of St. Francis
- Teaching Philosophy: In the classroom, powerpoints are used for most classes. I do try to get outside speakers, depending on the topic. It is expected that you come to class prepared as most classes have suggested readings or assignments prior to attending class.
- Personal Fact: I love Cavalier King Charles Spaniels, Christian Rock/Pop music, and Sushi! 😊
- Contact Information:
  - Email: Karen.Mannisto@froedtert.com
  - Phone: 414-805-4495

**University of Wisconsin Hospitals and Clinics, Madison, WI**

About the Facility:
- **# of and description of treatment machines**
  - At the main campus, we have 2 Linear Accelerators (Varian TrueBeam machines), 2 Tomotherapy machines and a ViewRay treatment machine. Our East Clinic department has one linear accelerator (Varian TrueBeam), which is identical to those at the main campus. All of our linear accelerators have comprehensive IGRT capabilities, respiratory gating, and surface tracking. We offer several special procedures, including Stereotactic Radiosurgery, Stereotactic Body Radiosurgery, Fractionated Stereotactic Radiation Therapy, Pulsed-Reduced Dose Rate Radiation Therapy, IMRT, IGRT (on tomotherapy and using cone-beam CT), TBI and many different types of brachytherapy procedures.
  - We have a Siemens wide-bore CT scanner for simulation. There is a portable CT scanner in the brachytherapy suite for those procedures.
  - MRI machine will be installed in the department by 2020 for diagnostic and simulation procedures.
  - We use electronic charting for all aspects of clinic and treatment.
- **# of physicians, therapists, average # of patients treated per day**
  - We have 11 physicians and 8 residents. Each of our physicians have their own specialties and many are considered experts in their fields. A lot of our patients are on clinical trials because of this. Our residents teach all of our cancer lectures and also help teach the students while they are in their dosimetry rotation. Everything we do has a teaching component to it.
  - We have 24 therapists. The therapists rotate every six months- year, so there is consistency amongst the staff members on the treatment machines from day to day.
  - We treat around 100 patients each day on the five machines. We treat patients from 7:30 – 6 each day, so we have an early and late shift of therapists.
- **Job for students’ availability**
  - We currently offer very limited hours for work in our department, just two hours every five weeks for stocking. However, this does put you in the system so it you can receive employee perks (bus passes, library use, etc), but do not offer many hours.
As a UW System student, you are eligible for many student positions within UW Madison and elsewhere in the hospital. There is a website for these jobs, as well as others outside the system that students have used to find jobs in the past. It’s a great service because most of the positions are flexible since they are looking for student help.

- Type of learning environment
  - This is a large, teaching hospital. In addition to residents and radiation therapy students, we also have medical students, physics students and residents, and many many more. Our philosophy is to jump right in and go! We let everyone go at their own pace, but encourage students to do things as they are comfortable. But don’t worry— the therapists are always right at your side and won’t let you do anything wrong. In the beginning, we try to have labs on the machines. Once you are in the swing of things, we leave it up to you but encourage you to take an active role in the clinical process.

Education Director: Amy Heath MS, RT(T)

- Education
  - MS in Clinical Leadership from George Washington University
  - BS in Radiation Therapy from UWL.

- Contact Information
  - Email: aheath@uwhealth.org
  - Phone: 608-263-8517

- Teaching Philosophy (Style)
  - I work Monday – Thursday and try to keep organized, but am flexible. I am always willing to try new things. I like to take advantage of working in a teaching hospital and try to get as many outside lecturers and tours as I can. I like to link what we are doing in class to the patients we are treating in clinic.

- Personal Fact
  - I love to garden and spend time outside.

Education information:

- Days and times of class
  - We typically have one full day of class and one half day of class midweek. We also go to chart rounds every Thursday and Cancer Grand Rounds as applicable. This cuts down on the driving back and forth from the hospital to East Clinic if you are on that rotation. Students often ride the bus to and from the hospital, but drive to East Clinic. Having class scheduled like this really cuts down on transportation headaches.

- Typical rotations and length of rotations
  - Our rotations are 3-4 weeks in length. In the fall semester, you rotate on each Linac (2 here and 1 at East Clinic) and one Tomotherapy, and CT. The CT and Simulation rotation are together. In the spring, you rotate on each Linac, tomotherapy, CT and dosimetry. During the final summer, your rotations are shorter and you also go to other hospitals for externships.
  - It’s great that we have a clinic for students to rotate to. The pace is much different than the hospital. Students get great one-on-one attention, get to communicate with all members of the treatment team more, have more contact with patients and get an idea of what it is like to work in a smaller center.
  - Clinical hours are 8 – 4:30, but we move as clinic volume dictates.
• Study areas, library, etc.
  o The students have a computer in the department that they can use at breaks and lunches, as well as a printer to use for course materials. In addition, one of the adjoining buildings to the hospital has a very large medical library. We use their computers for exams, and also their journals and books for class assignments. The library is open until 11 pm most nights, so students find it useful to use this area when they are working on projects or studying for exams.

D-2 Internship Site Placement

Internship Site Interviews

In order to meet the best interest of the students and the internship sites, the following system is used for internship site placement:

• By accepting a position in the program, the student agrees to be placed at any one of the five internship sites. Each student will be placed according to what would be best for his or her learning style.
• Students will schedule an interview at each site with the Education Director of that site during the time period of May 2-August 31, with the exception of July. Please use your class of 2021 site to click on directions for scheduling your visits this summer.
• The student can schedule the visit by choosing a date at each site which fits your schedule using the polls created on Doodle and placed on Canvas, with the exception of Gundersen; there are separate directions given on Canvas. A minimum of two weeks’ notice should be given for scheduling the visit.
• The student should plan to be at the clinical site for at least two hours. During the interview, the student will complete a tour of the department, spend time on the treatment machines with radiation therapists, and meet with the Education Director/Clinical Supervisor(s).
• This is your chance to determine if the site will be a place that fits your learning needs. The Education Director/Clinical Supervisor(s) and radiation therapists at the site will also be determining if you will fit well in that environment. Be sure to take the following two forms with you to each interview for the Education Director/Clinical Supervisor(s) and therapist to evaluate you by afterwards. These forms contain the criteria by which you will be evaluated.
• Students should wear business casual clothing and closed toed shoes, with hosiery. No sandals, shorts, leggings, or Capri pants. If necessary, students will be given a lab coat with a name badge at the internship site.
• Students may visit the sites in groups of two.
• Students are expected to ask questions, interact with staff and patients, and show enthusiasm and interest at each site. Additionally, students are encouraged to participate and help in the treatment rooms and display knowledge of the field of radiation therapy.
• After the student interviews at each site, the Education Director/Clinical Supervisor(s) will complete the evaluation form, as well as the radiation therapist that the student primarily worked with. The scores of these forms will be used in the placement process.
• Finally, after the student has completed all site interviews, each student will rank the internship site on a scale of one to ten, with ten indicating very high interest for the site. The student may give only one “10” rating to a site and one “1” rating to a site. The other sites should be evaluated with different numbers between 1 and 10 to reflect desire to be placed there. Final rankings should be submitted to the drop box by September 15th, 2019.
Radiation Therapy Program Student Handbook

- We will not take into account personal reasons for placement and we reserve the right to assign each to student to a site where we think you will learn best.
- Students will be notified on their placement prior to Spring Break, prior to the beginning of their internship year.

UW- La Crosse Radiation Therapy Program
Student Evaluation of Internship Site
Education Director Evaluation

Student Name:
Observation Site:
Date:

Please evaluate the student’s performance during his/her internship site interview in your department.

<table>
<thead>
<tr>
<th></th>
<th>Met</th>
<th>Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student asked questions of Education Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student was prepared for and on time for visit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student demonstrated professionalism.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student was enthusiastic during visit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates knowledge of the field.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How well do you think this student’s learning expectations and needs would be met at this internship site?

0 Not Met 1 Somewhat Met 2 Met

Explain your response.

Do you feel that the student demonstrated an interest in this clinical internship site?

Office Use Only:
Average Score _______________
Met = 1 pt., Not Met = 0 pts
Student Evaluation of Internship Site
Radiation Therapist Evaluation

Student Name:
Observation Site:
Date:

Please evaluate the student’s performance during his/her internship site interview in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Met</th>
<th>Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student asked questions of staff.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student was enthusiastic during visit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student demonstrated an interest in treatment procedures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student demonstrated professionalism.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates knowledge of the field.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How well do you think this student’s learning expectations and needs would be met at this internship site?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not Met</td>
</tr>
<tr>
<td>1</td>
<td>Somewhat Met</td>
</tr>
<tr>
<td>2</td>
<td>Met</td>
</tr>
</tbody>
</table>

Explain your response.

Do you feel that the student demonstrated an interest in this clinical internship site?

Thank you for your help! Please sign your name on the line below:

Office Use Only:
Average Score _______________
Met = 1 pt., Not Met = 0 pts
During the final summer of the clinical internship, students are able to gain clinical experience at a site other than their assigned hospital. Students may choose to spend time at another clinical site or at one of the program’s affiliated externship sites as listed below.

<table>
<thead>
<tr>
<th>Affiliated Externship Sites</th>
<th>Clinical Supervisor</th>
<th>Email Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocate Good Shepherd-Barrington, IL</td>
<td>Holly Kurpius</td>
<td><a href="mailto:holly.kurpius@advocatehealth.com">holly.kurpius@advocatehealth.com</a></td>
<td>847-842-0300</td>
</tr>
<tr>
<td>SSM Health Agnesian Cancer Center- Fond du Lac, WI</td>
<td>Heather Bowen, Lynn Letourneau, student liaison</td>
<td><a href="mailto:lynn.letourneau@ssmhealth.com">lynn.letourneau@ssmhealth.com</a></td>
<td>920-926-5722</td>
</tr>
<tr>
<td>Aspirus Wausau Hospital- Wausau, WI</td>
<td>Rhonda Nousen</td>
<td><a href="mailto:Rhonda.nousen@aspirus.org">Rhonda.nousen@aspirus.org</a></td>
<td>715-847-2866</td>
</tr>
<tr>
<td>Aurora Kenosha- Kenosha, WI</td>
<td>Nicole Ottaviani</td>
<td><a href="mailto:Nicole.ottaviani@aurora.org">Nicole.ottaviani@aurora.org</a></td>
<td>262-857-5701</td>
</tr>
<tr>
<td>Ascension- Columbia St. Mary’s Hospital Ozaukee-Mequon, WI</td>
<td>Tracy Katzer</td>
<td><a href="mailto:Tracy.katzer@ascension.org">Tracy.katzer@ascension.org</a></td>
<td>414-585-1595</td>
</tr>
<tr>
<td>Community Memorial Hospital- Menomonee Falls, WI</td>
<td>Karen Ferkans-Rupert</td>
<td><a href="mailto:Karen.ferkans-rupert@froedtert.com">Karen.ferkans-rupert@froedtert.com</a></td>
<td>262-257-5133</td>
</tr>
<tr>
<td>Leonard Ferguson Cancer Center</td>
<td>Barbara Horton</td>
<td><a href="mailto:bhorton@fhn.org">bhorton@fhn.org</a></td>
<td>815-599-7421</td>
</tr>
<tr>
<td>St. Paul Cancer Center- St. Paul, MN</td>
<td>Kenneth Walker</td>
<td><a href="mailto:Kenneth.walker@usoncology.com">Kenneth.walker@usoncology.com</a></td>
<td>651-251-5565</td>
</tr>
<tr>
<td>St. Vincent Hospital- Green Bay, WI</td>
<td>Kathy Aubry, Elizabeth Simonar</td>
<td><a href="mailto:Kathy.aubry@hshs.org">Kathy.aubry@hshs.org</a></td>
<td>920-433-0111 (main)</td>
</tr>
<tr>
<td>Turville Bay MRI &amp; Radiation Oncology Center- Madison, WI</td>
<td>Kim Bangert</td>
<td><a href="mailto:kbangert@turvillebay.com">kbangert@turvillebay.com</a></td>
<td>608-251-6868</td>
</tr>
<tr>
<td>UW Health- East Clinic- Madison, WI</td>
<td>Amy Heath</td>
<td><a href="mailto:AHeath@UWHealth.org">AHeath@UWHealth.org</a></td>
<td>608-263-8517</td>
</tr>
<tr>
<td>Veteran’s Administration Hospital- Milwaukee, WI</td>
<td>Amanda Halderson</td>
<td><a href="mailto:Amanada.halderson@va.gov">Amanada.halderson@va.gov</a></td>
<td>414-384-2000 x46942</td>
</tr>
</tbody>
</table>
D-4 Clinical Internship Attendance Policies

I. General information

- The clinical internship is scheduled for approximately 13 months beginning in early July, 2020 and ending the last Friday in July, 2021.
- Breaks during the internship will be arranged between the Clinical supervisor and the students and may not correspond to the University’s academic calendar. But students at each site will take their breaks during the same periods.
- During the clinical internship, students will be present at the clinical affiliate for a 40-hour week. When not in didactic classes, students will be assigned to clinical rotations. Students are not expected to be in attendance more than 40 hours in a week’s time.
- The purpose of time use regulation is to maximize the clinical education of students, ensure fairness and equity between students, and foster good work habits for future job success.

II. Daily Hours

- Students will be expected to report for an 8-hour day with beginning and ending times designated by the Clinical Supervisor. Variations of these hours must be made in advance and approved by the Clinical Supervisor.
- Students are to log their hours on the designated time keeping record (Trajecsys or other), kept in their clinical rotation sites and signed daily by their clinical instructor. Time reports are to be submitted to and as specified by the Clinical Supervisor.
- One, fifteen-minute break, given in the morning and one in the afternoon may be taken as approved by the appropriate clinical instructor.
- Lunch break will be 30-45 minutes long and is arranged between the clinical instructor and the individual student.
- Early or late hours: Should a patient treatment situation of particular interest arise, that would necessitate attendance beyond normal hours, one or more students may volunteer to stay to observe and assist.
  - The student(s) must submit documentation of the time that they spent and the reason, signed by a therapist, to the program director.
  - Time spent over 40 hrs./week in this manner will be compensated to the student with equal time off at a time arranged between the student and the Clinical Supervisor.
  - Students will not be allowed to “bank” excess comp time beyond 8 hours.
- Breaks may not be used to make up time.
- If a clinical instructor tells a student that she/he may leave early, the student may use time and do so and note the time on his/her record of time using personal time to compensate.

III. Personal Days off (Sick Leave & Vacation)

A. Each student will be granted 10 days for personal use when sick or for vacation.
B. Vacation or personal days are to be scheduled in advance and approved by the Educational Director of the internship site.
C. When students are sick and unable to come to classes and/or clinical, they are required to call their Educational Director or Clinical Supervisor or to leave a message at the front desk by the start of the class day. Sick days are to be used for illness or doctor’s appointments and not for other purposes. Students found in violation will be subject to disciplinary action.
D. A student who misses three consecutive school days because of illness must bring a doctor’s clearance upon returning to school.
IV. **Scheduled Breaks**

A. A “fall break” long weekend may be scheduled.

B. Students are granted a semester break after fall semester, until just after the new year of 2021. This is subject to change at the discretion of program officials, but will be roughly two weeks.

C. A Spring Break will be scheduled as per University of Wisconsin-La Crosse unless the students and Education Director/Clinical Supervisor at an internship agree to change the break to another week.

D. A break around the time of commencement in May will be scheduled.

IV. **Holidays.**

Holidays observed are: Labor Day, Thanksgiving (& Friday following), Martin Luther King Day, Memorial Day and the Fourth of July.

V. **Funeral attendance/Bereavement time**

1. Students are allowed up to three days of time upon the death of a close family member for bereavement and funeral attendance.

2. Students may have time to attend the funeral of a friend or other significant person upon the discretion of the Educational Director/Clinical Supervisor.

3. For any use of time for this purpose the Clinical Coordinator is to be consulted.

VI. **Incomplete (Insufficient Time)**

If a student uses more time than allowed for personal holiday, sick leave, etc. and becomes deficient in the standard amount of time required by the clinical affiliate for graduation, the student will be required to spend the appropriate amount of time to be made up in the department during a normal work day under the supervision of a therapist. Upon completion of the deficient time the student will receive his/her diploma and will be declared a graduate. Students may voluntarily "makeup" time used in excess for sick leave or other reasons by:

1. Starting early or staying late in the clinic, involved in valuable clinical experiences; beyond the eight hour day or on weekends (supervised by a staff radiation therapist).

2. Above time must be noted on the time report and initialed by the supervising clinical instructor.

3. Excessive absenteeism may be brought by the Educational Director/Clinical Supervisor of the student’s internship site to the Student Progress Committee which will recommend action to be taken. Actions can include probation and dismissal from the program.

VII. **Mandatory Attendance Requirements**

A. **General**

1. All students are required to attend classes, unless ill or on approved leave.

2. Classes are pre-scheduled by the Education Director/Clinical Supervisor and the individual instructors. The instructor or Education Director/Clinical Supervisor will inform students of classes which are to be cancelled and will reschedule them.

3. Students absent on the day of an exam are to make up the exam on the next day of attendance. (An exception would be a student who also missed, by vacation or extended illness, lecture material covered on the exam. That student would have an additional day to obtain notes
covering that material.) Failure to take the exam as required will necessitate a lowering of the achieved grade by one full step.

B. Conferences
1. All students will attend conferences within the clinical affiliate as scheduled by the Clinical Supervisor.
2. Students are encouraged to join the state professional society: Radiation Therapists of Wisconsin (RTOW) and attend the fall and spring meetings.
3. Students are also encouraged and will be excused from clinical internship to attend the annual ASRT Radiation Therapy conference in the fall. Students will be responsible for all costs associated with attending the conference.

D-5 Inclement Weather Policy

Living and going to school in Wisconsin and Illinois can sometimes be challenging due to the weather. There are times that attendance may be affected by snow, ice or extreme cold. The policy regarding attendance during those times is as follows.

1. If the University of Wisconsin (La Crosse, Madison, or Milwaukee as pertinent). Midstate Technical College or Northeastern Illinois University announces that its classes are cancelled for the day due to the weather:
   a. Classes will also be cancelled for our program. It will be considered a snow day and no time will be deducted.
   b. Should one or more students feel that they can safely attend, they may do so, spend the day in clinical assignments and they will be given "comp" time equivalent to the number of hours spent in attendance.

2. On days of inclement weather, in which the University remains in session:
   a. The student(s) must make a decision whether they are able to safely attempt to come to school, based on their best judgment.
   b. Classes will be held as scheduled as much as possible.
   c. Students who elect not to come in, must call in to communicate that decision. They will be able to use vacation or personal holiday time and will be allowed to make up the time at a later date.
The student radiation therapist is a member of a health professions team dedicated to the diagnosis and treatment of disease. Under the supervision of qualified radiation oncologists, registered radiation therapists, and other related professionals such as RN’s, physicists and radiobiologists, the student receives didactic and clinical education in the art and science of radiation therapy.

**Students’ Responsibilities Are:**

1. **Contributing to the department and hospital in such a way as to promote the highest quality patient care by:**
   - Treating all patients with the utmost care and respect.
   - Protecting confidential information of any and all patients.
   - Being sensitive to the special needs and concerns of patients and their families.
   - Insuring the safety of patient, staff, personnel and students. Carelessness cannot and will not be tolerated.
   - Accurately setting up patients according to the specifications and orders of the physicians and radiation therapists.
   - Maintaining a high quality of work in both clinical and didactic areas.

2. **Obtaining proficiency in all areas of didactic and clinical education by:**
   - Attending all classes and clinical assignments as scheduled.
   - Completing didactic and clinical assignments on time.
   - Participating in clinical activities under the direction of clinical instructors. Students are not allowed to treat patients on their own. They must be supervised by a registered radiation therapist. Students can be assured that they will not be used in place of paid technological staff. Students may write daily treatments in patients’ charts, but must be double-checked and co-initialed by a registered radiation therapist.
   - Using clinical time wisely and practicing skills when patients are not scheduled.
   - Accepting instruction and correction in a professional and positive manner.
   - Utilizing all opportunities to improve skills and knowledge in the field of radiation therapy.

3. **Demonstrating personal conduct indicative of a mature health care professional by:**
   - Being prompt for classes, conferences and clinical rotations.
   - Being dependable, accepting tasks and responsibilities as they are delegated.
   - Students may not drink alcoholic beverages or use drugs that affect sensory or motor skills during School hours. Nor will students be allowed to let such use on personal time affect their performance during School hours.
   - Treating the equipment with respect. Informing proper personnel of problems that may arise with equipment.
   - Reporting any clinical mistakes to the proper authorities.
   - Maintaining high ethical and moral standards in clinical and didactic experiences.
   - Following policies and procedures of the clinical affiliate.
D-7 Clinical Rotations

Students will rotate through the following clinical areas to receive training and experience:

a. **CT Simulator:** Patients are initiated into the treatment process in these areas where planning of the best approach to treatment is combined with determination of patient position, definition of treatment fields, design of treatment accessories and devices and documentation of the same.

b. **Treatment Machines:** Linear Accelerators of various energies and with several ancillary pieces of equipment such as computer verification systems will give students the opportunity to learn how radiation treatments are accurately and precisely delivered on a daily basis for a variety of pathologies.

c. **Dosimetry:** Rotations will give students training in the measurement, calculation and optimization of dose delivery for treatments. During these rotations, students will also learn to fabricate shielding and beam modification devices.

d. **Radiotherapy and Oncology Clinics:** Give students the opportunity to work with and observe the Radiation Oncologist and Oncology nurse in examination, education and follow-up of radiotherapy patients. Basic nursing skills are practiced and enhanced.

e. **Brachytherapy:** involves the delivery of a high dose of radiation to a very local area, using a radio-isotope as a source. Certain types of GYN, prostate, lung and other cancers are particularly well suited to this treatment. Students will learn to assist and film for verification in either a low dose rate or high dose rate remote system.

f. **Stereotactic radiosurgery, Gamma Knife, Cyberknife, MRI Linacs and/or Orthovoltage** treatments will be introduced as specialty areas and may be scheduled as a one-time experience.

g. **Radiology:** Students will have the opportunity to spend time observing in a radiology department. This will strengthen their understanding of the diagnostic procedures utilized for cancer patients and allow them to apply what they have learned in their imaging course.

**Students Are Responsible To:**
1. Educational Director/Clinical Supervisor of the clinical affiliate.
2. Clinical Coordinator
3. Program Director
4. Technical Director of the clinical affiliate.
5. Clinical Instructors
6. Didactic (Classroom) Instructors
D-8 The Clinical Education Component

The officials of the University of Wisconsin La Crosse Radiation Therapy major support a philosophy that a strong clinical emphasis is essential in training radiation therapists. The academic or didactic area is very important but unless the individual therapist can take what he/she has learned in class and put it to practice in the clinical arena he/she will not be able to function adequately in the field. Trained and registered radiation therapists constantly supervise students in their clinical rotations. They not only provide the student with information on techniques and procedures, but also with background material and rationale for what is done. Staff and resident radiation oncologists as well as nursing staff and physicists are available for further explanations and assistance.

The plan for clinical education includes the following points:

1. All activities are designed to be educational.
2. Students will always be supervised by qualified personnel. (Radiation therapists, nurses, physicians, medical dosimetrists, medical physicists, or radiographers as appropriate.)
3. Students will rotate through all clinical areas at least twice during the internship.
4. Students will complete a “safety checklist” during the first rotations through the treatment units and simulator.
5. Clinical assignments will be given to check cognitive learning in regard to the clinical objectives.
6. Students will demonstrate psychomotor learning by competency testing on setups listed in syllabi for the clinical practicum courses.
   a. If a student fails in an attempt to document competency, the setup must be repeated. Failed competencies must be turned in, and may be counted against the student’s grade.
   b. The student is observed during the competency testing by a clinical instructor who completes the competency form.
   c. This instructor will give students ample time to complete the setup and may help in lifting or three pointing as directed by the student.
   d. He/she will give the student an opportunity to self-correct any errors in setup but will not allow the patient to be treated incorrectly. A limited number of competencies may be obtained with the use of a phantom or patient model, rather than a real patient.
   e. The list of required clinical competencies follows in this handbook, as per the ARRT requirements.
7. Clinical Affective Evaluation forms, addressing affective learning objectives, will be filled out by two radiation therapists (whenever possible) who have worked closely with the student during their rotation.
8. The clinical instructor or the Clinical Supervisor will review the evaluations with the student within two weeks of the end of each rotation, whenever possible.
9. Objectives for each clinical practicum course, competency testing forms, evaluation forms, clinical assignments and exams will be given the student at the beginning of the term.
## D-9 Checklist of Required Clinical Competencies

### UNIVERSITY OF WISCONSIN LA CROSSE RADIATION THERAPY

**CHECKLIST OF REQUIRED CLINICAL COMPETENCIES: RT 471-474**

<table>
<thead>
<tr>
<th>Student Name:</th>
<th>Internship Site:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion Date:</td>
<td>Clinical Supervisor Signature:</td>
</tr>
</tbody>
</table>

*All competencies must be completed on patients unless otherwise noted

*Multiple field competencies may include treatments using IMRT, 3D conformal, and/or Arc Therapy unless otherwise noted

<table>
<thead>
<tr>
<th>Safety checklist for Simulation</th>
<th>Patient transfer from wheelchair to table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety checklist for Treatment Unit</td>
<td>Patient transfer from cart to table</td>
</tr>
<tr>
<td>Vital Sign Measurement (done in clinic rotation)</td>
<td>3-point patient</td>
</tr>
<tr>
<td>Pulse</td>
<td>Respiration</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>Temperature</td>
</tr>
<tr>
<td>Oxygen Administration</td>
<td>3-point patient with mold or belly board</td>
</tr>
<tr>
<td>CPR and BLS training/certification</td>
<td>3-point patient with a mask</td>
</tr>
<tr>
<td>Programming and Running Machine (console)</td>
<td>Field &amp; Table Settings (pendant)</td>
</tr>
</tbody>
</table>

### Treatment-Required competencies

(3 of these may be completed on a phantom)

<table>
<thead>
<tr>
<th>Metastatic Brain</th>
<th>Primary Brain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Field Head and Neck</td>
<td>Multiple Field Chest (non-IMRT)</td>
</tr>
<tr>
<td>IMRT and/or Arc Therapy Chest</td>
<td>Tangential Breast Fields</td>
</tr>
<tr>
<td>Tangential Breast with Supclav</td>
<td>Tangent Breasts with Supclav and PAB</td>
</tr>
<tr>
<td>Special Set-Up Breast (Photon or Electron Bst, Prone, IMRT, Gating)</td>
<td>Single Electron Field</td>
</tr>
<tr>
<td>Abutting Electron Fields</td>
<td>Spine (Single field)</td>
</tr>
<tr>
<td>Spine (Multi-field)</td>
<td>Extremity</td>
</tr>
<tr>
<td>Multiple Field Abdomen (Non-IMRT)</td>
<td>Multiple Field Abdomen (IMRT/Arc)</td>
</tr>
<tr>
<td>Multiple Field Supine Pelvis</td>
<td>Multiple Field Prone Pelvis</td>
</tr>
</tbody>
</table>

### Simulation-Required Competencies

<table>
<thead>
<tr>
<th>Custom Immobilization Device for Chest, Abdomen/Pelvis</th>
<th>Custom Immobilization Device-Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>Skeletal (ie, Spine or Extremity)</td>
</tr>
<tr>
<td>Brain-Primary or Metastatic</td>
<td>Head and Neck</td>
</tr>
<tr>
<td>Abdomen</td>
<td>Pelvis (Non-Skeletal)</td>
</tr>
</tbody>
</table>

### Quality Control

Linac: _____
Simulator: _____

### Participatory Procedures

<table>
<thead>
<tr>
<th>Craniospinal</th>
<th>Total Body Irradiation (TBI)</th>
<th>Brachytherapy</th>
</tr>
</thead>
</table>

### Dosimetry/Physics Calculations

<table>
<thead>
<tr>
<th>Single open field</th>
<th>Parallel Opposed field w/blocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Generated Isodose Plan</td>
<td>Weighted Fields</td>
</tr>
<tr>
<td>Wedged Fields</td>
<td>Electron Field</td>
</tr>
</tbody>
</table>

### Treatment Accessory Devices

<table>
<thead>
<tr>
<th>Electron or Photon Block Cutting</th>
<th>Fabrication of Custom Bolus</th>
</tr>
</thead>
</table>

8/10/18
D-10 Dress and Appearance Standards for Radiation Therapy Students During Clinical Internship

Dress and appearance standards depend upon policies at the clinical internship sites and will be shared with students during Orientation (RT 401). Examples of dress codes are included below to give students guidance in preparing for the internship. Our clothing communicates to fellow staff and patients who we are in part and connotes professionalism or its lack. This should be considered in selection of apparel for school.

**SCRUBS:** Are usually acceptable and would consist of the following:
- Types of scrubs and colors differ between clinical sites. Your clinical supervisor will educate you on appropriate scrub clothing for your assigned clinical internship site.

**LAB COATS:**
- Lab coats are to be worn at all times when a uniform is not worn.
- Lab coats are to be neat and clean, white in color, and without holes.

**STREET CLOTHING**
- Clothing worn beneath a lab coat should be neat and clean. Clothing usually associated with leisure activities is not appropriate. (No blue jeans, shorts, leggings, capris, yoga pants, collarless T shirts or shirts with writing, halters or sweat pants may be worn.)
- Clothing that restricts movement, inhibiting ability to do clinical duties, is revealing or is offensive to patients in any other way is prohibited.

**FOOTWEAR:**
- Shoes, any color, clean and polished may be worn. Tennis or athletic shoes are acceptable if they are kept clean and in good condition.
- Sandals may not be worn for safety reasons.
- Hosiery is required at all times.

**GROOMING:**
Because the condition and treatment of our patients make them sensitive to odors in many cases, good grooming is essential. Use of an effective deodorant which doesn't have a strong aroma of its own is required. Perfumes and after shaves must also be selected with care as these too may be difficult for our patients to tolerate. Hair, beards and mustaches must be neatly groomed and clean. Body piercing, other than ears may not be allowed, depending on the site.

**IDENTIFICATION:**
Name tags will be worn regardless of type of uniform worn.

A student who does not comply with these standards may be sent home to change. During the absence he/she will have to use personal time. If further incidents occur, additional disciplinary action will take place.
Radiation Therapy Program Student Handbook

D-11 Radiation Protection Policy and Procedures in the Clinical Internship

Patient safety:
1. During simulation images, the CT scan volume pertains to the area of interest and according to simulation orders, and exposure factors utilized must produce the minimum amount of patient exposure needed to obtain diagnostic images.
2. Calculations done by students in the dosimetry rotation must be double-checked by the dosimetrists.
3. Students rotating on the treatment units and simulator are to be supervised at all times by staff radiation therapists to assure that proper treatments are given.
4. Any errors in set-up or charting must be reported to the therapist on the treatment unit, dosimetry, and the radiation oncologist in charge of that particular patient's care.
5. During treatments the patients must be monitored at all times via the closed circuit television monitors.

Student Radiation Safety:
1. Students who are new to clinical internship must receive orientation to radiation safety practices and requirements by the Radiation Safety Officer.
2. A radiation monitoring badge must be worn by the student at all times while in the department.
3. When rotating through brachytherapy, if the student is loading or unloading sources, a ring badge must also be worn.
4. Students and therapists working in the simulator and treatment units must never be in the room during exposures or treatments.
5. The students upon beginning each clinical rotation must be made aware of emergency "off" locations and other safety factors.
6. Should the treatment machines malfunction or the beam turn on while a student or therapist is in the room an emergency "off" must be activated immediately.
7. Students working in brachytherapy must remember and put to use techniques of time, distance and shielding.
8. The student must be aware of the procedure to follow should the linear accelerator or simulator fail to turn off the beam.
9. Radiation exposure levels will be monitored by the dosimetry and physics departments.

Radiation Monitoring & Excessive Doses:
1. Radiation Dosimeter reports are reviewed by the Radiation Safety Officer at the clinical internship sites. The reports are posted in the clinical internship site with personal identity information protected.
2. Monthly/quarterly radiation exposures for students must not exceed 50 mRem to occupationally exposed persons as established by the state and federal agencies for radiologic health.
3. If abnormal (high) readings are present (125-250 mrem), the radiation safety officer, clinical supervisor/education director and program officials will investigate the cause. This may include interviews with students, clinical instructors and other relevant individuals. The objective of this investigation will be to learn why the student received the excessive dose and to determine what type of corrective action may be needed.
4. A report of the information obtained and subsequent corrective action will be provided to the student. This action will be enforced and the results of the investigation and corrective action will be placed in the student’s file and program files for future reference.
5. The Radiation Safety Officer and Program Officials will counsel the student to include the risk from radiation exposure, the reason for the exposure (if possible to determine), and changes in work habits, procedures, and equipment as appropriate. The student will be monitored closely to ensure they are following the corrective action plan.
D-12 MRI Safety Policy

In MRI, the magnetic field is always on. Students working with or observing in an MRI area will comply with each site’s policies and procedures regarding metallic objects being introduced into the MRI scanning area. Carrying ferromagnetic articles or introducing them to the MRI scanning area is strictly prohibited. These objects can become projectiles within the scanning room causing serious injury or death and/or equipment failure. This would include but not be limited to: oxygen tanks, wheelchairs, carts, monitors, IV poles, laundry hampers, tools, furniture, personal ferromagnetic items (eg. Cell phones, iPods, underwire bras). Students will be screened according to patient screening protocols at the respective hospital, to assure MRI compatibility. Students should notify the clinical supervisor immediately if their safety status should change after screening due to a surgical implant, personal injury or other event during the course of their time in the program.

D-13 Policy Regarding Employment of Students in Radiation Therapy

1. Students may be employed in a clinical radiation oncology facility outside educational hours provided the work does not interfere with the educational program.
2. The student should not be involved in unsupervised treatment of patients.
3. The work must be non-compulsory, paid and subject to employee regulations.
4. The student employed during training is not covered during hours worked in that employment for liability by the University of Wisconsin-La Crosse or the clinical affiliate hospital.
Section E- Information about Assessment and Evaluation

Evaluation and Assessment Plan

1. Students will evaluate didactic courses and instructors at the end of the course and instructors may ask for an evaluation in the middle of the course as well. The evaluations will be prepared by program assistants of the Health Professions Department and sent to the instructors of the courses at the internship sites, as well as on-campus instructors. They will be administered at the internship sites by electronic survey methods and the results will be sent to the Health Professions Department. The results will be tabulated and given to the Clinical Coordinator, who will share the evaluations with the Instructor.

2. Students will evaluate clinical instructors at the end of each clinical rotation. The Clinical Supervisor/Education Director of the internship site will share the evaluations with the clinical instructors.

3. Student evaluations may be done anonymously.

4. Evaluations are to be turned as per number one above, with the exception of the clinical instructor evaluations which are turned in to the Clinical Supervisor, who will in turn share them with the Clinical Instructors and provide a summary to the Clinical Coordinator and Program Director as requested.

5. An evaluation form will be sent to graduates and their employers six months following graduation via email or social media. A survey will be sent to each graduate and an additional survey will be sent to be filled out by the employer, Chief Radiation Therapist or Radiation Oncologist, at the former student's request.

6. Students are strongly urged to participate in evaluation exercises to assist the program officials in outcome assessment and improvement of the program.

7. Outcome Assessment will be conducted on a continuous basis. The Program Officials will gather information and do initial analysis. The information will be shared with the Radiation Therapy Advisory Committee.

8. Outcome measures that do not meet benchmarks will signal a need for revision which will be addressed by the Program Officials and Advisory Committee.

9. The University of Wisconsin-La Crosse seeks accreditation from the Joint Review Committee on Education in Radiologic Technology. Evaluation from the accrediting body will be reviewed by the Advisory Committee and Program Officials and discussion and decisions based on findings may bring about change in the program.
Section F: Appendices
A. INTRODUCTION

Section 19.12 of 10 CFR Part 19 states that all individuals working in or frequenting any portion of a restricted area must be instructed in the health protection problems associated with exposure to radioactive materials or radiation. This guide describes the instruction that should be provided concerning biological risks to embryos or fetuses resulting from prenatal exposure.*

B. DISCUSSION

Since the Law of Bergonie and Tribondeau was published in 1906** it has been known that the sensitivity of cells to radiation damage is related to their reproductive activity and inversely related to their degree of differentiation. It follows that children could be expected to be more radiosensitive than adults, fetuses more radiosensitive than children, and embryos even more radiosensitive.

This principle has long been a factor in the development of radiation exposure standards. Section 20.104 of 10 CFR Part 20 places different limits on minors than on adult workers. Specifically, it limits anyone under the age of 18 to exposures not exceeding 10% of the limits for adult workers. However, §20.104 does not relate to embryos or fetuses.

A special situation arises when an occupationally exposed woman is pregnant. Exposure of the abdomen of such a worker to penetrating radiation from either external or internal sources would also involve exposure of the embryo or fetus. Because a number of studies have indicated that the embryo or fetus is more sensitive than an adult, particularly during the first three months after conception, when a woman may not be aware that she is pregnant, the National Council on Radiation Protection and Measurements (NCRP) recommended in its Report No. 39 that special precautions be taken to limit exposure when an occupationally exposed woman could be pregnant.

C. REGULATORY POSITION

Instruction to workers performed under §19.12 should be given prior to assignment to work in a restricted area. In providing instruction about health protection problems associated with radiation exposure, female workers and those who may supervise or work with them should be given specific instruction about prenatal exposure risks to the developing embryo and fetus.

The instruction should ensure that the employees understand:

1. That the NCRP has recommended that, during the entire gestation period, the maximum permissible dose equivalent to the fetus from occupational exposure of the expectant mother should not exceed 0.5 rem and

2. The reasons for this recommendation.

The instruction should include the information provided in the Appendix to this guide. It should be presented to the employee, her supervisors, and her co-workers both orally and in written form. Each individual should be given an opportunity to ask questions, and each individual should be asked to acknowledge in writing that the instruction has been received.

D. IMPLEMENTATION

The purpose of this section is to provide information to licensees regarding the use of this guide.
Except in those cases in which the licensee chooses to propose an alternative method for complying with the portion of the Commission's regulations previously specified, the methods described herein should be used immediately to instruct female employees working in or frequenting any portion of a restricted area, and those who may supervise or work with such employees, concerning the health protection problems associated with prenatal radiation exposure.
Some recent studies have shown that the risk of leukemia and other cancers in children increases if the mother is exposed to a significant amount of radiation during pregnancy. According to a report by the National Academy of Sciences, the incidence of leukemia among children from birth to 10 years of age in the United States could rise from 3.7 cases in 10,000 children to 5.6 cases in 10,000 children if the children were exposed to 1 rem of radiation before birth (a "rem" is a measure of radiation). The Academy has also estimated that an equal number of other types of cancers could result from this level of radiation. Although other scientific studies have shown a much smaller effect from radiation, the Nuclear Regulatory Commission wants women employees of its licensees to be aware of any possible risk so that the women can take steps they think appropriate to protect their offspring.

As an employee of a Nuclear Regulatory Commission licensee, you may be exposed to more radiation than the general public. However, the Nuclear Regulatory Commission has established a basic exposure limit for all occupationally exposed adults of 1.25 rems per calendar quarter, or 5 rems per year. No clinical evidence of harm would be expected in an adult working within these levels for a lifetime. Because the risks of undesirable effects may be greater for young people, individuals under 18 years of age are permitted to be exposed to only 10 percent of the adult occupational limits. (This lower limit is also applied to members of the general public.)

The scientific organization called the National Council on Radiation Protection and Measurements has recommended that because unborn babies may be more sensitive to radiation than adults, their radiation dose as a result of occupational exposure of the mother should not exceed 0.5 rem. Other scientific groups, including the International Commission on Radiation Protection, have also stressed the need to keep radiation doses to unborn children as low as is reasonably achievable.

All Nuclear Regulatory Commission licensees are now required* to inform all individuals who work in a restricted area of the health protection problems associated with radiation exposure. This instruction would in many cases include information on the possible risks to unborn babies. The regulations also state** that licensees should keep radiation exposures as low as is reasonably achievable. According to the National Council on Radiation Protection and Measurements, vigorous efforts should be made to keep the radiation exposure of an embryo or fetus at the very lowest practicable level during the entire period of pregnancy.

Thus it is the responsibility of your employer to take all practicable steps to reduce your radiation exposure. Then it is your responsibility to decide whether the exposure you are receiving is sufficiently low to protect your unborn child. The advice of your employer's health physicist or radiation protection officer should be obtained to determine whether radiation levels in your working areas are high enough that a baby could receive 0.5 rem or more before birth. If so, the alternatives that you might want to consider are:

(a) If you are now pregnant or expect to be soon, you could decide not to accept or continue assignments in these areas.

(b) You could reduce your exposure, where possible, by decreasing the amount of time you spend in the radiation area, increasing your distance from the radiation source, and using shielding.

(c) If you do become pregnant, you could ask your employer to reassign you to areas involving less exposure to radiation. If this is not possible, you might consider...

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* By Title 10, Part 19 of the Code of Federal Regulations.
**In Title 10, Part 20.
leaving your job. If you decide to take such steps, do so
without delay. The unborn child is most sensitive to
radiation during the first three months of your preg-
nancy.

(d) You could delay having children until you are
no longer working in an area where the radiation dose to
your unborn baby could exceed 0.5 rem.

You may also, of course, choose to:

(e) Continue working in the higher radiation areas,
but with full awareness that you are doing so at some
small increased risk for your unborn child.

The following facts should be noted to help you make a
decision:

1. The first three months of pregnancy are the
most important, so you should make your decision
quickly.

2. In most cases of occupational exposure, the
actual dose received by the unborn baby is less than the
dose received by the mother because some of the dose is
absorbed by the mother’s body.

3. At the present occupational exposure limit, the
actual risk to the unborn baby is small, but experts
disagree on the exact amount of risk.

4. There is no need to be concerned about sterility
or loss of your ability to bear children. The radiation
dose required to produce such effects is more than 100
times larger than the Nuclear Regulatory Commission’s
dose limits for adults.

5. Even if you work in an area where you receive
only 0.5 rem per three-month period, in nine months
you could receive 1.5 rems, and the unborn baby could
receive more than 0.5 rem, the full-term limit suggested
by the NCRP. Therefore, if you decide to restrict your
unborn baby’s exposure as recommended by the NCRP,
be aware that the 0.5 rem limit to the unborn baby
applies to the full nine-month pregnancy.

The remainder of this document contains a brief
explanation of radiation and its effects on humans. As
you will see, some radiation is present everywhere and
the levels of radiation most employees of Nuclear
Regulatory Commission licensees receive are not much
larger than these natural levels. Because the radiation
levels in the facility where you will be working are
required by law to be kept quite low, there is not
considered to be a significant health risk to individual
adult employees.

Discussion of Radiation

The amount of radiation an individual receives is
called the “dose” and is measured in “rems.” The
average individual in the United States accumulates a
dose of one rem from natural sources every 12 years.
The dose from natural radiation is higher in some states,
such as Colorado, Wyoming, and South Dakota, pri-
marily because of cosmic radiation. There the average
individual gets one rem every 8 years.

Natural background radiation levels are also much
higher in certain local areas. A dose of one rem may be
received in some areas on the beach at Guarapari, Brazil,
in about 9 days, and some people in Kerala, India,
get a dose of one rem every 5 months.

Many people receive additional radiation for med-
ical reasons. In 1970, an estimated 212 million X-ray
examinations were performed in the United States. The
estimated average surface skin dose from one radio-
graphic chest X-ray is 0.027 rem. The estimated average
surface skin dose per abdominal X-ray is 0.62 rem.*

Radiation can also be received from natural sources
such as rock or brick structures, from consumer prod-
ucts such as television and glow-in-the-dark watches,
and from air travel. The possible annual dose from
working 8 hours a day near a granite wall at the Redcap
Stand in Grand Central Station, New York City, is 0.2
rem, and the average annual dose in the United States
from TV, consumer products, and air travel is 0.0026
rem.

Radiation, like many things, can be harmful. A large
dose to the whole body (such as 600 rems in one day)
would probably cause death in about 30 days, but such
large doses result only from rare accidents. Control of
exposure to radiation is based on the assumption that
any exposure, no matter how small, involves some risk.
The occupational exposure limits are set so low, how-
ever, that medical evidence gathered over the past 50
years indicates no clinically observable injuries to indi-
viduals due to radiation exposures when the established
radiation limits are not exceeded. This was true even for
exposures received under the early occupational ex-
posure limits, which were many times higher than the
present limits. Thus the risk to individuals at the
occupational exposure levels is considered to be very
low. However, it is impossible to say that the risk is zero.
To decrease the risk still further, licensees are expected
to keep actual exposures as far below the limits as is
reasonably achievable.

*“Pre-Release Report: X-Ray Exposure Study (XES) Revised
Estimates of 1964 and 1970 Genetically Significant Dose,”
and Welfare, Public Health Service, Federal Drug Administra-
tion, Bureau of Radiological Health.
The current exposure limits for people working with radiation have been developed and carefully reviewed by nationally and internationally recognized groups of scientists. It must be remembered, however, that these limits are for adults. Special consideration is appropriate when the individual being exposed is, or may be, an expectant mother, because the exposure of an unborn child may also be involved.

**Prenatal Irradiation**

The prediction that an unborn child would be more sensitive to radiation than an adult is supported by observations for relatively large doses. Large doses delivered before birth alter both physical development and behavior in experimentally exposed animals. A report of the National Academy of Sciences states that short-term doses in the range of 10 to 20 rems cause subtle changes in the nerve cells of unborn and infant rats. The report also states, however, that no radiation induced changes in development have been demonstrated to result in experimental animals from doses up to about 1 rem per day extended over a large part of the period before birth.

The National Academy of Sciences also noted that doses of 25 to 50 rems to a pregnant human may cause growth disturbances in her offspring. Such doses substantially exceed, of course, the maximum permissible occupational exposure limits.

Concern about prenatal exposure (i.e., exposure of a child while in its mother’s uterus) at the permissible occupational levels is primarily based on the possibility that cancer (especially leukemia) may develop during the first 10 years of the child’s life. Several studies have been performed to evaluate this risk. One study involved the followup of 77,000 children exposed to radiation before birth (because of diagnostic abdominal X-rays made for medical purposes during their mother’s pregnancy). Another study involved the followup of 20,000 such children. In addition, 1292 children who received prenatal exposure during the bombing of Hiroshima and Nagasaki were studied. Although contradictory results have been obtained, most of the evidence suggests a relationship between prenatal exposure and an increased risk of childhood cancer.

**Summary**

Occupational exposures to radiation are being kept low. However, qualified scientists have recommended that the radiation dose to an embryo or fetus as a result of occupational exposure of the expectant mother should not exceed 0.5 rem because of possible increased risk of childhood leukemia and cancer. Since this 0.5 rem is lower than the dose generally permitted to adult workers, women may want to take special actions to avoid receiving higher exposures, just as they might stop smoking during pregnancy or might climb stairs more carefully to reduce possible risks to their unborn children.

**Bibliography**


5. U.S. Atomic Energy Commission, Division of Technical Information, Understanding the Atom Series:
   - *Atoms, Nature and Man*
   - *The Genetic Effects of Radiation*
   - *The Natural Radiation Environment*
   - *Your Body and Radiation*
Joint Review Committee on Education in Radiologic Technology (JRCERT)

Process for Reporting Allegations

Important Notes

1. The JRCERT cannot advocate on behalf of any student(s). An investigation into allegations of non-compliance addresses only the program’s compliance with accreditation standards and will not affect the status of any individual student.

2. The investigation process may take several months.

3. The JRCERT will not divulge the identity of any complainant(s) unless required to do so through legal process.

Process

1. Before submitting allegations, the individual must first attempt to resolve the complaint directly with program/institution officials by following the due process or grievance procedures provided by the program/institution. Each program/institution is required to publish its internal complaint procedure in an informational document such as a catalog or student handbook. (Standard One, Objective 1.6)

2. If the individual is unable to resolve the complaint with program/institution officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance to the JRCERT:

   Chief Executive Officer
   Joint Review Committee on Education in Radiologic Technology
   20 North Wacker Drive, Suite 2850
   Chicago, IL  60606-3182
   Ph:   (312) 704-5300
   Fax:  (312) 704-5304
   e-mail:  mail@jrcert.org

3. The Allegations Reporting Form must be completed and sent to the above address with required supporting materials. All submitted documentation must be legible.

4. Forms submitted without a signature or the required supporting material will not be considered.

5. If a complainant fails to submit appropriate materials as requested, the complaint will be closed.

The Higher Education Opportunities Act of 2008, as amended, provides that a student, graduate, faculty or any other individual who believes he or she has been aggrieved by an educational program or institution has the right to submit documented allegation(s) to the agency accrediting the institution or program.

The JRCERT, recognized by the United States Department of Education for the accreditation of radiography, radiation therapy, magnetic resonance, and medical dosimetry educational programs investigates allegation(s) submitted, in writing, signed by any individual with reason to believe that an accredited program has acted contrary to the relevant accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.
Joint Review Committee on Education in Radiologic Technology (JRCERT)

Allegations Reporting Form

Please print or type all information.

Name of Complainant: __________________________________________________________

Address: ______________________________________________________________________

City: ___________________ State: ___________________ Zip Code: ___________________

Signature: _______________________________ Date: _______________________________

Institution sponsoring the program:

Name: ______________________________________________________________________

City: ___________________ State: ______________

Type of Program (Check one):

☐ Radiography ☐ Radiation Therapy ☐ Magnetic Resonance ☐ Medical Dosimetry

The following materials must be submitted:

1. Attach a copy of the program’s publication that includes the due process or grievance procedure.

2. Provide a narrative that identifies what you did at each step of the due process or grievance procedure and copies of materials you submitted as part of your appeal and copies of correspondence you received in response to your appeal.

3. List the specific objective(s) from the accreditation standards (available at www.jrcert.org/ace_standards.html) and indicate what the program is alleged to have done that is not in compliance with the cited objective(s).

Example

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<td>Students often do patient exams without supervision before they have completed a competency check-off.</td>
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University of Wisconsin – La Crosse  
General Incident Report  
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Full Description of the incident including specific location and activity involved in at the time of the incident.  
(Use the back of this sheet if additional space is needed.)

Injuries

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Witnesses

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If different than home address, address where damaged property may be seen

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I certify that the information in this report is a complete and accurate description of the incident.

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Return Completed Report To:  
University of Wisconsin – La Crosse  
Attn: Risk Manager  
125 Graff Main Hall  
La Crosse, WI 54601