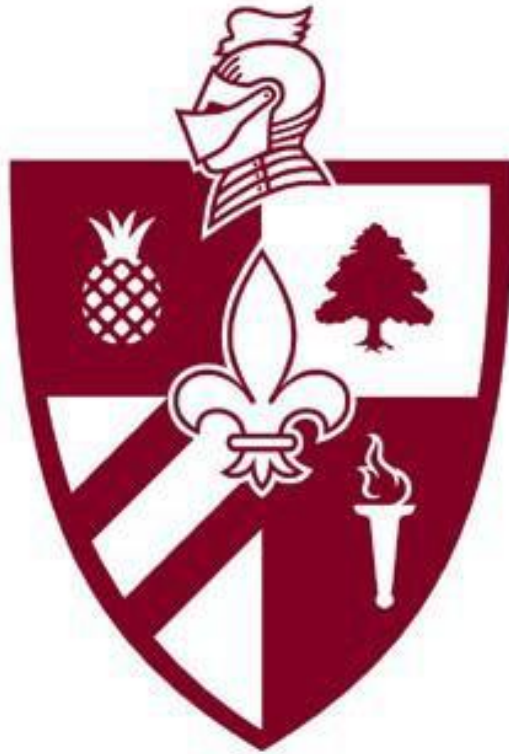


Bellarmino University  
College of Health Professions  
Lansing School of Nursing and Clinical Sciences



**BELLARMINE  
UNIVERSITY**

IN VERITATIS AMORE

**RADIATION THERAPY PROGRAM  
POLICIES AND PROCEDURES  
2023-2024**

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July 1, 2023

Dear Radiation Therapy Student:

On behalf of the faculty and staff of the Radiation Therapy Program, I would like to welcome you to the Bellarmine University, Radiation Therapy Program. You are about to embark on a journey that will expose you to some of the most technologically advanced medical procedures currently performed in the field of radiation oncology.

The Radiation Therapy Program has dedicated faculty and instructors who will help you along this most challenging academic endeavor. Please do not hesitate to avail yourself of the extensive resources the university has to offer, whether through on-line, print or personnel sources.

Please read the Student Guidelines carefully, familiarize yourself with the contents and seek answers when needed.

The faculty and staff are looking forward to meeting each of you and helping with your academic progress.

Sincerely,

*Carol Scherbak*

Carol Scherbak, M.S.R.S., R.T.(T)  
Assistant Professor  
Chair and Program Director  
Radiation Therapy Program

July, 2023

## **I. INTRODUCTION AND INSTITUTIONAL INFORMATION**

### **A. Purpose of Student Guidelines**

This manual describes the guidelines for students enrolled in the Lansing School of Nursing and Clinical Sciences, Radiation Therapy Program. These guidelines are extensions of those outlined in the current School Catalog (or its latest revision). Students are also bound by each clinical affiliate rules and individual course syllabi.

Please read these Student Guidelines carefully. At the end of this manual, you will find an acknowledgment form. This form states that you agree to follow these guidelines while you are enrolled as a student in this program. The form is to be signed, dated and returned to the program office during orientation.

This is a general information publication only. It is not intended to, nor does it contain, all regulations that relate to students. This manual, although revised annually, cannot always reflect up-to-the minute changes or developments in the School of Nursing and Clinical Sciences, the Radiation Therapy Program, Bellarmine University and clinical affiliates. Contents of the manual are, therefore, subject to revision without notice. Changes will become effective whenever the proper authority so determines and will apply to both prospective students and those already enrolled. Students should also familiarize themselves with the BU College Catalog.

### **B. Mission of the Radiation Therapy Program**

The Mission of the Radiation Therapy Program in the Lansing School of Nursing and Clinical Sciences is to develop entry level radiation therapists who adhere to the Catholic traditions imbedded in Bellarmine University which promote intellectual, moral and ethical decision making in completing professional competencies with a patient centered approach. The program will encourage professional growth and development to improve outcomes, advance radiation therapy practice and create a safe working environment.

#### **Program Goals and Student Learning Outcomes**

**Goal # 1:** Students will develop critical thinking skills.

*Student Learning Outcomes*

- Students will synthesize didactic and clinical information in clinical case studies.
- Students will complete a research project in radiation therapy.
- Students will perform treatment calculations.

**Goal # 2:** Students will communicate effectively with patients and the oncology health care team.

*Student Learning Outcomes*

- Students will communicate effectively with their patients.
- Students will communicate effectively with the health care team.
- Students will demonstrate written communication skills.
- Students will demonstrate oral presentation skills.

**Goal # 3:** Students will demonstrate professionalism during the program.

*Student Learning Outcomes*

- Students will develop and maintain professional behavior.
- Students will demonstrate ethical behavior in clinical situations.
- Students will demonstrate ethical decision making about social issues in oncology.

**Goal #4:** Students will perform as competent, entry level radiation therapists.

*Student Learning Outcomes*

- Students will perform Treatment Delivery.
- Students will perform Simulation.
- Students will perform General Patient Care Skills.
- Students will demonstrate consistency and efficiency while working in the clinic.

**Goal # 5:** The program will demonstrate programmatic effectiveness.

*Student Learning Outcomes*

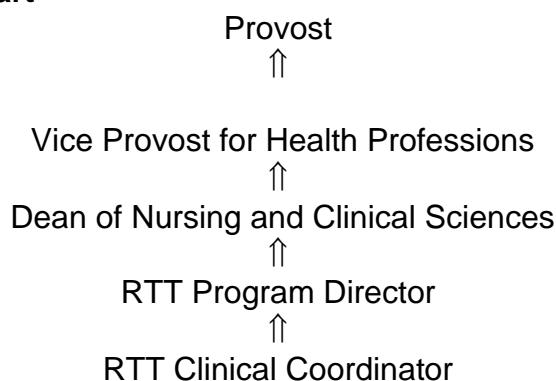
- Graduates will function as a competent entry level radiation therapist.
- Graduates will be satisfied with their education.
- Students enrolled in the program will complete the program.
- Students will pass the ARRT exam in Radiation Therapy.
- Graduates will gain employment.

### **C. Accreditation Statement of the Radiation Therapy Program**

Bellarmino University has regional accreditation through the Southern Association of Colleges and Schools (SACS/COC).

The Radiation Therapy Program's programmatic accreditation is through the Joint Review Committee in Radiologic Technology, program # 0935.  
20 N. Wacker Drive Suite 2850 Chicago, IL 60606-3182 Phone: (312) 704-5300 Fax: (312) 704-5304, [mail@jrcert.org](mailto:mail@jrcert.org), [www.jrcert.org](http://www.jrcert.org)

## D. Organizational Chart



## II. ACADEMIC AFFAIRS

### A. List of Courses

<b>Freshman Year Fall</b>	<b>Credits</b>
BU 100 Freshman Focus	1
ENG 101 Expository Writing	3
PSYC 103 Intro to Psychology	3
BIOL 108 Anatomy and Physiology I	4
HIST 116/7 Western Civilization	3
Total	14

<b>Freshman Year Spring</b>	
IDC 101 Freshman Seminar	3
PHIL 160 Intro to Philosophy	3
MATH 116 Pre-Calculus	3
BIOL 109 Anatomy and Physiology II	4
Gen Ed Fine Arts	3
Total	16

<b>Sophomore Year Fall</b>	
HLTH 120 Medical Terminology	3
CHEM 214 Chemistry for Health Sci	4
PHYS 201 College Physics I	4
THEO 200 Theology	3
Total	14

<b>Sophomore Year Spring</b>	
PHIL 301 Ethics	3
ENGL 2XX English Literature	3
PHYS 202 College Physics II	4
HLTH 321 Legal Issues In HC	3
THEO ¾XX Gen Ed Theology	3
Total	16

**Fall Semester Junior Year**

RTT 300 Introduction to Radiation Therapy	3
RTT 301 Medical Imaging and Processing	3
RTT 302 Oncology Patient Care	4
RTT 322 Sectional Anatomy	2

Total 12

**Spring Semester Junior Year**

RTT 320 Radiation Biology	4
RTT 321 Oncologic Pathology	2
RTT 325 Radiation Therapy Physics	3
RTT 391 Clinical Education I	3

Total 12

**Summer Semester Junior Year**

RTT 331 Principles and Practices of Rad Th I	3
RTT 392 Clinical Education II	3

Total 6

**Fall Semester Senior Year**

RTT 430 Medical Dosimetry	4
RTT 431 Principles and Practices of Rad Th II	3
RTT 432 Advanced Radiation Therapy	3
RTT 491 Clinical Education III	4
IDC 401 Senior Seminar	3

Total 17

**Spring Senior Year**

RTT 460 Registry Review	3
RTT 461 QA and Op Issues in Rad Th	3
RTT 490 Radiation Therapy Capstone	3
RTT 492 Clinical Education IV	4

Total 13

Minimum for Graduation 120



## **B. List of Clinical Rotations**

The Bellarmine University Radiation Therapy Program is affiliated with numerous clinical sites.

- Locations of clinical rotation sites will vary and no assurances will be given regarding clinical site placement.
- Students will not have a chance to rotate through all clinical sites and will not have a choice of which sites they will attend.
- Sites are chosen to give the student a wide spectrum of the clinical environment and are determined by a collaboration between the Program Director, Clinical Coordinator and Clinical Supervisors.
- Schedules are subject to change at any time at the discretion of the Program Director and Clinical Coordinator.

Students will rotate through the following areas: Nursing, Medical Physics, Brachytherapy, Dosimetry, Treatment Delivery and Simulation.

### Junior Year, Spring Semester

During this semester, students will have an orientation to the radiation oncology department and will rotate through the following clinical areas:

Nursing (including chemotherapy)  
Treatment Delivery  
Simulation

### Junior Year Summer Session until Graduation

Students will rotate through the following areas:

Medical Physics (to include Brachytherapy, Stereotactic Radiosurgery, etc.)  
Dosimetry  
Treatment Delivery  
Simulation

## **C. List of Essential Functions**

All individuals, including people with disabilities, who apply for admission for BU Radiation Therapy Program must be able to perform specific essential functions, which differ depending upon the academic program. Essential functions are the basic activities that a student must be able to perform to complete the program's curriculum. No applicant who can perform the school's and program's essential functions, either with or without reasonable accommodation, will be denied consideration for admission.

### Essential functions related to general academic work:

1. Attend scheduled classes and laboratory sessions and be present for examination and testing.
2. Travel to practicum sites and have mobility within and around the sites.

3. Assimilate information presented via lecture, handouts, videos, discussions, computer, and/or other educational modalities.
4. Complete assignments such as written assignments, oral presentations, class participation, examinations, and computer-based activities.
5. Apply the assimilated information to appropriate clinical situations.
6. Effectively communicate with faculty, students and other professionals using oral, telephonic, written, and computer modalities in private and group settings.
7. Make effective use of learning resources at Bellarmine University and affiliated facilities.

Each student in the **Radiation Therapy** Program must be able to:

1. Participate in supervised clinical activities involving walking and standing for eight-hour days.
2. Demonstrate sufficient visual acuity to monitor patients, input data, read computer monitors and distinguish markings in dim lighting.
3. Demonstrate sufficient strength to lift, carry and move items weighing up to 40 pounds.
4. Distinguish and interpret audio signals from equipment.
5. Demonstrate sufficient upper and lower body strength to move, lift and transport patients.

## **D. Academic Standards and Progress**

### **1. Faculty Advisor:**

Each student will be assigned a member of the faculty as their Faculty Advisor. The role of the Faculty Advisor is to assure that the student is making satisfactory progress in the program. Each student is encouraged to meet with their Faculty Advisor whenever a personal or academic problem arises that might impede their progress in the program. If a student is not making satisfactory academic progress, they will be able to meet with their advisor during the academic semester/term at the discretion of the program; or until academic performance has significantly improved. Each student is required to meet with their Faculty Advisor at least once each semester, so that the Faculty Advisor may assure that the student is making satisfactory progress and to suggest any needed improvements.

### **2. Evaluation**

In general, the student's achievement in programmatic courses is determined by:

- (1) course participation
- (2) written examinations
- (3) clinical performance evaluations
- (4) other written and/or oral assignments
- (5) laboratory assessment or assignments

### 3. Grading Levels

The program courses will be graded by the following scale or the appropriate equivalent:

A+	98 – 100	4.0 quality points
A	91 – 97	4.0
A-	90	3.67
B+	88 – 89	3.3
B	81 – 87	3.0
B-	80	2.67
C+	78 – 79	2.33
C	71 – 77	2.0
C-	70	1.67
D+	68 – 69	1.33
D	61 – 67	1.0
D-	60	.67
F	Below 59	0.0

At the discretion of the instructor, **I** (incomplete) may be used in reporting a student's standing in a semester's work. An "incomplete" must be removed under written conditions and within one (1) year from the end of the semester in which the **I** (incomplete) was reported. Should the established conditions not be met one year from the end of the semester in which the "incomplete" was reported, the instructor must assign a final grade. If after one year from the end of the semester the instructor has failed to assign a grade, the "incomplete" will be changed to a final grade of "F". An incomplete is not considered a final grade. A final grade must be assigned to calculate GPA.

**NOTE:** Courses taught by other departments may use different grade scales.

### 4. Radiation Therapy Program Examinations

Students are expected to take all examinations on the scheduled date. The rescheduling of an examination may be allowed if circumstances warrant permission by the course instructor (e.g. documented illness, previously identified religious holiday, or death in the family), otherwise there will be no exceptions to this policy. If a student fails to take a scheduled examination without obtaining permission from the instructor of the course, the student will receive a "zero" on that scheduled examination. Examinations are generally "timed," therefore; all examinations will begin on the scheduled date and at the scheduled time. An examinee that has been delayed may be admitted to the examination up to 15 minutes after the session has started. The examinee will be given no extra time to complete the examination. Examinees arriving after the 15 minute "grace period" will automatically receive a "zero" on the examinations. Under extenuating circumstances and with timely notification from the student, exceptions to this policy may be considered by the course instructor. Questions concerning test items during exams are not allowed.

## **5. Satisfactory Performance and Progress**

### **a. Academic Performance**

In general, satisfactory performance and progress in the radiation therapy program are defined as:

- (1). Completing the Radiation Therapy course sequence as stipulated;
- (2). Overall GPA of program courses 3.00 or higher; no more than 2 C+ or lower in all 5 semesters;
- (3). A minimum grade of "C-" or "Pass" in each course with the exception of RTT 460 Registry Review, which must be passed with a minimum grade of "B-".
- (4). Acceptable clinical competence. Defined as:
  - a) Ability to complete clinical proficiencies for each semester by the end of that semester.
  - b) Complete the minimum number of required treatment and simulation competencies each semester.
  - c) Achieve an average minimum score of 80 on all student monthly evaluations.
  - d) Ability to synthesize didactic and clinical material.
  - e) Clinical course grade B- or higher

An academic deficiency occurs when any of the above requirements are not met.

All academic deficiencies are referred to the Department's/Programs Committee on Student Progress. Depending on the nature and seriousness of the deficiency and available program resources, a student is subject to remediation, probation, suspension, or dismissal.

### **b. Academic Deficiencies**

The Radiation Therapy Program Faculty will identify and document in writing to the Department Chairman/Program Director any student having difficulty with one or more of his/her Radiation Therapy Program designated courses.

The Department Chairman/Program Director, after reviewing the student's deficiencies with the appropriate faculty member(s), will notify the student in writing of his/her academic status. A faculty member will arrange assistance as necessary, taking into consideration the available college and program resources.

The faculty member(s) will notify the Program Director of the deficient course in writing of: (1) the type of assistance to be arranged, and (2) the time expected for the student to show an improvement.

When an academic deficiency has occurred, the situation is referred to the Program's Committee on Student Progress. Depending upon the frequency, nature, and extent of the deficiency, a student may be (1) placed on academic probation, (2) required to repeat the course, (3) required to remove the deficiency by specific remediation activities, or (4) dismissed from the program. This may occur following periodic mid-term or end-of-

semester examinations/evaluations. Any student required to repeat a course or a rotation must anticipate a delay in the timing of their graduation and the inclusion of additional tuition and fees required to repeat curriculum.

Any faculty member may recommend to the Program Director that a student be considered for remediation, probation, suspension, or dismissal at any indicated time during the semester for any of the following reasons: (1). Failure to achieve a grade of "Pass" in a Pass/Fail designated course, (2). Failure to meet attendance requirements, (3) Failure to exhibit adequate academic progression, Course grade below a "C-", RTT Program GPA below 3.3, grade below C- on a project, presentation, clinical competency (4). Failure to demonstrate acceptable clinical competence, for example: more than 2 failed mandatory clinical competencies, grade below 85 on a repeat or challenge competency (5). Monthly Evaluation Grade below a "B-", improprieties in conduct, scholastic integrity and professional behavior. Students may receive warnings that are either oral or written for any of the above. Students who receive more than ONE (1) WRITTEN warning will have their performance reviewed and may be dismissed from the program.

Clinical competencies MUST be passed within three attempts. The inability to pass any single clinical competency within three attempts, failing a total of 5 mandatory clinical competencies or failing more than 2 Repeat competencies, separate or combined, during the student's academic enrollment is considered failure to demonstrate clinical competence and will result in automatic dismissal from the program.

## **6. Conduct, Scholastic Integrity and Professional Behavior**

### **a. Scholastic Integrity**

Since the value of an academic degree depends upon the absolute integrity of the work done by the student for the degree, it is imperative that a student maintain a high standard of individual honor in his/her scholastic work. Please refer to the College Catalog and this handbook.

### **b. Professional Behavior**

#### **(1) General Behavior**

A student who demonstrates inappropriate ethical or professional behavior will be promptly advised and will be subject to disciplinary action. Penalties range from remediation, probation and dismissal from the program. Each student must consistently demonstrate **ethical and professional** behaviors in all aspects of the program:

a. Identify guidelines of each of the following entities that pertain to students and comply with them:

1. Radiation Therapy Program Student Guideline Manual
2. Bellarmine University Catalog
3. All policies and procedures at each clinical affiliate.

Professional behavior is monitored on a continuing basis by university and clinical faculty and administration. Deficiencies in professional behavior are referred to the Chair and/or Dean for review and possible disciplinary action. For behavior and actions that result in harm or potential harm to a patient, the student is subject to disenrollment and may incur further disciplinary action.

## **(2) Radiation Therapist Behavior**

Students enrolled in the Radiation Therapy Program are required to adhere to the American Society of Radiologic Technologists ([www.asrt.org](http://www.asrt.org)) Code of Ethics and Practice Standards for Radiation Therapists and the American Registry of Radiologic Technologist ([www.arrt.org](http://www.arrt.org)) Standards of Ethics. All of these documents are available on line and addressed in the didactic curriculum.

Violation of ASRT or ARRT professional behavior is subject to the following:

1. meeting with the program director and clinical coordinator

Depending on the nature of the violation:

1. probation and remediation;
2. dismissal from the program.

## **3. Request for Accommodation**

Students who wish to declare a documented disability must follow Bellarmine University policy and procedures as outlined in the catalog. Please contact Director of Disability Services

## **4. Attendance**

Attendance is required and mandatory for all classes, laboratories and clinical rotations. A student is allowed two sick days per semester during their clinical rotation. Routine or annual medical appointments should NOT be made during clinic or class hours. The program must be notified 5 business days before a routine or annual appointment is made during class or clinic time. Clinic time will need to be made up. If more than two days are missed then that clinical time must be made up following these guidelines:

- (1). The student's total hours for the week, including class, laboratories and clinical time may not exceed 40 hours, no more than 10 hours in one day,
- (2). The time must be arranged in advance with the pertinent clinical supervisor and the clinical coordinator and/or program director,
- (3). Make up time must be measured in hours; no credit will be given for less than one hour.
- (4). A student calling in sick for class or clinic immediately prior to OR immediately following a holiday, OR in the last week of the semester MUST bring a note from a health care provider for that illness.

- (5). Students missing class immediately prior to and/or immediately after a holiday will receive a 3% reduction in their final grade for the course.

The Radiation Therapy Program office **AND** the clinical site must be notified before 7:15 am when a student calls in sick. If a student misses more than three (3) consecutive days, the student must submit a statement from their health care provider indicating a release to return to school. Students must notify the clinical site verbally (email is optional but not a primary way of notification) if they are going to be tardy. Tardiness is considered unacceptable conduct and will be reflected in the monthly evaluation.

Sickness – students should consider themselves sick if they have a fever (100 F and above), have symptoms of nausea/vomiting (or any GI problems), etc and should NOT participate in clinicals or class activities. Students can join class from home using Teams if they feel able to participate.

Covid -19 – Students must adhere to all Bellarmine University, School of Nursing and Clinical Sciences and Clinical Affiliates Covid 19 policies. Students diagnosed with Covid -19, must follow the procedures outlined in the Covid-19 Departmental/Lansing School/CHP policy before returning to class and clinicals.

## **5. Tardiness for class**

Three (3) unexcused late appearances will lower the course grade by 10% and five (5) late appearances will lower the course grade by 20%.

- A student will be considered tardy if they are not ready for class to start as class begins.
- Once a student is 10 minutes late, he/she may be considered absent for the day at the discretion of the instructor.

A student who is absent without permission once or consistently tardy to class will be displaying unprofessional behavior and therefore, will follow the procedure outlined in Section 2 above “Radiation Therapist Behavior”. Tardiness is considered excused if the student notifies the instructor because of extenuating and unusual circumstances.

Repeated tardiness, even if the student notifies the instructor, will be considered unprofessional behavior.

### Clinical Rotations

Clinical rotations will be from 7:30am – 4:30pm; the Clinical Coordinator or Program Director must approve ANY deviations from this time frame (exception: linear accelerator warm up). Students may not leave their clinical assignments for any reason without prior approval from the Clinical Coordinator or Program Director. Students are expected to be at their assigned clinical rotation and ready to work on schedule.

If classes, labs, or exams are missed for an unexcused reason, the decision as to whether the work or test can be made up is at the discretion of the course instructor. An unexcused absence in the clinic may result in a one-letter grade drop in the course grade for that

semester. Course policies in other departments may differ from the Radiation Therapy Program course policies.

It is the student's responsibility to contact the course instructor or preceptor immediately following absenteeism or lateness regarding course work or exam make-up. Excusable reasons for absence are limited to: (1) illness, (2) death or illness in immediate family, (3) jury duty, (4) military service, (5) subpoena, (6) approved college activities, and (7) faculty approved attendance at professional conferences. Not reporting an absence is considered unexcused.

**Funeral Leave**- Students can miss up to two (2) days of class or clinic as an excused absence in the event of the death of an immediate (father, mother, sibling, grandparent, child) family member. Students MUST submit an obituary to Radiation Therapy Faculty upon returning from funeral leave.

## **6. Attire**

Students will wear uniforms at all times when in the clinic for either patient care or laboratories. Required uniforms to be worn are comfortable shoes, and scrubs. Students must wear the approved Bellarmine University Radiation Therapy Program approved scrubs.

Identification badges and film badges are to be worn at all times. Film badges must be taken care of and stored properly. The student will be issued an ID badge, which must be worn at all times at collar level when in the clinic. Film badges are also to be worn at collar level.

Classroom dress may include casual wear such as jeans and shorts. Miniskirts, short shorts, muscle shirts, plunging necklines or any clothing that is revealing or provocative is NOT permitted. Skirts must be within 10 cm of the ground when kneeling.

## **7. Personal Appearance in Clinic**

- a. Hair longer than shoulder length must be pulled back.
- b. Nails should be kept short (no longer than the finger tip in length) to prevent possible injury to the patient and to prevent spread of germs. Artificial nails and nail polish are NOT permitted.
- c. Perfumes and colognes should not be worn because patients may have altered olfactory sensations.
- d. Uniforms must be clean and wrinkle free. If the temperature is too low in the department, it is permissible to wear a white laboratory coat or matching scrub jacket, a long sleeve shirt under the scrub top. Shoes should be kept clean. No shirt may be worn OVER the scrub top.
- e. Tattoos and visible body piercings must be approved by the clinical site beforehand. Multiple earrings may be worn if they are tasteful, contained to the ear and do not extend below the ear lobe.



## 8. Health Insurance Portability and Accountability Act (HIPAA) Standards Requirements and Background Checks

All students whose education includes contact with patients, patient records, or patient billing documentation, also referred to as “protected health information,” will receive HIPAA compliance training, in accordance with Bellarmine University policy. Furthermore, clinical affiliates may impose additional requirements for HIPAA training of students.

All students enrolled in the Radiation Therapy Program must also complete a background check and drug screening conducted by the approved vendor of Bellarmine University. Students may need additional background checks and drug screening during their enrollment at BU and are responsible for all expenses incurred by obtaining the background check and drug screening.

## 9. BCLS (Basic Cardiac Life Support, CPR)

All students must be certified in BCLS for the duration of the Radiation Therapy Program. The program must receive proof of BCLS certification in the Fall semester, first (Junior) year. The acceptable courses are American Heart Association BLS for Healthcare Providers or American Red Cross Professional Rescuer. Students MAY NOT miss classes, clinic or laboratories in order to complete the training.

Students may obtain and/or maintain certification by completing one of the following courses with training locations resourced on the corresponding websites:

- Basic Life Support (BLS) Healthcare Provider Course American Health Association [www.americanheart.org](http://www.americanheart.org)
- CPR for the Professional Rescuer American Red Cross [www.redcross.org](http://www.redcross.org)

**Students may not participate in clinical activities with expired or incomplete background information, immunizations or CPR certification**

- **Any time missed for this purpose will need to be made up. Keeping these up to date is the STUDENT’S responsibility.**

## 10. E-mail, Telephone, FAX, Pager, Cell Phone, PDAs, Smart Watches

### a. E-Mail

All students will be assigned a campus e-mail account. All e-mail information from the academic and clinical departments will be sent to this address. **Students are responsible for checking and responding to Outlook e-mail within 48 hours, as instructed by the program.** Students who have a commercial e-mail account may elect to forward their campus e-mail to this account, or they may access their Bellarmine e-mail account while they are on campus or from a remote location. It is important to remember that campus e-mail and Internet use are intended for University related purposes only, very much the same as with campus telephones and FAX machines. Individuals found abusing these office communication methods may be subject to disciplinary action, up to and including dismissal and/or legal action.

## **b. Telephones**

Students should not use clinical departmental telephones. Students should provide the Department's main number to persons who need to reach them in an emergency. Otherwise, students should use other means for obtaining personal messages while they are on campus. Cell phones must be turned off and put away during didactic classes. Students are not to use their cell phones while performing radiation therapy duties at clinical sites. Students may not use their cell phones as a calculator during exams.

## **c. FAX**

The University FAX machines are not for student personal use.

## **d. Pagers**

Pagers must be turned to vibrate during class. **Pagers may not be worn during written or practical exams.** Students who may be expecting an emergency page during an exam should ask the instructor to monitor their pagers.

## **e. Cell phones / Internet personal digital assistance devices (PDAs)/iPads, etc.**

Cell phones / Internet PDAs/iPads, etc. must be turned off during class and when guidelines dictate in a clinical facility, according to the policy of the facility. Clinical affiliates may prohibit cell phone use in their facilities. **Students may not have cell phones, pagers, Internet PDAs, or any other electronic devices on their person or at their desk during written or practical exams.** Other arrangements should be made for emergency calls during exams.

## **f. PDA's and laptop/notebook/pads computers**

PDA's and laptop/notebook/pads computers may be used in the classroom, only in a manner that does not disturb other students or the instructor. During exams, students may not use computers, PDA's, or any other electronic device without instructor approval.

## **g. Smart Watches**

Students may not wear smart watches during exams and they may not wear them in the clinic if they can receive phone calls or text messages.

For further clarification on the use of any electronic devices, students should consult their instructors.

## **11. Graduation Requirements**

A candidate for the degree of Bachelor of Health Science in Radiation Therapy must meet the requirements of Bellarmine University and the following requirements:

The student must maintain at least a 3.0 cumulative grade point average in all radiation therapy courses, have no academic deficiencies, and have no incompletes. All Radiation Therapy courses must be passed with a minimum grade of "C-" with the exception of RTT 460 Registry Review, which requires a minimum grade of "B-".

### **III. Student Affairs**

#### **A. Student Rights**

##### **1. Statement of Equal Opportunity**

###### **Non-Discrimination Policy**

Bellarmino University admits qualified students of any age, gender, gender identity, sexual orientation, race, disability, color, religion, and national or ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of age, gender, gender identity, sexual orientation, race, disability, color, religion, or national or ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school administered programs. Bellarmine University will not tolerate any form of sexual misconduct, which includes, but is not limited to, sexual harassment, non-consensual sexual contact, non-consensual sexual intercourse, sexual exploitation, rape or retaliation arising out of any of the above acts, as more fully defined in the Bellarmine Sexual Discrimination and Misconduct Policy in the Student and Employee Handbooks. Bellarmine University is an equal opportunity employer.

##### **2. Protection of Privacy of Information**

The Radiation Therapy Program will NOT post student grades.

##### **3. Grievances and Appeals**

Please see the Bellarmine University catalog for details and procedures.

###### **a. JRCERT GRIEVANCE POLICY**

If a student, staff or faculty has reason to believe that the Radiation Therapy Program is not in compliance with the JRCERT Standards, the procedure below will be followed:

1. The complaint will be submitted in written form to The Dean of the Lansing School of Nursing and Clinical Sciences, Chair of Radiation Therapy or the Radiation Therapy Program Director with specified dates/times/occurrence of event, as soon as possible after the occurrence of the event and within three (3) working days of the occurrence.
2. The Radiation Therapy Program Director will meet and discuss the information with the RTT Advisory Committee within ten (10) working days of receiving the complaint. This meeting will determine if non-compliance exists and develop a plan for resolution.
3. The Radiation Therapy Program Director will provide the complainant with a written plan for resolution of the problem within three (3) working days of decision by the RTT Advisory Committee.
4. If the complainant believes the alleged non-compliance has not been resolved or satisfactorily addressed by the Program Director and the Advisory Board, they are then encouraged to contact the JRCERT within five business days after receiving the written resolution from the RTT Advisory Committee.

## **B. Other General Guidelines**

### **1. Identification Badges**

Students will receive a BU name badge when enrolling and should have it available while on campus. Students must not attempt to use another student's ID badge or to permit another student to use their ID badge. Students must wear clinical affiliate name badges (if supplied) while in their clinical assignments and/or their BU Name badge.

### **2. Change of Address or Name**

Students are expected to keep the Department/Program and Registrar's Office fully apprised of their correct name and mailing address. If the student changes addresses and/or phone and/or name while in school, a change of address form must be filed with the Department/Program and Registrar's Office.

### **3. Employment**

Student employment that interferes with the student's academic or clinical responsibilities is not allowed. Students may not be employed at a clinical affiliate. During clinical rotations, Radiation Therapy students may not substitute for regular clinical or administrative staff.

### **4. Professional Liability Insurance**

All students are required to carry professional medical liability insurance while enrolled as a student in a course involving patient contact. This insurance will be included in the student fees.

### **5. Health Insurance**

All Radiation Therapy students are required to retain a current health insurance plan while enrolled in the professional phase of the radiation therapy program. Students are required to document proof of health insurance coverage to the Radiation Therapy Program.

### **6. Immunization and Background Check Requirements**

Radiation Therapy students must provide proof of the following immunizations:

- MMR
- Rubella
- Varicella
- Hepatitis B
- Flu
- Negative TB
- Hepatitis A recommended
- Covid 19

Students are required to have all of these immunizations to remain in the radiation therapy program.

Students must complete a background check before starting clinicals. The background check also includes a drug screening. Students must also submit copy of health insurance. Please also see Lansing School of Nursing & Clinical Sciences Student Drug and Alcohol Policy at the end of the clinic manual.

## **7. Leave of Absence Policy**

It is expected that students will maintain enrollment for the duration of the program in which they are enrolled. However, a student can request a Leave of Absence if unusual circumstances arise. Leave of Absence is a time-limited situation, as specified in the Request for Leave of Absence form.

Requests for a student leave of absence should be made formally in writing to the Department Chairman/Program Director. Students will be granted a leave of absence at the discretion of the Program. In the event a leave of absence is granted, the following procedures will be followed. A letter granting a Leave of Absence to a student by a program should be accompanied by the attached Leave of Absence (LOA) form (section V). The original letter should go to the student with copies going to the Chair/Program Director. The original LOA form should go to the Chair/Program Director office, with copies going to the student, the student file, the Financial Aid Office and the Registrar.

Medical leave of absence requires written documentation from the physician stating anticipated time of the absence. Additionally, written documentation from the physician releasing the student from care and ability to return to school is required.

### Returning from Leave of Absence

A student's return from leave of absence is contingent on the following conditions:

1. clinical space availability,
2. didactic classroom space availability.

A student returning from a LOA must return at the beginning of the semester in which they left provided there is adequate space available for them in the classroom or clinic.

## **8. Inclement Weather Policy**

Students in the Radiation Therapy Program are expected to attend all classes and clinics that are scheduled. In case of severe weather, please refer to the University Catalog/Web site for detailed information on delayed or canceled classes. When students are participating in clinical rotations they are expected to use their own judgment when deciding on the safety of driving to a clinical site when the University is open. The clinical site and Radiation Therapy Program must be informed in the same manner as an absence if the student elects to not attend clinicals due to weather related safety reasons. Students will be required to make up all clinical time missed due to weather on days when the University remains open. Students may **NOT** attend clinicals when the University is closed.

## **9. Radiation Safety for Performing Labs in Clinic Setting**

***The following rules were established for the operator's protection against ionizing radiation during clinical components of the radiation therapy program and must be strictly adhered to:***

1. Students will be instructed and tested on basic radiation safety practices prior to assignment to the energized lab.
2. Students will show proficiency in the application of radiation safety practices before being assigned to lab rotations.
3. Student utilization of the energized laboratory must be under the supervision of a qualified radiation therapist who is readily available.
4. All rules for the practice in a clinical setting will be followed during laboratory use.

## **10. Student Radiation Safety**

The Bellarmine University Radiation Therapy will follow the National Council on Radiation Protection and Measurements Guidelines for radiation exposure. If a student in the program approaches .75 mSv, the student must meet with the program director and/or clinical coordinator to discuss radiation protection and safety. A review of the student's clinical practice will occur to help determine the cause of the excessive dose. A plan of action will be developed and given to the student with regards to radiation exposure, safety and protection. All students must wear film badges correctly at the collar level while in the clinic or energized laboratories. If a student loses or damages a film badge, they must immediately (as soon as discovered) report by verbal communication the loss to the program director/clinical coordinator so another badge can be obtained. Students are NOT allowed in clinical practicum or energized labs without a film badge.

## **11. Dosimetry Reports**

Dosimetry reports are received by the program from the vendor on a monthly basis. The Clinical Coordinator will notify students electronically within 10 business days when the reports arrive. Students may see their individual reports in the Clinical Coordinators office and may request a printout of their report. Reports will NOT be posted.

## **12. Social Media Usage (also see Social Media Policy)**

Students will not engage Bellarmine University faculty or staff nor any employees at clinical affiliates (including those employed contractually with the clinic) on social media.

## **IV. Pregnancy Policy**

A female student who is pregnant may volunteer that information, in writing, to the program director. Form RTT – 001 available from the Radiation Therapy Program must be completed in order to voluntarily declare a pregnancy.

If a pregnancy is suspected, the student may go on a rotation in a non-radiation area until the pregnancy is confirmed or denied. Declared pregnant students have the following options:

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1. The student may withdraw from the program entirely and re-apply at a later date, re-admission is not guaranteed because the student will be evaluated against the current applicant pool,
2. The student may withdraw from only the clinical portion of the program which will be completed within a reasonable time period after the birth of the child,
3. The pregnant student may continue with all aspects of the program.

The student will be counseled on fetal dose monitoring, fetal exposure records and in-utero irradiation.

All didactic and clinical work must be completed in order to graduate.

If a student does not declare their pregnancy, the pregnancy will not be acknowledged.

At any time after a written declaration of pregnancy, the student may elect to undeclare the Pregnancy, in writing. If this occurs, the student, along with the Program Director and Clinical Coordinator, will decide when to start clinical rotations again if they have been suspended.

# Bellarmino University Radiation Therapy Program

## Pregnancy Declaration

I, \_\_\_\_\_, hereby voluntarily declare my pregnancy so the Program Director may monitor any possible radiation exposure to my embryo/fetus. I will receive a radiation badge that should be worn at waist level to monitor fetal exposure. The dose to an embryo/fetus shall be limited to 5 mSv (500 mrem) for the entire pregnancy for a **DECLARED** pregnant woman. A copy of your exposure history will be made available for review at the Radiation Therapy Program Director's Office. If you have any questions or require a consultation, please contact the Program Director.

Estimated Conception Date \_\_\_\_\_ Estimated Due Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Clinical Affiliates (s) \_\_\_\_\_

Student Classification: \_\_\_\_\_ Email: \_\_\_\_\_

Social Security No: \_\_\_\_\_ Birth Date: \_\_\_\_\_

Address: \_\_\_\_\_



V. Leave of Absence Form

BU Radiation Therapy Program

Request for Leave of Absence

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

Permanent \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail (other than BU E-mail): \_\_\_\_\_

I formally request a leave of absence from the BU Radiation Therapy Program starting \_\_\_\_/\_\_\_\_/\_\_\_\_. I understand this leave of absence ends \_\_\_\_/\_\_\_\_/\_\_\_\_.

Reason for Leave: \_\_\_\_ Research \_\_\_\_ Health \_\_\_\_ Supplemental education  
\_\_\_\_ Other

Comments:

I understand that **this leave may not exceed \_\_\_\_ months (maximum of 12 months)**. I understand that I may re-enroll prior to the time limitations indicated above within the constraints of the program's curriculum. After that time, I understand I will be considered withdrawn from program, and my re-enrollment will require a full application and interview as would any other applicant to the BU Radiation Therapy Program. **I understand that it is my responsibility to contact the program with information about my intentions by \_\_\_\_/\_\_\_\_/\_\_\_\_.**

I also understand that it is my responsibility to **contact the program with any change of address, phone number, or E-mail contact information** in the interim.

I understand that during the leave, **I am not considered enrolled in the program**. I understand that I no longer qualify for financial aid and it is my responsibility to contact my financial aid counselor and work out the details necessary. I understand that I will no longer be eligible for resources such as student health services and malpractice insurance. Health insurance coverage while on leave varies with the vendor and should be investigated by the student considering leave.

I understand that to return to the program I must successfully pass a criminal background check performed by a company selected by BU Radiation Therapy Program on a schedule specified by Bellarmine University and at my own expense.

\_\_\_\_\_  
Student Signature

Approved

\_\_\_\_\_  
Department Chair/Program Director

\_\_\_\_\_  
Date

Approved

\_\_\_\_\_  
Dean, Lansing School

**VI. Acknowledgement Form**  
**STUDENT'S ACKNOWLEDGMENT of Student Guideline Manual**

Date: \_\_\_\_\_

Louisville, KY

I understand that the contents of these Student Guidelines are provided for my information as a student in the Radiation Therapy Program.

By signing this statement, I acknowledge receipt of the Bellarmine University Radiation Therapy Program Student Guidelines and accept my responsibility to follow the regulations outlined in this manual.

---

Student's Name (PRINT)

---

Student's Signature

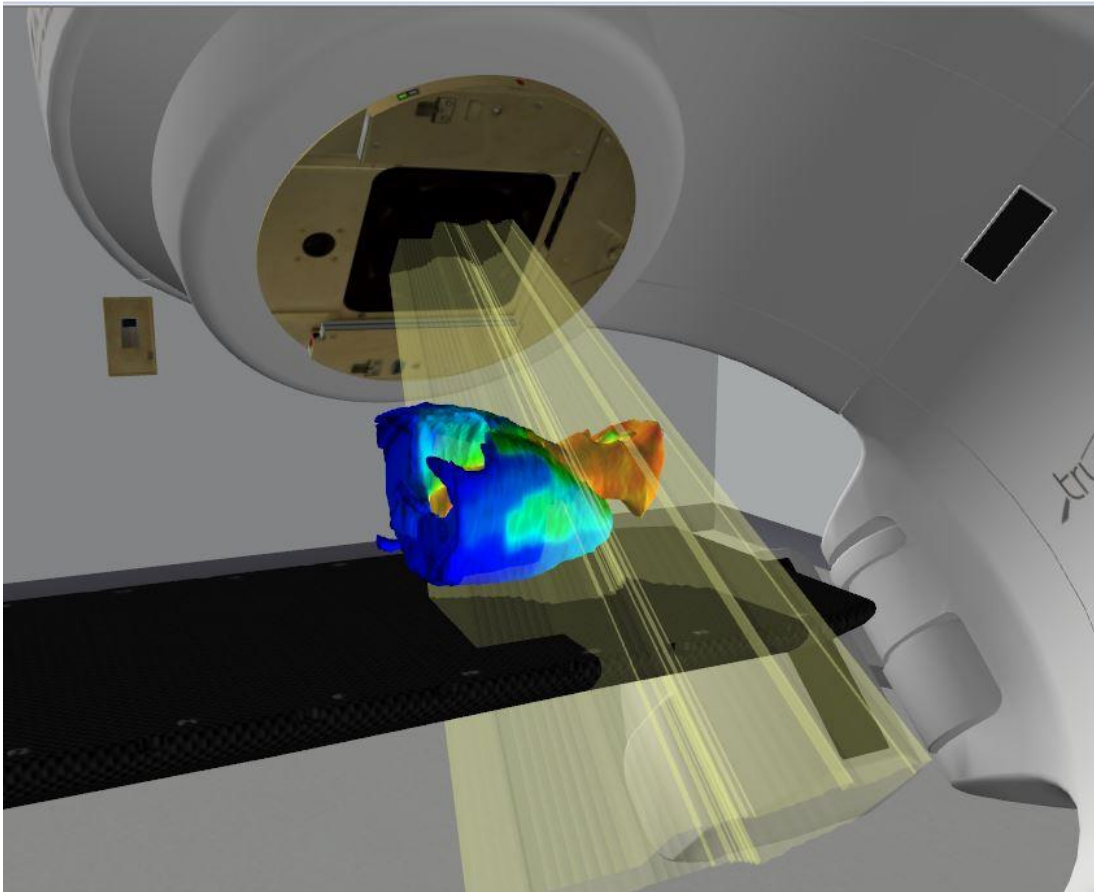
To be retained in your program file  
RETURN TO PROGRAM DIRECTOR OFFICE – Miles 132.

NOTE: This booklet is presented as an informational guide only. It is not intended to, nor does it contain all the regulations that relate to students. This Student Guidelines, although revised periodically, cannot always reflect up-to-the-minute changes or developments in the Radiation Therapy Program. Contents of the Student Guidelines are therefore subject to revision without notice. Changes become effective whenever the Program so determines and will apply to both prospective student and those already enrolled. Bellarmine University reserves the right to alter any and all requirements affecting students. The Student Guidelines does not constitute a contract, express or implied, between students and Bellarmine University.

NOTE: Please see the Bellarmine student handbook for additional university policies:  
<https://www.bellarmino.edu/studentaffairs/>

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# Clinic Manual



July, 2023

## Clinical Site Information

Students in the Radiation Therapy Program will rotate through multiple clinical sites located at various geographically strategic locations to Bellarmine University. These rotations will give the student a broad based clinical education through exposure to a wide variety of radiation oncology equipment and a variety of settings from academic medical centers to local community based hospitals and free standing radiation oncology centers. Students can expect to be rotated on a random basis between clinical sites on a semester basis. Students may remain at the same site for no more than two consecutive rotations.

- Locations of clinical rotation sites will vary and no assurances will be given regarding clinical site placement.
- Students will not have a chance to rotate through all clinical sites and will not have a choice of which sites they will attend.
- Sites are chosen to give the student a wide spectrum of the clinical environment and are determined by a collaboration between the Program Director, Clinical Coordinator and Clinical Supervisors.
- Schedules are subject to change at any time at the discretion of the Program Director and Clinical Coordinator.

Students are required to supply their own transportation to each site. Students will complete orientation training at each site and additional information can be found in the clinical affiliate handbook for the radiation therapy program.

## Clinical Guidelines

### Direct Supervision

Direct supervision assures patient safety and proper educational practices. All radiation procedures require direct supervision. The JRCERT defines direct supervision as student supervision by a qualified practitioner (e.g., registered radiation therapist, credentialed medical physicist, licensed radiation oncologist) during all aspects of the procedure. Students must always be directly supervised during all patient procedures that involve radiation.

The JRCERT defines direct supervision as student supervision by a qualified practitioner who:

- is physically present during the conduct of the procedure, and
- reviews and approves the procedure and/or image.

**Supervision of students over closed-circuit monitor(s) is not acceptable.**

### Clinical Times

Most of the clinical affiliates will have students from 7:30am – 4:30pm. The start and finish time will vary at each clinical site and will depend on how each clinical affiliate works their patient schedule. Students can expect to start each day at a clinical site between 7:00 – 8:00am and complete the day 9 hours after they start (1 hour for lunch). This schedule will only be altered when a student is doing the linac warm up. For any other schedule changes, the clinical coordinator or program director must be informed and approved of the change.

### Clocking In and Out of the Clinic

Students will clock into and out of the clinic in the online clinical software used by the program, Trajecsys. Students must clock in when they are in the facility ready to work and clock out once they leave their assigned areas. If a student fails to clock in or out he/she must complete a **Time Exception** within Trajecsys. Learning to clock in and out is a significant part of the student's clinical learning experience so time exceptions must be kept to a minimum. The student will be **allowed two (2) time exceptions per semester**. Any additional time exceptions will lower the overall clinical grade by **1% per incident**.

### Student Observations Fall Semester Junior/First Year in Program Year

Students will observe in the program's clinical sites for several days during the fall semester after Fall Break. These observations allow the student to correlate the introductory radiation therapy material with clinical practice. Students must turn in all proof of immunizations, criminal background check and drug screening before starting these observations.

### Covid 19 (SARS-CoV-2) Pandemic and PPE

Students must wear the appropriate PPE when in the clinical education settings when required.

**BU Radiation Therapy Program**  
**Clinical Evaluation**  
**Spring Semester- Junior**

**Monthly Clinical Evaluation**

Each month the student will receive an evaluation from the area they are rotating. Each evaluation is worth 100 pts possible. The scale is as follows:

Grading Scale:	10	Perfect
	9	Above Average
	8	Average
	7	Below Average
	6	Unacceptable

Students will meet with the clinical coordinator/program director at the end of each rotation to evaluate their progress in the clinic. If a grade of 7 or below is given on the monthly clinical evaluation, a plan will be discussed with the student to improve the score. The monthly clinical evaluation will account for **40%** of your total clinical grade during the spring semester.

**Clinical Case Studies**

During the spring semester, the students are required to do **7** case studies. A minimum of **4** case studies must be turned in before spring break. The case studies are defined as a three page double-space typed elaboration of the patient information sheet. Students must gather information to complete the student information sheet. Students MAY NOT compile this information while patient treatment/simulation activities are in process. These info sheets are homework. Work on the case study should be performed outside of clinic as not to interfere with the student's clinical learning. The case studies account for **30%** of the clinical grade. The scoring template for the clinical case studies are located on the on line learning platform.

**Clinical Objectives and Technical Questions/Assignments**

Each semester the student will have a set of clinical proficiency objectives that must be met. If a student cannot pass an objective, remediation will be given and the student has two weeks to pass the objective after remediation. Clinical assignments and technical questions will be administered throughout the semester and account for **30%** of the clinic grade. Proficiencies must be passed in order to move on to the next semester. If a student cannot pass them after remediation, the student will be dismissed from the program due to non-progression in the clinic.

Clinical Grade:	Monthly Evaluation	40%
	Clinical Case Studies	30%
	Technical Questions, Portfolio, Help/Study Notebook & Assignments, Skills Assessments	30%

**Bellarmino University Radiation Therapy Program**  
**Clinical Evaluation**  
**Summer semester thru graduation**

**Clinical grade scale will be the same as the didactic.**

The program courses will be graded by the following scale or the appropriate equivalent:

A+	98 – 100	4.0 quality points
A	91 – 97	4.0
A-	90	3.67
B+	88 – 89	3.3
B	81 – 87	3.0
B-	80	2.67
C+	78 – 79	2.33
C	71 – 77	2.0
C-	70	1.67
D+	68 – 69	1.33
D	61 – 67	1.0
D-	60	.67
F	Below 59	0.0

**Monthly Clinical Evaluation**

Each month the student will receive an evaluation from the area they are rotating. Each evaluation is worth 100 pts possible. The scale is as follows:

Grading Scale:	10	Perfect
	9	Above Average
	8	Average
	7	Below Average
	6	Unacceptable

Students will meet with the clinical coordinator/program director at the end of rotation to evaluate their progress in the clinic. If a grade of 7 or below is given on the clinical monthly evaluation, a plan will be discussed with the student to improve the score. The monthly clinical evaluation will account for **60%** of the total clinical grade.

**Clinical Competencies**

Clinical competencies **MUST** be passed within three attempts. The inability to pass any single clinical competency within three attempts or failing a total of 5 clinical competencies, or failing more than 3 Repeat competencies, separate or combined, during the student's academic enrollment is considered failure to demonstrate clinical competence and will result in automatic dismissal from the program. The overall grade of the competencies completed for that semester will account for **25%** of the clinical grade, Skills Assessment **10%**, other **5%**.

The grade scale is as follows:

<b>Grading Scale:</b>	9 – 10	Thorough grasp of procedure, has good problem solving skills
	7 – 8	Can perform skill without assistance, good knowledge of basic principles
	4 – 6	Knows only routine procedure, needs assistance, little problem solving skills
	1 – 3	Very little knowledge, needs considerable assistance
	0	Did not perform skill, automatic failure

## **Clinical Proficiency and Technical Questions**

Each semester the student will have a set of clinical proficiency objectives that must be met. If a student cannot pass an objective, remediation will be given and the student has two weeks to pass the objective after remediation. If the student cannot pass the proficiency goals after remediation, the student will be dismissed from the program due to non-progression in the clinic. Also included in the fall semester is the combined grade for the physics paper and presentation. The clinical portfolio and Helps notebook is also included in this portion of the clinic grading.

Clinical Grade:

Summer/Junior  
Fall/Spring Senior

Monthly Evaluation 60%  
Clinical Competencies 25%

Skills Assessment 10%  
Technical Questions/Assignments, Portfolio, Helps  
Notebook 5%



# CLINIC EXPECTATIONS PER SEMESTER

These expectations only pertain to the clinical competency aspect of the program. Refer to the Clinic and Student Guidelines Manual regarding any further guidelines such as attendance, dress code or conduct.

## • Spring-Junior (First Year)

- Complete VERT Laboratory Assignments/Skills Assessments
- Introduction into clinic
- Complete all patient care competencies
- Complete **7** clinical case studies (at least **4** to be turned in before Spring Break)
- Linear accelerator and CT sim introductions
  - Observe CT warmup and complete competency
  - Learn room layout
  - Flow of clinic
  - Machine functions
  - Setup for patients
  - Patient interaction
  - Clinic proficiency objectives (refer to Clinic Manual)

## • Summer – Junior (First Year)

- By the first Friday of each rotation the clinical coordinator **MUST** receive a list in writing (email) of three patients the student could possible comp during the rotation
- **CT sim rotation**
  - Complete **ALL** phantom competencies if necessary
  - Complete CT warmup competency if not previously completed
  - Complete a **minimum** of **1** pt competency
- **Linear Accelerator rotation**
  - Complete at least **8** treatment delivery competencies
  - Complete at least **2** Repeat Competencies
  - Complete a machine warmup competency on last linac rotation
- **Clinical Proficiencies** – must be completed to start next semester

## • Fall-Senior (2<sup>nd</sup> Year)

- By the first Friday of each rotation the clinical coordinator **MUST** receive a list in writing of three patients the student could possible comp during the rotation
- **CT sim rotation**
  - Preferred - complete **ALL** CT competencies
  - Complete at least 1 CT Sim Repeat competency
- **Linear Accelerator rotation**
  - Complete **at least 20 total** (summer and fall) Linac Tx Competencies and, 5 Repeat Competencies
  - Finish machine warmup competencies
  - Run the treatment machine console (must run console on comps if WU comped)
  -

- **Physics rotation**
  - Complete physics competency
  - Complete physics paper and physics presentation
  - Complete engineering competency and block/bolus fabrication competency
  - Rotate on machine when available during physics rotation
- **Clinical Proficiencies** – must be completed to start next semester

### **Spring-Senior (2<sup>nd</sup> Year)**

- By the first Friday of each rotation the clinical coordinator **MUST** receive a list in writing of three patients the student could possibly complete during the rotation
- **Dosimetry/Physics**
  - Finish any block/bolus and engineering/physics competencies
- **Linear accelerator**
  - Complete New Start Competency
  - Finish all remaining Tx competencies
  - Complete 6 Repeat Competencies
- **Clinical Proficiencies** – must be completed to graduate
- Finish any remaining competencies for all rotations
- REPEAT any 2 CT simulation competencies

\*\*\*A clinic portfolio is required throughout the clinical education. The portfolio is to be kept by the student and should be a hard bound 3 ring binder that should include: a master list of all competencies and dates of when completed, copies of all graded competencies and all the patient information needed for the competency (i.e. pt. info sheet, mock treatment chart and field localization worksheet). The folder **MUST** be brought to the student's meeting following each rotation.

\*\*\*\*It is the student's responsibility to complete clinical instructor and supervisor evaluations within a week of the end of the rotation.

**Clinical Proficiency Objectives  
Junior (First Year) -Fall Semester**

This laboratory is designed to introduce the student to the radiation therapy treatment room, hand pendant, table operation and the rationale behind basic patient positioning. The student will also locate room supplies and be able to use treatment accessories such as cones and wedges.

At the end of the Fall semester you must be able to:

- \_\_\_ Locate the linens, masks, vac bags and bolus
- \_\_\_ Locate the sharps container, gloves and cleaning supplies
- \_\_\_ Locate headrests, wingboards and breastboards
- \_\_\_ Locate all emergency offs
- \_\_\_ Locate the oxygen and suction
- \_\_\_ Use the hand pendant to rotate the gantry and collimator
- \_\_\_ Move the table in all directions using the table controls and hand pendant
- \_\_\_ Define the manufacturer of the machine and identify major components
- \_\_\_ Attach the accessory mount
- \_\_\_ Attach an electron cone to the gantry
- \_\_\_ Level a patient using a three-point setup
- \_\_\_ Locate and explain the lasers

**STUDENTS MUST BE ABLE TO COMPLETE THESE GOALS IN ORDER TO PROGRESS TO THE NEXT SEMESTER.**

Comments: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Student

Signature \_\_\_\_\_ Date \_\_\_\_\_  
PD/CC/CS/Therapist

**Clinical Proficiency Objectives  
Junior (First Year) Spring Semester**

**At the end of the Spring semester the student must be able to complete the following to progress in the program:**

- \_\_\_ Competent use of the hand pendant and table controls
- \_\_\_ Use the pendant to move to controls simultaneously ie. Gantry and collimator
- \_\_\_ Locate and identify the lasers (side, sagittal, ceiling, backpointer)
- \_\_\_ Describe a physical and inherent/dynamic wedge
- \_\_\_ Level a patient using a three point setup efficiently
- \_\_\_ Locate the patient setup instructions
- \_\_\_ Setup the room according to the patient setup instructions
- \_\_\_ Set treatment parameters using the hand pendant only, i.e. field size, collimator rotation, gantry angle
- \_\_\_ Explain the rationale of tattooing and reference marks
- \_\_\_ Explain why certain treatment devices are used i.e. mask, breastboard, belly board, pullstraps etc...
- \_\_\_ Explain the use of bolus
- \_\_\_ Set up a lung, a pelvis and a whole brain
- \_\_\_ Set up an electron treatment
- \_\_\_ Locate the treatment plan in the patient chart
- \_\_\_ Locate the prescription in the patient chart
- \_\_\_ Identify plan vs. actual on Electronic Record and Verify System
- \_\_\_ Locate the physics check in the patient chart
- \_\_\_ Locate and identify proper approval ie. Signatures for the treatment plan, prescription and physics check
- \_\_\_ Locate the images and identify approval
- \_\_\_ Identify when a weekly image is needed by viewing the treatment chart
- \_\_\_ Retrieve patient information from Departmental/Hospital Chart
- \_\_\_ Complete the patient information sheet and case studies
- \_\_\_ Recite normal blood counts

**STUDENTS MUST BE ABLE TO COMPLETE THESE GOALS IN ORDER TO PROGRESS TO THE NEXT SEMESTER.**

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Student Signature: \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_  
PD/CC/CS/Therapist

**Clinical Proficiency Objectives  
Junior (First Year) Summer Semester**

**At the end of the Summer semester the student must be able to complete the following:**

- \_\_\_ Proficient use of the hand pendant and table controls
- \_\_\_ Use the pendant to move controls simultaneously ie. Gantry and collimator Efficiently, raise and load table
- \_\_\_ Level a patient using a three point setup efficiently with hand pendant and patient manipulation
- \_\_\_ Setup the room according to the patient setup instructions
- \_\_\_ Set treatment parameters using the hand pendant only, i.e. field size, collimator rotation, gantry angle
- \_\_\_ Explain why certain treatment devices are used i.e. mask, breast board, belly board, pullstraps etc...
- \_\_\_ Explain the use of bolus
- \_\_\_ Setup an AP/PA or IMRT lung, a 4-field or IMRT pelvis and a whole brain efficiently
- \_\_\_ Setup an electron treatment efficiently
- \_\_\_ Move the patient efficiently during setup
- \_\_\_ Communicate effectively with the patient
- \_\_\_ Identify when a verification image is due and if the patient needs to be seen by nursing or doctors
- \_\_\_ Locate and identify proper approval ie. Signatures for the treatment plan, prescription and physics check
- \_\_\_ Recite all TD 5/5's
- \_\_\_ Define field borders
- \_\_\_ Perform a machine warmup (with PD/CC and CS approval)
- \_\_\_ Explain use of OBI matching and proper anatomical landmarks/fiducials
- \_\_\_ Perform at least 1 Simulation competency
- \_\_\_ Perform at least 8 TX Delivery total competencies
- \_\_\_ Perform 2 REPEAT Competencies
- \_\_\_ Perform and comp a linac warmup if approved

**STUDENTS MUST BE ABLE TO COMPLETE THESE GOALS IN ORDER TO PROGRESS TO THE NEXT SEMESTER.**

Comments: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Student

Signature \_\_\_\_\_ Date \_\_\_\_\_  
PD/CC/CS/Therapist

**Clinical Proficiency Objectives  
Fall (Second Year) Senior Semester**

**At the end of the Fall semester the student must be able to complete the following:**

- \_\_\_ Apply all objectives from RTT 391 and RTT 392
- \_\_\_ Perform and comp a linc warmup if not completed in Summer
- \_\_\_ Preferred: Complete all CT simulation competencies
- \_\_\_ Perform OBI Image matching with assistance
- \_\_\_ Run the treatment console
- \_\_\_ Perform basic and advanced competencies
- \_\_\_ Communicate effectively with the patient
- \_\_\_ Attend weekly chart rounds during physics rotation
- \_\_\_ Apply dosimetry and physics principles in the clinic
- \_\_\_ Learn medical physics procedures for chart checks
- \_\_\_ Observe Advanced Modality procedures
- \_\_\_ Observe Brachytherapy procedures
- \_\_\_ Perform at least 20 TX Delivery total competencies (Summer and Fall combined)
- \_\_\_ Perform 5 REPEAT Competencies
- \_\_\_ Complete at least 1 CT Sim REPEAT Competency

**STUDENTS MUST BE ABLE TO COMPLETE THESE GOALS IN ORDER TO PROGRESS TO THE NEXT SEMESTER.**

Comments: \_\_\_\_\_

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Signature \_\_\_\_\_ Date \_\_\_\_\_  
Student

Signature \_\_\_\_\_ Date \_\_\_\_\_  
PD/CC/CS/Therapist

**Clinical Proficiency Objectives  
Spring Senior (Second Year) Semester**

**At the end of the Spring semester the student must be able to complete the following:**

- \_\_\_ Apply all objectives from RTT 391, 392 and 491
- \_\_\_ Complete simulation competencies
- \_\_\_ Run the treatment console
- \_\_\_ Perform basic and advanced competencies
- \_\_\_ Communicate effectively with the patient
- \_\_\_ Complete all clinical competencies
- \_\_\_ Perform OBI Image matching independently
- \_\_\_ Improve speed, accuracy and precision in patient set ups
- \_\_\_ Apply Principle and Practices I and II knowledge to clinical set ups
- \_\_\_ Apply dosimetry and physics principles in the clinic
- \_\_\_ Participate in Advanced Modality procedures
- \_\_\_ Complete a radiation therapy project
- \_\_\_ Perform 6 REPEAT Competencies
- \_\_\_ REPEAT any 2 CT Sim competencies

**STUDENTS MUST BE ABLE TO COMPLETE THESE GOALS IN ORDER TO GRADUATE.**

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Student

Signature \_\_\_\_\_ Date \_\_\_\_\_  
PD/CC/CS/Therapist

**BU Radiation Therapy Program**  
**Student Responsibilities – Clinical Competencies**

1. Each student must complete all mandatory treatment competencies, repeat, challenge and 2 elective treatment competencies.
2. Students must complete the minimum number of treatment delivery, simulation, challenge and repeat competencies as listed on each semesters' clinical proficiencies goals. **No** patient information sheets are required for **challenge or repeat** competencies.
3. The patient information form, treatment page and simulation page **MUST** be filled out and signed by the program director or clinical coordinator **at least 24 hrs** before the linac competency is to be performed. Competencies completed without clinical paperwork signed by the program director or clinical coordinator as specified above, will **ONLY** be allowed at the discretion of the PD or CC and may have to be repeated.
4. Most of the basic competencies should be completed before a student attempts to perform advance knowledge competencies.

5. Students are responsible for the following when they do a competency:

**For Linac Competencies**

- Data contained in the “**Patient Information**” sheet
- Data must be filled in on the “**Mock Treatment Chart**”
- All questions on the blue clinical competency sheet

**For Warm Up Competencies**

- All questions on the pink competency sheet
- How to flip the circuit breaker on each machine
- Location of fire extinguishers, pull alarm stations and evacuation routes

**For Simulation Competencies**

- All questions on the orange competency sheet

**For Physics Rotation**

- Physics competency sheet must be signed and turned in along with a physics paper and presentation within a week of completing the rotation
- Engineering competency and block fabrication must be completed during the rotation

6. Students should not start a competency before the therapist has arrived.
7. The room should be **COMPLETELY** ready before the patient is brought in.
8. If the student is not running the console, they must still watch the therapist and be able to explain which parameters should be entered on the console, MU's, field size, gantry/collimator rotation, etc.
9. All treatment delivery competencies must be passed within three attempts.



10. All graded competencies must be turned in to the clinical coordinator/program director within one week or they will not be accepted.

11. No more than 5 competency failures may occur during the student's academic enrollment. (Challenge/Repeat Competencies excluded from this total).

12. A clinical portfolio is to be kept by the student. The portfolio is required to be brought to each monthly student meeting. The portfolio **MUST** be a hard bound 3 ring binder. The clinical portfolio will include:

- a master list of all comps completed with dates
- copies of all graded competencies with all the patient information paperwork needed for the competency
- daily clinical journal with self assessment

13. Each student will have a "Helps" notebook for reviewing of information for the board examination. The student will identify the 15 most important aspects from each didactic course and place these items in the notebook for review. This notebook must be with the student at all times during clinicals and didactic classes.

14. All paperwork related to completing a clinical treatment competency, patient info sheet, treatment page, simulation/isocenter page, should be completed as homework and **NOT** in the clinic during patient care/treatment/simulation activities. Students gather information during lunch, during breaks in patient care activities, before or after clinicals.

## BU Radiation Therapy Program Treatment Delivery Competencies

	Mandatory	Elective	Date	Patient or Simulated	Evaluator Initials	Grade
<b>Brain</b>						
Whole Brain (Metastatic)	√					
Partial Brain (Primary)	√					
<b>Head and Neck</b>						
Multi-field *	√					
Boost		√				
Mixed Beam (same TV)		√				
Multi-Field w/ Supraclav*	√					
Laterals only		√				
<b>Thorax</b>						
Multi-Field Lung non IMRT	√					
IMRT Lung	√					
Off-Cord *		√				
Laterals		√				
Esophagus		√				
<b>Breast</b>						
Tangents Only	√					
Tangents with Supraclav	√					
Special setup: e- boost, prone, IMRT, gating	√					
Tangents with Supraclav & Post Axilla	√					
Boost (photons)		√				
Dual Energy Breast		√				
<b>Abdomen</b>						
Multiple Field Abdomen non IMRT		√				
IMRT Abdomen	√					
Boost		√				
Para-aortics		√				
<b>Pelvis</b>						
Multi-Field Prone *	√					
Multi-Field Supine *	Prostate	√				
	Other (GYN, Rectum, etc)	√				
Boost		√				
Bladder *		√				

\* Multiple Fields may Include Conventional, 3D, IMRT, or VMAT

**BU Radiation Therapy Program  
Treatment Delivery Competencies**

	Mandatory	Elective	Date	Patient or Simulated	Evaluator Initials	Grade
<b><i>Skeletal</i></b>						
Extremity	√					
Single Field Spine		√				
Multi-Field Spine	√					
Pelvis		√				
<b><i>Electron Fields</i></b>						
Single	√					
<b><i>Abutting Fields</i></b>						
Electron or Photon	√					
<b><i>Endocrine</i></b>						
Pituitary		√				
Adrenal		√				
Thyroid		√				
<b><i>SBRT/SABR/SRS</i></b>						
Primary or Metastatic	√					
<b><i>Participatory Procedures</i></b>						
Total Body Irradiation (TBI)	√					
Craniospinal Axis	√					
<b><i>Lymphoreticular</i></b>						
Primary		√				
Boost		√				
<b><i>New Patient</i></b>						
New Start Competency	√					

BU Radiation Therapy Program

REPEAT LINAC COMPETENCIES

Procedure	Repeat	Date	Grade	Therapist

**BU Radiation Therapy Program  
Simulation Competencies**

Procedure	Date	Grade	Therapist
Lung			
Head and Neck			
Brain			
Pelvis			
Breast			
Skeletal (extremity or hip)			
Gastrointestinal/Abdomen			
Special Procedure Mask (SRS, etc)			
<b>PARTICIPATORY</b> : Special Treatment Simulation Procedure (e.g., 4D CT, SBRT, Gating, or Brachytherapy)			

**Repeat Sim Comps at the discretion of PD/CC/CS. No more than 3 per semester, must be 3 different sites.**

**Simulation Repeat Competencies**

Procedure	Date			Grade			Therapist		
Lung									
Head and Neck									
Brain									
Pelvis									
Breast									
Skeletal (extremity or hip)									
GI/Abdomen									

**ALL SIMULATION PROCEDURES MUST BE PERFORMED ON PATIENTS**

**BU Radiation Therapy Program**  
**Warm Up Competencies**

Facility/Machine	Date	Grade	Verified By

THE WARM UP COMPETENCY MUST BE COMPLETED BEFORE A STUDENT CAN RUN  
THE CONSOLE FOR THAT MACHINE

**BU RADIATION THERAPY PROGRAM  
Clinical Competencies**

**General Patient Care**

<b>Procedure</b>	<b>Date</b>	<b>Verify By</b>
CPR		
Vitals Signs (BP,pulse, respiration, temp)		
Oxygen Administration		
Venipuncture		
Patient Transfer		
Brachytherapy Participatory Comp		

**Dosimetry**

<b>Calculation</b>	<b>Date</b>	<b>Verified By</b>
Single Open Field		
Parallel Opposed Fields with Shaping		
Geometric Gap		
Weighted Fields		
Wegded Fields		
Computer Generated Isodose Plan		
Electron Field		

**Treatment Accessory Devices**

<b>Beam Modification Devices</b>	<b>Date</b>	<b>Verified By</b>
Custom Block (electron)		
Bolus		
Custom Immobilization Device (thorax/abd/pelvis)		
Mask		

**Physics**

<b>Procedure</b>	<b>Date</b>	<b>Verified By</b>
Physics		
Engineering		

**Quality Control Procedures**

<b>Procedure</b>	<b>Date</b>	<b>Verified By</b>
Linac Laser Alignment, Output and Symmetry, Imaging		
Simulator Laser Alignment, QC Water Phantom		

## BU Radiation Therapy Program Treatment Machine Warm-Up Competency

Name \_\_\_\_\_

Date \_\_\_\_\_

Clinical Site and Linac \_\_\_\_\_

### Objective

Describe the treatment machine components, its accessories and perform morning warm-up and QA procedures.

### Grading Scale

- 9 – 10 Thorough grasp of procedure, has good problem solving skills
- 7 – 8 Can perform skill without assistance, god knowledge of basic principles
- 4 – 6 Knows only routine procedure, needs assistance, little problem solving skills
- 1 – 3 Very little knowledge, needs considerable assistance
- 0 Did not perform skill, automatic failure

Objective	Grade
<b>1. Identification</b> Manufacturer's Name Model List beam energies photon and electron Describe imaging capabilities	
<b>2. Definitions</b> Describe Dmax Define SAD Define and explain C <sub>tp</sub> correction Define SSD	
<b>3. Treatment Machine Console</b> Locate on/standby switch Describe the difference between selections in the MAJOR MODE screen Locate circuit breaker and know how to use Locate emergency off switches	
<b>4. Warm Up Procedure (in room)</b> Alignment jig is properly placed on table Check field size and ODI Checked all lasers, S.L., ceiling, sagittal, backpointer Checked gantry and CR coincide with jig Checked all mechanical and digital readouts Checked table height Properly sets up QA devices (output and OBI)	
<b>5. QA/Output Devices</b> Properly placed daily QA/Output device on table Understands importance of QA/Output device cord care Explains basic function and position of sensors on QA/Output device Checked all fluid levels, gas pressure and temperature	
<b>6. Warm Up Procedure (console)</b> Turned on computers and MLC in correct order Properly warms up OBI (CBCT, kV, etc) Properly selected beam energies Properly recorded, downloaded and saved output readings Knows acceptable limits, when to inform physics and when to not treat	



**BU Radiation Therapy Program  
Linac Warm Up Competency  
Continued**

<p><b>7. Warm Up Procedure (console)</b>          Checked door interlock          Checked audio and visual monitors          Properly calculated Ctp correction          Checked battery back up counter          Demonstrated use of MLC</p>	
<p><b>8. Treatment Room Details</b>          Checked room cleanliness          Checked supplies          Checked treatment accessories</p>	
<p><b>9. Student Behavior</b>          The student performed quickly and skillfully (9 – 10)          The student performed skillfully (7 – 8)          The student performed slowly but with precision (5 – 6)          The student was awkward but still performed with adequate competency (4)          The student lacked attention to detail (0 – 3)</p>	
<p><b>10. Student Comprehension</b>          The student's comprehension level exceeded what was needed (9 – 10)          Basic and advanced concepts were well understood (7 – 8)          Basic knowledge was demonstrated with an above average comprehension (6)          The warm up was completed with adequate knowledge (4 – 5)          Understanding was limited and the student required assistance on several occasions (2 – 3)          The student possessed inadequate knowledge of morning warm up, the competency is failed</p>	
<b>Total</b>	

**Student Signature** \_\_\_\_\_

**Evaluator Signature** \_\_\_\_\_

**Comments**

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**BU Radiation Therapy Program  
CT Simulation Warm-Up  
Equipment, Accessories and Procedures**

Student \_\_\_\_\_

Date \_\_\_\_\_

**Objective**

The student will be able to explain and describe the CT simulator, its accessories and supplies needed for the various simulation procedures.

<b>Grading Scale</b>	9 – 10 Thorough grasp of procedure, has good problem solving skills
	7 – 8 Can perform skill without assistance, good knowledge of basic principles
	4 – 6 Knows only routine procedure, needs assistance, little problem solving skills
	1 – 3 Very little knowledge, needs considerable assistance
	0 Did not perform skill, automatic failure

Objectives	Grade
<b>1. Machine Description</b> Identify the manufacturer Describe radiation produced Locate on/off switch Locate emergency off Locate circuit breaker Locate door safety interlock	
<b>2. Definitions</b> SSD/TSD SAD/TAD Isocenter Midplane Midline Contour Sagittal laser Ceiling laser	
<b>3. Contrast Media</b> List types Contraindications Sterile vs. non-sterile procedures	
<b>4. Injector</b> Identify components of injector Describe injector console and operation Explain venipuncture	

<b>5. Demonstrates Use of :</b> Sponges Pillows Thermoplastic masks and head holder Breast board Stereotactic Body Frame IMRT board Vac loc bags Use of table	<b>Grade</b>
<b>6. Properly runs CT</b> Warm up procedures properly followed per clinical site Performed multiple QA exams Correctly verified QA results	
<b>7. Charting Procedures</b> Describe process for scheduling a CT Demonstrate how to check pt information in paper/electronic chart for simulation	
<b>8. Machine Warm-Up</b> Warm –up (tube) Explain calibration Describe CT console Demonstrate use and QA of internal lasers Demonstrate use and QA of external lasers	
<b>9. Phantoms</b> Water phantom correctly placed on table Water phantom correctly lined up to lasers Laser phantom placed on table correctly Isocenter properly placed on phantom and checked with LAP lasers	
<b>10. Room Supplies</b> Contrast stocked and current Sheets and gowns available Radio-opaque fiducial markers Room clean and ready	
<b>Total</b>	

Grade \_\_\_\_\_

Student Signature \_\_\_\_\_

Evaluator \_\_\_\_\_

Comments \_\_\_\_\_

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## BU Radiation Therapy Program Tomotherapy Warm-Up Competency

Name \_\_\_\_\_  
Date \_\_\_\_\_

### Objective

Describe the treatment machine components, its accessories and perform morning warm-up and QA procedures.

### Grading Scale

9 – 10 Thorough grasp of procedure, has good problem solving skills  
 7 – 8 Can perform skill without assistance, good knowledge of basic principles  
 4 – 6 Knows only routine procedure, needs assistance, little problem solving skills  
 1 – 3 Very little knowledge, needs considerable assistance  
 0 Did not perform skill, automatic failure

Objective	Grade
<b>1. Identification</b> Manufacturer's Name Model List beam energy for treatment and imaging Describe imaging capabilities	
<b>2. Definitions</b> Describe helical vs. axial Define HOME, PLANNED and REGISTERED laser positions Explain water temp required for beam on Explain how to enter shifts without scanning pt. first	
<b>3. Treatment Machine Console</b> Locate key switch, explain each key position Login to Tomotherapy computer and software properly Select correct data to display during tx (ambient and return temps) Locate emergency off switches	
<b>4. Warm Up Procedure (in room)</b> Locate circuit breaker and key, know how to use Tomodose detector properly placed on table, proper height and laser alignment Locate air pressure valve, supplemental A/C unit Turn on green laser, verify alignment with sagittal laser Verified correct laser shift when appropriate Properly place solid water on detector Properly send table into gantry to begin procedure	
<b>5. QA Devices</b> Properly placed daily QA device on table Understands importance of QA device cord care Explains basic function and position of sensors on QA device Checked all gas pressures and temperatures	
<b>6. Warm Up Procedure (console)</b> Turned on Tomodose program and Tomotherapy beam in correct order Open procedures in proper sequence for warm up Select proper setting for Automatic Registration Control Properly recorded, downloaded and saved output readings Knows acceptable limits, when to inform physics and when to not treat	

**BU Radiation Therapy Program  
Tomotherapy Warm Up Competency  
Continued**

<p><b>7. Warm Up Procedure (console)</b>          Select appropriate TABS as needed (scan, calibrate, treat)          Checked audio and visual monitors          Properly align images and understand variance limits          Explain temp limits for return water and ambient air          Changed DATA tape</p>	
<p><b>8. Treatment Room Details</b>          Checked room cleanliness          Checked supplies          Checked treatment accessories</p>	
<p><b>9. Student Behavior</b>          The student performed quickly and skillfully (9 – 10)          The student performed skillfully (7 – 8)          The student performed slowly but with precision (5 – 6)          The student was awkward but still performed with adequate competency (4)          The student lacked attention to detail (0 – 3)</p>	
<p><b>10. Student Comprehension</b>          The student’s comprehension level exceeded what was needed (9 – 10)          Basic and advanced concepts were well understood (7 – 8)          Basic knowledge was demonstrated with an above average comprehension (6)          The warm up was completed with adequate knowledge (4 – 5)          Understanding was limited and the student required assistance on several occasions (2 – 3)          The student possessed inadequate knowledge of morning warm up, the competency is failed</p>	
<b>Total</b>	

**Student Signature** \_\_\_\_\_

**Evaluator Signature** \_\_\_\_\_

**Comments** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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## BU Radiation Therapy Program Halcyon Warm-Up Competency

Name \_\_\_\_\_  
Date \_\_\_\_\_

**Objective**

Describe the treatment machine components, its accessories and perform morning warm-up and QA procedures.

<b>Grading Scale</b>	9 – 10 Thorough grasp of procedure, has good problem solving skills 7 – 8 Can perform skill without assistance, good knowledge of basic principles 4 – 6 Knows only routine procedure, needs assistance, little problem solving skills 1 – 3 Very little knowledge, needs considerable assistance 0 Did not perform skill, automatic failure
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Objective	Grade
<b>1. Identification</b> Manufacturer's Name Model List beam energy for treatment and imaging Describe imaging capabilities	
<b>2. Definitions</b> Describe helical vs. axial Define laser positions Defines Align, Motion Control, Load, Unload	
<b>3. Treatment Machine Console</b> Login to Halcyon computer and software properly Locate emergency off switches	
<b>4. Warm Up Procedure (in room)</b> Locate circuit breaker and key, know how to use Locate emergency off's Properly send table into gantry to begin procedure Paper work printed and prepared	
<b>5. QA Devices</b> Properly placed daily QA device on table Understands importance of QA device cord care Explains basic function and position of sensors on QA device	
<b>6. Warm Up Procedure (console)</b> Open procedures in proper sequence for warm up Properly recorded, downloaded and saved output readings Knows who to contact if QA fails	

**BU Radiation Therapy Program  
Tomotherapy Warm Up Competency  
Continued**

<b>7. Warm Up Procedure (console)</b> Checked audio and visual monitors Properly align images and understand variance limits Properly selects PREVIEW – PREPARE – READY – BEAM ON	
<b>8. Treatment Room Details</b> Checked room cleanliness Checked supplies Checked treatment accessories	
<b>9. Student Behavior</b> The student performed quickly and skillfully (9 – 10) The student performed skillfully (7 – 8) The student performed slowly but with precision (5 – 6) The student was awkward but still performed with adequate competency (4) The student lacked attention to detail (0 – 3)	
<b>10. Student Comprehension</b> The student’s comprehension level exceeded what was needed (9 – 10) Basic and advanced concepts were well understood (7 – 8) Basic knowledge was demonstrated with an above average comprehension (6) The warm up was completed with adequate knowledge (4 – 5) Understanding was limited and the student required assistance on several occasions (2 – 3) The student possessed inadequate knowledge of morning warm up, the competency is failed	
<b>Total</b>	

**Student Signature** \_\_\_\_\_

**Evaluator Signature** \_\_\_\_\_

**Comments** \_\_\_\_\_

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## BU Radiation Therapy Program Treatment Delivery Competency

Student \_\_\_\_\_ Evaluator \_\_\_\_\_ Date \_\_\_\_

Procedure \_\_\_\_\_ Pt. # \_\_\_\_\_

<b>Grading Scale</b>	9 – 10 Thorough grasp of procedure, has good problem solving skills 7 – 8 Can perform skill without assistance, good knowledge of basic principles 4 – 6 Knows only routine procedure, needs assistance, little problem solving skills 1 – 3 Very little knowledge, needs considerable assistance 0 Did not perform skill, automatic failure
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<b>1. Chart Interpretation</b> States patient's name, sex and age. Identifies tumor type and site. State the treatment prescription and intent of the treatment.	
<b>2. General Clinical Oncology</b> Describe tumor stage and grade including histology. State nodal groups and drainage routes from site. Describe various treatment options that might be available to this particular case. Describe both acute and chronic side effects of treatment and possible complications.	
<b>3. Preparedness</b> Reviewed treatment chart prior to patient entering the room. Treatment room prepared before patient enters the room, table, immobilization devices, accessories are ready. Images checked, if necessary.	
<b>4. Patient Care</b> Confirm patient's ID by wristband, photo and questioning. Introduced self and explained procedure to patient. Transferred patient safely to treatment table. Evaluated patient (does pt need to see radiation oncologist before tx, is patient stable, etc). Attends to patient's comfort and modesty. Answers questions within the radiation therapist's scope of practice; educates patient when needed.	
<b>5. Patient Positioning and Set-Up</b> Verified which fields are to be treated in the chart. Positions patient according to set-up instructions. Uses proper immobilization. Checks for rotation using lasers. Utilizes field light, lasers and ODI for correct alignment. Remarks patient when necessary.	
<b>6. Machine Parameters</b> Instructs patient to remain still. Sets correct field size. Appropriate field shaping used or selected. Sets correct machine parameters: SSD, gantry and collimator angles, table and floor angles. Correct accessory equipment used: bolus, wedges, cones, etc. Rechecks set-up with instructions in chart.	



**BU Radiation Therapy Program  
Treatment Delivery Competency**

<p><b>7. Treatment Machine Console</b>          Properly sets controls for the correct modality (photons, electrons), energy, MU's.          Properly selects correct wedge and orientation.          Correctly uses OBI when necessary (tumor localization, acquisition and registration).          Verifies treatment console settings.          TV monitor and audio surveyed throughout treatment.          Monitors patient and/or equipment.</p>	
<p><b>8. Documentation</b>          Correctly records MU's, daily dose and cumulative dose.          Correctly records date, time (if necessary), day of week, number of treatments and elapsed days.          Checks to see if weekly verification images needed or if patient needs to visit clinic.          States basic billing codes according to knowledge level.</p>	
<p><b>9. Image Review</b>          Identify field borders.          Identify critical structures, their current doses and their TD5/5's.          Delineates gross tumor volume and planning treatment volume.          Identify field of view.</p>	
<p><b>10. Student Behavior</b>          The student performed quickly and skillfully.          The student performed skillfully.          The student performed slowly but with precision.          The student was awkward but still performed an adequate competency.          The student lacked attention to detail.</p>	
<p><b>Student Comprehension (Select one)</b>          _____ The student's comprehension level exceeded what was needed for this set-up. Basic and advanced concepts were well understood.          _____ Basic knowledge of the set-up was demonstrated with an above average comprehension.          _____ The set-up was completed with adequate knowledge.          _____ Understanding was limited and the student required assistance on several occasions.          _____ The student possessed inadequate knowledge to complete this set-up. The competency is failed.</p>	<b>X</b>
<p><b>Comments:</b>          _____          _____          _____          _____</p> <p><b>Percentage</b> _____                      <b>Grade</b> _____</p> <p><b>Student Signature</b>          _____</p> <p><b>Evaluator</b>          _____</p> <p>ANY ACTION WHICH RESULTS IN A RADIATION TREATMENT ERROR IS AN AUTOMATIC FAILURE.</p> <p>Maximum Score For Second or More Attempt is 90%</p>	

## BU Radiation Therapy Program Treatment Delivery REPEAT Competency

Student \_\_\_\_\_ Evaluator \_\_\_\_\_ Date \_\_\_\_\_

Procedure \_\_\_\_\_ Pt. # \_\_\_\_\_

<b>Grading Scale</b>	9 – 10	Thorough grasp of procedure, has good problem solving skills
	7 – 8	Can perform skill without assistance, good knowledge of basic principles
	4 – 6	Knows only routine procedure, needs assistance, little problem solving skills
	1 – 3	Very little knowledge, needs considerable assistance
	0	Did not perform skill, automatic failure

<p><b>1. Chart Interpretation</b> States patient's name, sex and age. Identifies tumor type and site. State the treatment prescription and intent of the treatment.</p>	
<p><b>2. General Clinical Oncology</b> Describe tumor stage and grade including histology. State nodal groups and drainage routes from site. Describe various treatment options that might be available to this particular case. Describe both acute and chronic side effects of treatment and possible complications.</p>	
<p><b>3. Preparedness</b> Reviewed treatment chart prior to patient entering the room. Treatment room prepared before patient enters the room, table, immobilization devices, accessories are ready. Images checked, if necessary.</p>	
<p><b>4. Patient Care</b> Confirm patient's ID by wristband, photo and questioning. Introduced self and explained procedure to patient. Transferred patient safely to treatment table. Evaluated patient (does pt need to see radiation oncologist before tx, is patient stable, etc). Attends to patient's comfort and modesty. Answers questions within the radiation therapist's scope of practice; educates patient when needed.</p>	
<p><b>5. Patient Positioning and Set-Up</b> Verified which fields are to be treated in the chart. Positions patient according to set-up instructions. Uses proper immobilization. Checks for rotation using lasers. Utilizes field light, lasers and ODI for correct alignment. Remarks patient when necessary.</p>	
<p><b>6. Machine Parameters</b> Instructs patient to remain still. Sets correct field size. Appropriate field shaping used or selected. Sets correct machine parameters: SSD, gantry and collimator angles, table and floor angles. Correct accessory equipment used: bolus, wedges, cones, etc. Rechecks set-up with instructions in chart.</p>	

**BU Radiation Therapy Program  
Treatment Delivery REPEAT Competency**

<p><b>7. Treatment Machine Console</b>          Properly sets controls for the correct modality (photons, electrons), energy, MU's.          Properly selects correct wedge and orientation.          Correctly uses OBI when necessary (tumor localization, acquisition and registration).          Verifies treatment console settings.          TV monitor and audio surveyed throughout treatment.          Monitors patient and/or equipment.</p>	
<p><b>8. Image Review</b>          Identify field borders.          Identify critical structures, their current doses and their TD5/5's.          Delineates gross tumor volume and planning treatment volume.          Identify field of view.</p>	
<p><b>9. Student Behavior</b>          The student performed quickly and skillfully.          The student performed skillfully.          The student performed slowly but with precision.          The student was awkward but still performed an adequate competency.          The student lacked attention to detail.</p>	
<p><b>10. Student Comprehension</b>          The student's comprehension level exceeded what was needed for this set-up. Basic and advanced concepts were well understood.          Basic knowledge of the set-up was demonstrated with an above average comprehension.          The set-up was completed with adequate knowledge.          Understanding was limited and the student required assistance on several occasions.          The student possessed inadequate knowledge to complete this set-up. The competency is failed.</p>	
<p><b>Comments:</b></p> <hr/> <hr/> <hr/> <hr/> <hr/> <p><b>Percentage</b> _____                      <b>Grade</b> _____</p> <p><b>Student Signature</b></p> <hr/> <p><b>Evaluator</b></p> <hr/> <p>ANY ACTION WHICH RESULTS IN A RADIATION TREATMENT ERROR IS AN AUTOMATIC FAILURE.</p>	

**BU Radiation Therapy Program  
CT Simulation Competency**

**Student** \_\_\_\_\_ **Evaluator** \_\_\_\_\_

**Date** \_\_\_\_\_

**Procedure** \_\_\_\_\_ **Pt. #** \_\_\_\_\_

**Evaluation Scale**

- 9 – 10 Thorough grasp of procedure, has good problem solving skills
- 7 – 8 Can perform this skill without assistance, good knowledge of basic principles
- 4 – 6 Knows only routine procedure, needs assistance, little problem solving skills
- 1 – 3 Very little knowledge, needs considerable assistance
- 0 Cannot perform this skill, automatic failure

<p><b>1. Chart Completeness</b>          Checked for Simulation Note/CT Sim order in chart.          Properly pulled patient information from chart.          Checked consent form.</p>	
<p><b>2. Patient Care</b>          Introduced themselves to the patient and explained the procedure.          Identified patient by wristband and/or questioning.          Safely transferred patient from wheelchair or stretcher to table.          Ask patient to sign properly filled out consent form.          Take face photo, if necessary, and explain to the patient why it is being taken.</p>	
<p><b>3. Preparedness</b>          Check for contraindications or special instructions from the physician.          Room is prepared with all necessary supplies.          Attends to patient’s comfort and modesty.          Answers questions within the therapists’ scope of practice, educates patient.</p>	
<p><b>4. Positioning</b>          Positions patient correctly on the simulation table, prone, supine, etc.          Patient is checked for rotation and straightness.          Immobilization devices, facemasks, alpha cradle, etc., are correctly used.          Properly corrects any deviations in rotation and straightness.</p>	
<p><b>5. Scan Alignment</b>          Sets correct start and stop per physicians orders.          Places radio-opaque markers correctly.          Aligns patient with the external lasers and then internal lasers.          Zeros table and programs scout correctly.</p>	
<p><b>6. Equipment Usage</b>          Operates CT safely.          Operates table controls safely.          Checks for clearance patient during scanning.          Uses controls located on the CT gantry correctly.</p>	

**BU Radiation Therapy Program  
CT Simulation Competency**

<p><b>7. CT Console.</b> Sets appropriate controls on the console. Operates console efficiently. Patient is monitored visually during the simulation; equipment is monitored during procedure. Appropriate isocenter and/or fields aligned per physicians instructions. Correct imaging parameters used. Contours drawn, beams, blocks, etc. placed correctly and shifts made if necessary.</p>	
<p><b>8. Documentation</b> Correctly documents set-up instructions in chart. Takes photos of fields and set-up. Cleans room and prepares for next simulation.</p>	
<p><b>9. Post Simulation</b> Takes patient back to lobby or calls for transportation. Writes information on the board in dosimetry and/or the mold lab if necessary, makes sure scheduling is completed. Cleans room and prepares for next simulation. Transfers CT data to electronic chart and/or treatment planning.</p>	
<p><b>10. Student Comprehension</b> The student's comprehension level exceeded what was needed for this set-up. Basic and advanced concepts were well understood. Basic knowledge of the set-up was demonstrated with an above average comprehension. The set-up was completed with adequate knowledge. Understanding was limited and the student required assistance on several occasions. The student possessed inadequate knowledge to complete this set-up. The competency is failed.</p>	

**Student Behavior (Select as many that apply)**

- The student performed quickly and skillfully.
- The student performed skillfully.
- The student performed slowly but with precision.
- The student was awkward but still performed an adequate competency.
- The student lacked attention to detail.

Comments:

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Total Points \_\_\_\_\_ Percentage \_\_\_\_\_ Grade \_\_\_\_\_

Student Signature \_\_\_\_\_

ANY ACTION WHICH RESULTS IN A RADIATION TREATMENT ERROR IS AN AUTOMATIC FAILURE. For failed, competencies the highest achievable score is 90%

**BU Radiation Therapy Program  
REPEAT CT Simulation Competency**

**Student** \_\_\_\_\_ **Evaluator** \_\_\_\_\_ **Date** \_\_\_\_\_

**Procedure** \_\_\_\_\_ **Pt. #** \_\_\_\_\_

**Evaluation Scale**

- 9 – 10 Thorough grasp of procedure, has good problem solving skills
- 7 – 8 Can perform this skill without assistance, good knowledge of basic principles
- 4 – 6 Knows only routine procedure, needs assistance, little problem solving skills
- 1 – 3 Very little knowledge, needs considerable assistance
- 0 Cannot perform this skill, automatic failure

<p><b>1. Chart Completeness</b>            Checked for Simulation Note/CT Sim order in chart.            Properly pulled patient information from chart.            Checked consent form.</p>	
<p><b>2. Patient Care</b>            Introduced themselves to the patient and explained the procedure.            Identified patient by wristband and/or questioning.            Safely transferred patient from wheelchair or stretcher to table.            Ask patient to sign properly filled out consent form.            Take face photo, if necessary, and explain to the patient why it is being taken.</p>	
<p><b>3. Preparedness</b>            Check for contraindications or special instructions from the physician.            Room is prepared with all necessary supplies.            Attends to patient's comfort and modesty.            Answers questions within the therapists' scope of practice, educates patient.</p>	
<p><b>4. Positioning</b>            Positions patient correctly on the simulation table, prone, supine, etc.            Patient is checked for rotation and straightness.            Immobilization devices, facemasks, alpha cradle, etc., are correctly used.            Properly corrects any deviations in rotation and straightness.</p>	
<p><b>5. Scan Alignment</b>            Sets correct start and stop per physicians orders.            Places radio-opaque markers correctly.            Aligns patient with the external lasers and then internal lasers.            Zeros table and programs scout correctly.</p>	
<p><b>6. Equipment Usage</b>            Operates CT safely.            Operates table controls safely.            Checks for clearance patient during scanning.            Uses controls located on the CT gantry correctly.</p>	

**BU Radiation Therapy Program  
REPEAT CT Simulation Competency**

<p><b>7. CT Console.</b> Sets appropriate controls on the console. Operates console efficiently. Patient is monitored visually during the simulation; equipment is monitored during procedure. Appropriate isocenter and/or fields aligned per physicians instructions. Correct imaging parameters used. Contours drawn, beams, blocks, etc. placed correctly and shifts made if necessary.</p>	
<p><b>8. Documentation</b> Correctly documents set-up instructions in chart. Takes photos of fields and set-up. Cleans room and prepares for next simulation.</p>	
<p><b>9. Post Simulation</b> Takes patient back to lobby or calls for transportation. Writes information on the board in dosimetry and/or the mold lab if necessary, makes sure scheduling is completed. Cleans room and prepares for next simulation. Transfers CT data to electronic chart and/or treatment planning.</p>	
<p><b>10. Student Comprehension</b> The student's comprehension level exceeded what was needed for this set-up. Basic and advanced concepts were well understood. Basic knowledge of the set-up was demonstrated with an above average comprehension. The set-up was completed with adequate knowledge. Understanding was limited and the student required assistance on several occasions. The student possessed inadequate knowledge to complete this set-up. The competency is failed.</p>	

**Student Behavior (Select as many that apply)**

- The student performed quickly and skillfully.
- The student performed skillfully.
- The student performed slowly but with precision.
- The student was awkward but still performed an adequate competency.
- The student lacked attention to detail.

Comments:

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Total Points \_\_\_\_\_ Percentage \_\_\_\_\_ Grade \_\_\_\_\_

Student Signature \_\_\_\_\_

ANY ACTION WHICH RESULTS IN A RADIATION TREATMENT ERROR IS AN AUTOMATIC FAILURE. For 2<sup>nd</sup> attempt + competencies the highest achievable score is 90%

**BU Radiation Therapy Program  
New Patient Start Competency**

**Student** \_\_\_\_\_ **Evaluator** \_\_\_\_\_ **Date** \_\_\_\_\_

**Procedure** \_\_\_\_\_ **Patient #** \_\_\_\_\_

<b>Grading Scale</b>	9 – 10	Thorough grasp of procedure, has good problem solving skills
	7 – 8	Can perform skill without assistance, good knowledge of basic principles
	4 – 6	Knows only routine procedure, needs assistance, little problem solving skills
	1 – 3	Very little knowledge, needs considerable assistance
	0	Did not perform skill, automatic failure

<b>1. Chart Interpretation</b> - States patient's name, age and sex. - Identify tumor type and site. - State the treatment prescription and intent of treatment.	
<b>2. Patient Education</b> - Escorted patient to treatment room and explained filming procedure. - Introduced staff and oriented patient to treatment room. - Explained to patient during set-up what was happening (sights, sounds, machine noises, audio and visual monitoring, etc.)	
<b>3. Patient Care</b> - Confirmed patient's ID by wristband, photo and questioning. - Transferred patient safely to treatment table. - Evaluated patient's condition, notes any changes stated by patient. - Attends to patient's comfort and modesty. - Answers questions within the therapists scope of practice.	
<b>4. New Start Set-Up</b> - Verified which fields are to be treated in chart. - Displays simulation images. - Verified field shaping.	
<b>5. Patient Set-Up</b> - Position patient according to set-up instructions. - Uses proper immobilization. - Checks for rotation using lasers. - Utilizes field light, lasers, ODI, OBI for correct alignment. - Sets correct field size.	
<b>6. New Start Checks</b> - Instructs patient to remain still. - Appropriate field shaping used, compensator used with correct orientation. - Understands correct billing.	
<b>7. Machine Parameters</b> - Sets correct machine parameters: SSD, gantry and collimator angles, table/floor angles. - Correct accessory equipment used: wedges, bolus, other. - Rechecks set-up instructions. - Marks fields on patient if necessary.	



**BU Radiation Therapy Program  
New Start Competency**

<p><b>8. Image Review</b>          Checks images to make sure they correspond to simulation images.          Images are properly exposed.          Identifies anatomical landmarks.          Student can explain if the field shaping is acceptable or need modification.</p>	
<p><b>9. Treatment Machine Console</b>          Properly sets controls for the correct modality.          Verifies settings for exposure.          Checks all parameters – gantry, collimator, etc.          Monitors audio and visual throughout procedure.</p>	
<p><b>10. Documentation</b>          Double checks dosimetry information.          Properly documents information.          Schedules patient for daily treatment time .          Fills out daily appointment card and gives to patient.</p>	
<p><b>Student Comprehension</b> (select only one)          _____ The student’s comprehension level exceeded what was needed for this set-up. Basic and advanced concepts were well understood.          _____ Basic knowledge of the set-up was demonstrated with an above average comprehension.          _____ The set-up was completed with adequate knowledge.          _____ Understanding was limited and the student required assistance on several occasions.          _____ The student possessed inadequate knowledge to complete this set-up. The competency is failed.</p>	
<p><b>Student Behavior</b>          _____ The student performed quickly and skillfully.          _____ The student performed skillfully.          _____ The student performed slowly but with precision.          _____ The student was awkward but still performed an adequate competency.          _____ The student lacked attention to detail.</p>	
<p>Comments: _____ Grade _____</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>Student Signature _____</p>	
<p>Evaluator Signature _____</p>	
<p>ANY ACTION WHICH RESULTS IN A RADIATION TREATMENT ERROR IS AN AUTOMATIC FAILURE.          Maximum Score For Repeated failed Competency is 90%</p>	

**BU Radiation Therapy Program  
Monthly Evaluation**

**Student** \_\_\_\_\_ **Evaluation Period** \_\_\_\_\_

**Evaluator** \_\_\_\_\_ **Rotation (linac/sim) and Location** \_\_\_\_\_

Grading Scale	10	Perfect
	9	Above Average
	8	Average
	7	Below Average
	6	Unacceptable

	<b>Grade</b>
<b>1. Technical Knowledge</b> - knows fundamental principles of linac/simulation/dosimetry/physics equipment operation - understands treatment rationale - retention of didactic material and daily patient set-ups - challenge/repeat competency (linear accelerator/CT simulation)	
<b>2. Technical Accuracy</b> - consistently accurate with equipment (Linac, CT, physics, dosimetry) - consistently sets up patients accurately in treatment room and simulation	
<b>3. Consistency/Efficiency of Daily Technical Performance</b> - maintains a high consistency/efficiency in the performance of daily clinical tasks (treatment room, nursing, simulation, physics, dosimetry) - consistently sets up ALL patients, not just competencies	
<b>4. Use and Care of the Equipment</b> - always aware of equipment performance - properly uses all equipment in the radiation oncology department	
<b>5. Initiative</b> - student uses “inactive” time well - takes advantage of learning opportunities - assist staff members and seeks responsible assignments - asks appropriate questions for clarification at appropriate times	
<b>6. Work Ethic</b> - enthusiastic, considerate, helpful - refers to reading material and other material for additional information - is on time at station and ready to work	
<b>7. Problem Solving/Critical Thinking</b> - shows ability to IDENTIFY, assess and propose solutions problems (proposals may be correct or incorrect but student must demonstrate the ability to attempt problem solving) - attempts logical solutions to problems	

**BU Radiation Therapy Program  
Monthly Evaluation**

	<b>Grade</b>
<b>8. Patient Interaction</b> - established rapport with patients and their families - introduced themselves to patients and addressed patients by their names - consistently asked patients for proper identification when necessary	
<b>9. Cooperation with Clinical Personnel</b> - accepted instructions, constructive criticism, correction, guidance and direction with a positive attitude AND incorporates them into daily practice - carried out instructions promptly, communicates with the treatment team effectively - cooperative and receptive	
<b>10. Conduct and Appearance</b> - demonstrates professional conduct and appearance - acts in a professional manner with facility personnel and patients - student reacts under stress in a mature and dependable manner	
<b>Total</b>	

Grade \_\_\_\_\_

Student Signature \_\_\_\_\_

Comments \_\_\_\_\_

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**BU Radiation Therapy Program**  
**Student Evaluation of Clinical Instructor/Supervisor**

**Student** \_\_\_\_\_ **Rotation/Date** \_\_\_\_\_

**Instructor/Supervisor** \_\_\_\_\_

This evaluation is for you, the student, to anonymously evaluate the therapist, physicist, dosimetrist or nurse you are assigned to during each clinical rotation. This information is useful to make changes for the advancement of our RTT program. We appreciate your input.

**KEY:** Always (5) Almost Always (4) Occasionally (3) Seldom (2) Never (1) explanation required

- \_\_\_ 1. The patient set-ups, procedures and treatments were explained to me.
- \_\_\_ 2. The instructor was patient with me.
- \_\_\_ 3. The instructor allowed me to assist with the patient set-ups and/or procedures.
- \_\_\_ 4. The therapist supervised the patient set-ups performed by me (linac, brachytherapy, simulation).
- \_\_\_ 5. The instructor was willing to answer my questions.
- \_\_\_ 6. The instructor acted professionally in dealing with patients and their families.
- \_\_\_ 7. The instructor related to patients in a way to promote confidence and understanding.
- \_\_\_ 8. The instructor related well to physicians and other staff members.
- \_\_\_ 9. The instructor maintained their composure when under stress, reacting in a mature and dependable manner.
- \_\_\_ 10. The instructor's appearance was professional.
- \_\_\_ 11. The instructor included the student as part of the "treatment team".
- \_\_\_ 12. I saw a variety of patient set-ups and/or procedures.
- \_\_\_ 13. I was under direct supervision while working on the linacs, simulator or brachytherapy.
- \_\_\_ 14. The clinical environment promoted and encouraged learning.

**COMMENTS (Effective or ineffective teaching methods in the clinic):**

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**Reviewed by PD/CC:** \_\_\_\_\_ **Date** \_\_\_\_\_

**BU Radiation Therapy Program  
Craniospinal Competency**

**Objective:** The student, in a participatory role, will assist in the set-up and treatment of a craniospinal case.

<b>Objective</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1. What is the purpose of the CSI?			
2. Describe the various CSI set-ups.			
3. Explain the purpose of couch kicks.			
4. Explain the filming process.			
5. Explain the dose constraints.			
6. Student was present for the entire set-up and treatment delivery.			
7. What two anatomical areas are checked on the brain portion of the set-up?			
8. Define junction change/feathering.			

\_\_\_\_\_ Pass

\_\_\_\_\_ Fail

Student Signature

\_\_\_\_\_

Evaluator Signature

\_\_\_\_\_

Date \_\_\_\_\_

Comments

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# BU Radiation Therapy Program

## TBI Competency

**Objective:** The student will participate in the set-up and treatment of a photon/electron total body irradiation.

Objective	Yes	No	Comments
1. What is the purpose of the TBI treatment?			
2. Describe the various TBI set-ups.			
4. What is the purpose of the gantry and collimator positions?			
7. Explain the treatment schedule and the relevance to acute and late side effects.			
8. Why is it important to continually monitor the patient and give them updates during treatment delivery?			
9. Student was present during the entire set-up and treatment delivery.			

\_\_\_\_\_ Pass

\_\_\_\_\_ Fail

Student Signature \_\_\_\_\_

Evaluator Signature \_\_\_\_\_

Date \_\_\_\_\_

Comments

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# BU Radiation Therapy Program

## Dosimetry Competency

**Objective:** To become familiar with treatment planning calculations, computer generated isodose plans, contour taking and other dosimetry duties.

The following calculations **MUST** be completed with a passing score on a patient.

Student Signature \_\_\_\_\_

Evaluator Signature \_\_\_\_\_

Date \_\_\_\_\_

Calculation	Date	Verified By
Single Open Field		
Parallel Opposed Fields with Shaping		
Geometric Gap		
Weighted Fields		
Wedge Fields		
Computer Generated Isodose Plan		
Electron Field		

# BU Radiation Therapy Program

## Dosimetry Workbook

**All sections must be completed with a final grade of 90% or above.**

**Student** \_\_\_\_\_

**Evaluator** \_\_\_\_\_

Section	Date	Verified By	Grade
I. Dosimetry Basics _____/42			
II. Hand Dose Calculations _____/37			
III. Isodose Curves SSD/SAD _____/11			
V. 2D Spine, Whole Brain			
% for Questions      % for Tx Plan			
VI. 2D Breast Wedges/FIF			
% for Questions      % for Tx Plan			
VII. 2D Pelvis, Mantle			
% for Questions      % for Tx Plan			
VIII. 3D Brain, Lung			
% for Questions      % for Tx Plan			
IX. Electrons/3D H&N			
% for Questions      % for Tx Plan			
X. IMRT			
% for Questions      % for Tx Plan			
<b>Total</b>			



**BU RADIATION THERAPY PROGRAM**  
**CUSTOM BOLUS FABRICATION COMPETENCY**  
**PHYSICS/DOSIMETRY**

**Objectives:**

1. Become familiar with the uses of various types of bolus material.
2. Create a custom bolus using current facility materials.

<b>Objective</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
1. Describe the purpose of bolus material and how it effects Dmax.			
2. Identify potential problems with the use of bolus material.			
3. Create a custom bolus.			
a. Area is properly identified			
b. Student explains process to patient			
c. Bolus cut and labeled correctly with orientation and patient identification			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

**Student** \_\_\_\_\_

**Evaluator** \_\_\_\_\_

**Date** \_\_\_\_\_

**Comments** \_\_\_\_\_

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**BU RADIATION THERAPY PROGRAM**  
**CUSTOM MASK FABRICATION COMPETENCY**  
**CT SIMULATION**

**Objectives:**

1. Become familiar with the various types of masks.
2. Create a mask for a patient.

<b>Objective</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
1. Describe the use of different masks.			
2. Identify potential problems for not properly constructing a mask.			
3. Describe the different considerations for headholders in brain versus H&N cases.			
4. Create a mask			
a. Head is properly aligned			
b. Student explains process to the patient			
c. The correct mask and headholder are used.			
d. The mask is labeled correctly (name, headholder, etc.)			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

**Student** \_\_\_\_\_

**Evaluator** \_\_\_\_\_

**Date** \_\_\_\_\_

**Comments** \_\_\_\_\_

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**BU RADIATION THERAPY PROGRAM**  
**CUSTOM IMMOBILIZATION FABRICATION COMPETENCY**  
**CT SIMULATION**

**Objectives:**

1. Become familiar with the various types of immobilization devices for the thorax, abdomen and pelvis.
2. Create a custom immobilization device for the thorax, abdomen or pelvis.

<b>Objective</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
1. Describe the use of different types of immobilization devices for the thorax, abdomen and pelvis.			
2. Identify potential problems for not properly constructing an immobilization devices.			
3. Create an immobilization device.			
a. Identify the correct area to be immobilized.			
b. Student explains process to the patient			
c. The device was made according to the simulation order.			
d. The device is labeled correctly (name, headholder, etc.)			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

**Student** \_\_\_\_\_

**Evaluator** \_\_\_\_\_

**Date** \_\_\_\_\_

**Comments** \_\_\_\_\_

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**BU RADIATION THERAPY PROGRAM  
PHYSICS/DOSIMETRY  
BLOCK CUTTING/DIGITIZING FABRICATION**

**Objectives:**

1. The student will demonstrate proper usage of the block cutter and digitizer.
2. The student will explain the theory behind divergent blocks and the various parameters used in order to fabricate or digitize a custom block.
3. The student will explain the use of MLC to create blocks and discuss leaf issues.

<b>Performance Checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
<b>1. Differentiate between blocked areas and treatment areas.</b>			
<b>2. List safety precautions when working with cerrobend.</b>			
<b>3. Electron Cut Out</b>	***	***	*****
a. Trace cut out design from template and transfer to foam block			
b. Cut foam			
c. Pour cut out			
d. Properly label cut out			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

**Student** \_\_\_\_\_

**Evaluator** \_\_\_\_\_

**Date** \_\_\_\_\_

**Comments** \_\_\_\_\_

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**BU Radiation Therapy Program  
Physics Competency**

**Objectives:**

1. Learn medical physics procedures concerning chart checks.
2. Observe brachytherapy procedures from a physics and/or therapists viewpoint.
3. Attend departmental chart round.
4. Observe engineering procedures.
5. Present physics rotation information to classmates.

<b>1. Chart Checks (must do 2 linacs)</b>	<b>Date(s)</b>	<b>Physicist Initials</b>
Linac		
Linac		
<b>2. Stereotactic (Gamma Knife, Cyberknife, etc)</b>		
<b>3. Chart Rounds Facility</b>		
Chart Rounds Facility		
Chart Rounds Facility		
<b>4. Review Radiation Protection</b>		
<b>5. Review Measurement of Ionizing Radiation</b>		
<b>6. Brachytherapy Procedures</b>		
GYN		
Prostate		
Lung		
Eye Plaque		
Y-90 Spheres		
Other:		
<b>7. Other Physics Procedures (optional, observe if completed during student's rotation)</b>		
Source Change		
Linac Calibration		
Special Brachytherapy		
Lead Mask		
Compensators		
Other		

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Physicist/Preceptor Signature \_\_\_\_\_ Date \_\_\_\_\_

**BU Radiation Therapy Program  
Physics Rotation  
Engineering Competency**

**Objective:** The purpose of the Engineering Rotation is to orient the student to the engineer's perspective and why communication on accelerator function is critical.

	Yes	No	Comments
1. A linear accelerator has been called the world's most expensive hot water heater as it is much more efficient at producing hot water than radiation. Explain the water cooling system used in a linear accelerator.			
2. What are the uses of the a). target, b). flattening filters and c). scattering foils in producing a beam of radiation.			
3. Why is sulfur hexafluoride used in the waveguide of a linear accelerator?			
4. What is the purpose of the modulator?			
5. Why is it essential that the accelerator guide be kept under vacuum?			
6. List three reasons when the engineer should be notified.			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

Student Signature \_\_\_\_\_

Evaluator Signature \_\_\_\_\_

Date \_\_\_\_\_

Comments \_\_\_\_\_

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**BU RADIATION THERAPY PROGRAM  
PATIENT CARE  
BLOOD AND VITAL SIGNS COMPETENCY**

**Objectives**

1. Identify the normal ranges of the CBC.
2. Take a patient's blood pressure, temperature, pulse and respiration.

<b>Performance Checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1. Hemoglobin			
2. Hematocrit			
3. RBC			
4. WBC			
Abnormal Counts for:			
5. Hemoglobin			
6. Hematocrit			
7. WBC			
8. Platelet			
Student takes and records:	****	****	*****
9. Blood Pressure			
10. Temperature			
11. Pulse			
12. Respiration			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

Student \_\_\_\_\_

Evaluator \_\_\_\_\_

Date \_\_\_\_\_

**BU RADIATION THERAPY PROGRAM  
PHYSICS ROTATION  
BRACHYTHERAPY PROCEDURES**

**Objectives**

1. Observe brachytherapy nursing procedures.
2. Discuss various brachytherapy devices and applicators.

<b>Performance Checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1. Discuss various brachytherapy equipment. - T&O, prostate seeds, spheres, etc			
2. Identify various sources used for brachytherapy procedures.			
3. Describe proper use of applicators for a specific brachytherapy procedure.			
4. Discuss radiation safety precautions used for brachytherapy procedures.			

**Pass** \_\_\_\_\_

**Fail** \_\_\_\_\_

Student Signature \_\_\_\_\_

Evaluator's Signature \_\_\_\_\_

Date \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**BU Radiation Therapy Program  
VERT CBCT Competency**

Student \_\_\_\_\_ Evaluator \_\_\_\_\_ Date \_\_\_\_\_

Procedure \_\_\_\_\_

- Grading Scale**
- 9-10 Thorough grasp of procedure, has excellent problem solving skills
  - 8 - 7 Can perform skill without assistance, good knowledge of basic principles
  - 4-6 Knows only routine procedure, needs assistance, little problem solving skills
  - 1 – 3 Very little knowledge, needs considerable assistance
  - 0 Did not perform skill

Scores from 0-3 demonstrate lack of knowledge and comp should not have been performed, these are failing grades

<p><b>1. General VERT console operation</b>          Properly sets linac type from VERT workstation.          Review workstation in proper configuration.          Selects proper module and patient.</p>	
<p><b>2. Initiating CBCT</b>          Selects proper acquisition mode.          States reason for differing acquisition modes and start location (degree).          Observes patient and equipment during scanning.</p>	
<p><b>3. Image Matching – Menu Ribbon</b>          Identifies and explains the selections (tree view, pan, cross fade overlay, checkerboard, spyglass, color blend, switch views, manual matching, auto matching).          Selects proper images and contours.          Does NOT auto match – will result in automatic failure.</p>	
<p><b>4. CT/CBCT Viewing Windows</b>          Defines window and level.          Properly selects window and level for both CT and CBCT when necessary.          Manipulates images properly.</p>	
<p><b>5. Matching Anatomy, Machine Position and Shift Values</b>          Delineates proper anatomy to match for shifts.          Shifts are properly demonstrated.          Proper personnel notified if shifts are too large.</p>	
<p><b>6. Clinical Oncology</b>          Describe the purpose of CBCT for this particular treatment.          Describe both acute and chronic effects side effects of treatment and possible complications.          State nodal groups and drainage routes from this site.          Explain the difference between KV KV matching and CBCT matching.</p>	
<p><b>7. Image Review</b>          Identified field borders.          Identified critical structures and their TD5/5's.          Identifies general anatomy</p>	

<b>8. Documentation</b> Identifies and records any necessary parameters on paperwork.	
<b>9. Student Comprehension</b> The student comprehension level exceeded what was needed for this CBCT. (10) Basic knowledge of the CBCT was demonstrated with an above average comprehension. (9) The CBCT was completed with adequate knowledge. (7-8) Only very basic concepts were shown, little problem solving skills. (4-6) Basic concepts, little to no problem solving skills. (1-3) Could not complete CBCT without extensive support and assistance (comp should be failed).	
<b>10. Overall Student Behavior</b> The student performed quickly and skillfully. (10) The student performed skillfully. (9) The student performed slowly but with precision. (8) The student performed awkwardly but still completed an adequate CBCT and shifts. (7) The student lacked attention to detail.	
ANY ACTION WHICH RESULTS IN A RADIATION TREATMENT ERROR IS AN AUTOMATIC FAILURE.	

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Percentage \_\_\_\_\_

Grade \_\_\_\_\_

Student Signature \_\_\_\_\_

Evaluator Signature \_\_\_\_\_

**BU Radiation Therapy Program  
Special CT Simulation Procedure**

**Objective:** The student, in a participatory role, will assist in the set-up and simulation of a Special Treatment Simulation Procedure (e.g., 4DCT, SBRT, Gating or Brachy).

<b>Objective</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1. What is the purpose of the procedure?			
2. Describe the various CT set-ups of the procedure.			
3. Explain the purpose of devices used for the procedure.			
4. Explain the process of the procedure.			
5. Explain why this procedure is necessary.			
6. Student was present for the entire set-up and treatment delivery.			
7. What anatomical areas are the procedure used for?			
8. Define how procedure will assist in treatment planning.			

\_\_\_\_\_ Pass

\_\_\_\_\_ Fail

Student Signature

\_\_\_\_\_

Evaluator Signature

\_\_\_\_\_

Date \_\_\_\_\_

Comments

\_\_\_\_\_

\_\_\_\_\_

# Lansing School of Nursing & Clinical Sciences

## Student Drug and Alcohol Policy

Updated 08/11/2016

### Introduction

The Lansing School of Nursing & Health Sciences (LSNHS) is committed to providing a quality education for Students admitted into its Programs. In order to protect the integrity of the Programs, as well as safeguard the welfare of Students and of clients receiving care from Students, this Policy addresses Drug and alcohol testing of Students involved in Instructional/Learning Activities through LSNCS.

The purpose of this Student Drug and Alcohol Policy (the "Policy") is to notify Students and Faculty Members of the LSNCS's Drug and alcohol rules and testing procedures, and to provide assistance and due process for Students who test positive for Drugs (including legally prescribed medications) and/or alcohol. This policy applies to all Students admitted to the LSNCS programs ("Program" or "Programs") at Bellarmine University, and is effective immediately. The testing of Students for Drug or alcohol use while engaged in Program-sponsored Instructional/Learning Activities will be completed through an independent agency contracted by LSNCS. Testing costs are the responsibility of the student. These costs are beyond the control of the LSNHS and are subject to change at any time without notice.

It is the policy of Bellarmine University to comply with federal and state laws and regulations regarding the usage and detection of Drugs and alcohol. In addition, it is the professional duty and ethical obligation, of health care providers and students to identify and report when they have reasonable suspicion of an impaired health worker. This Policy is subject to change at the sole discretion of Bellarmine University and/or LSNHS, and is meant to supplement other relevant Bellarmine University policies, including but not limited to the *Policy on Alcohol* and the *Illegal Drug Use Policy* contained in the *Bellarmino University Student Handbook*. Violations of this Policy may result in the student's inability to complete the program. LSNCS bears no responsibility for a student's inability to complete or participate due to a failed drug or alcohol screening.

### Definitions

For the purposes of these guidelines, the following terms shall have the following meanings:

- A. "Drug" or "Drugs" means all of those drugs included in the current Medical Professional substance abuse profile (LabCorp, 2016). These may include, but are not limited to:
  - 1) Amphetamines (including Methamphetamine)
  - 2) Barbiturates
  - 3) Benzodiazepines
  - 4) Cocaine metabolites
  - 5) Cannabinoids (THC, Marijuana)
  - 6) Methadone
  - 7) Methaqualone
  - 8) Ecstasy
  - 9) Opiates (codeine, morphine)
  - 10) Phencyclidine

July, 2023

11) Oxycodone

12) Propoxyphene

- B. "Student" means any student enrolled in one of the LSNCS programs at Bellarmine University.
- C. "Reasonable Suspicion" means that the Student's faculty member, clinical instructor, preceptor, supervisor, or his/her designee (collectively, "Faculty Member") believes that the behavior, speech, body odor, or appearance of the Student is indicative of the use of alcohol or Drugs, as described in detail in this Policy.
- D. "Instructional/Learning Activities" include classroom and other activities on and off campus that involve patient care, instruction, or practice of preparatory skills as a component of health care provider practice, including but not limited to clinical practicums, internships, clerkships, service learning, community engagement, skills labs, and/or non-class associated practice at on-campus or off-campus sites.
- E. "Medical Review Officer ("MRO")" is a nationally certified, licensed medical doctor or osteopath responsible for receiving laboratory results under these guidelines who has knowledge of substance abuse disorders and has appropriate medical training to interpret and evaluate confirmed positive test results, medical history, and any other relevant biomedical information. Access to the MRO is through the agency contracted to complete the testing.
- F. "Positive Drug Test" is determined by the MRO in accordance with guidelines established for healthcare workers.
- G. "Positive Alcohol Test" means an alcohol test that is at or exceeds the Department of Transportation ("DOT") Guidelines for blood, breath, or saliva testing depending on the test used, e.g. blood alcohol content of 0.04 or greater (under current DOT Guidelines).

## **Policy**

The LSNHS prohibits the unlawful use or possession of Drugs or alcohol by any Student during any Instructional/Learning Activities associated with any Program. Prior to participation in a clinical course in their Program, all Students will be provided with a copy of this Policy and will be required to complete the LSNCS Student Drug and Alcohol Policy Acknowledgment Form (see below).

Per Bellarmine University policy as contained in the *Bellarmino University Student Handbook*, Students in possession of a controlled substance will be referred to the Dean of Students, and such conduct may result in suspension or expulsion from the University and/or a requirement that the Student enroll and actively participate in a Drug or alcohol counseling and rehabilitation program as a condition of continued enrollment or readmission.

In addition, the improper use of any Drugs or alcohol by any student in the LSNCS may constitute grounds for removal from all Instructional/Learning Activities and/or cause for termination from the program. Students who participate in an LSNCS Program may not Test Positive for Drugs or Test Positive for Alcohol, with the exception that a Student who Tests Positive for Drugs will be provided an opportunity to explain if that positive test is the result of his or her use of legally prescribed medication.

## **Mandatory Drug Screening**

Many clinical training sites now require students to undergo drug testing, similar to what is required of their employees. Therefore, all Students will submit to a drug screen and test negative for Drugs before engaging in any Instructional/Learning Activities.

## **Consequences**

- A. Refusal to Participate in Mandatory Drug Screening:  
If a Student fails to comply with the policy they will not be allowed to begin any Instructional/Learning Activities within the School.
  
- B. Negative Drug Screen Test Result:  
The Student will be allowed to participate in all Instructional/Learning Activities as planned if results of the negative drug screen are received by the requested deadline. Students who fail to meet the deadline will incur a \$50.00 fine charged to their bursar account and will be unable to attend Instructional/Learning Activities until the deficiency in documented information has been resolved.
  
- C. Positive Drug Test and Self-Admission:  
If a Student receives a Positive Drug Test, or if the Student admits to a Drug and/or alcohol problem, the Student will not be allowed to attend any Instructional/Learning Activities, and will be referred to their Chairperson and the LSNHS Dean.

### ***Drug and Alcohol Screening for Reasonable Suspicion***

In addition, students will be tested for the use of Drugs and alcohol upon observation of behavior that creates a Reasonable Suspicion of alcohol or Drug use; this could include conduct that prevents the Student from performing the essential functions of his or her role in the Instructional/Learning Activity, or which poses a direct threat to the health or safety of others. Other behavior which could create a Reasonable Suspicion of Drug or alcohol use by a Student includes, but is not limited to: odor of alcohol or Drugs, unsteady or staggering gait, rapid or slurred speech, pinpoint or dilated pupils, unresponsiveness, bloodshot eyes, fine motor tremors, difficulty participating in activities, nausea, vomiting, sweating, erratic behavior, incoherent speech, verbal or physical outbursts, self-report of Drug use or alcohol abuse, unsafe behavior, unsatisfactory care for others, and threats to harm self or others. Students in an LSNCS Program are expected to act in conformity with, and will be held accountable to, the same professional standards of licensed healthcare professionals during all educational and Instructional/Learning Activities. While it is not the intent of the LSNCS to monitor Students' behavior outside of their Program, Students' use or suspected use of Drugs and alcohol outside of the Program may adversely impact their behavior during their Program's Instructional/Learning Activities and may lead to a Drug or alcohol test based on Reasonable Suspicion of Drug or alcohol use. The Student will bear the cost of the screening based on a Reasonable Suspicion of Drug or alcohol use.

Faculty Members are encouraged to consult with other faculty members and clinicians, or other health care providers who may have witnessed the behavior, if possible, to validate the basis for Reasonable Suspicion testing. If the Faculty Member determines that Reasonable Suspicion of Drug use or alcohol use is present, Faculty Member should take the following steps:

1. Remove the Student from the Instructional/Learning Activity;
2. Move the Student into a private setting and in the presence of a witness, if possible;
3. Discuss the suspicious behavior with the Student and allow the Student to explain;
4. Decide whether Reasonable Suspicion exists for Drug and/or alcohol testing, in conformity with this Policy; and
5. Make arrangements for Drug and/or alcohol testing, if necessary, or allow the Student to return to the Instructional/Learning Activity.

- Notify the Department Chairperson the of drug and/or alcohol testing need
- If unable to reach the Department Chairperson, notify the “on call” Student Affairs staff member
- If in the Louisville area, call the Yellow Cab Service at 502-636-5511 for transportation needs
- Call Mainline Drug Testing Services, LLC to determine the closest testing facility (412-884-6967 or 412-398-8074)
- Provide the student with the drug testing form
- Either the clinical faculty member / preceptor or Department Chairperson (or their designee) should escort the student to the testing facility, wait for specimen collection to occur, and then using Yellow Cab, escort the student to their residence

If the Faculty Member determines that Reasonable Suspicion exists for a Drug and/or alcohol test, the Student must submit to a Drug and/or alcohol test at the earliest time possible in accordance with arrangements made by the Faculty Member. A Student tested for Drug or alcohol use, based on Reasonable Suspicion, will not be allowed to participate in Instructional/Learning Activities until he or she meets with the Faculty Member, Chairperson and Dean of the LSNCS.

If a Student is asked to submit to a Drug or alcohol test in accordance with this Policy, the involved Faculty Member will immediately, or within one business day for evening or weekend occurrences, notify the Chairperson of their program. The Faculty Member will also make a written report for their Chairperson within two working days of the event identifying the Student involved and describing the Student’s conduct, names of witnesses, and a summary of the events that led to the Reasonable Suspicion Drug or alcohol test.

### **Consequences**

#### **A. Refusal to Test for Drugs or Alcohol:**

If a Student fails to produce the requested sample at the date and time designated, the Student will be allowed 30 minutes to reconsider the decision and the Faculty Member will notify the Chairperson immediately. A Student who refuses to take the test after the 30 minute waiting period will be treated as if he or she received a Positive Drug Test or Positive Alcohol Test.

#### **B. Negative Test Result:**

If the Drug or alcohol test is negative, no action will be taken, and the Student will be allowed to participate in all Instructional/Learning Activities. The Student will be allowed to make-up any missed clinical/laboratory time at no cost.

#### **C. Positive Drug Test or Positive Alcohol Test, Other Policy Violations, and Self-Admission:**

If a Student receives a Positive Drug Test or Positive Alcohol Test, if a Student violates this Policy in any other manner, or if the Student admits to a Drug and/or alcohol problem, the Student will be immediately removed from all Instructional/Learning Activities and the Faculty Member will notify the Chairperson and Dean of the LSNCS. At a minimum, a Student who violates this Policy will receive a zero for the missed clinical/laboratory day when the Student was removed for testing. The Student will be responsible for payment of all costs associated with making up the clinical/laboratory day. However, a Student who

receives a Positive Drug Test will be provided with an opportunity to explain any Positive Drug Test that results from his or her use of a legally prescribed controlled substance, and such circumstances will be taken into account in determining the consequences of the Positive Drug Test.

### **Student Conduct Proceedings for Violation of the Drug and Alcohol Policy**

A Student found in violation of this Policy will be referred to the Chairperson and LSNCS Dean, as well as Bellarmine University's Dean of Students. A Positive Drug or Positive Alcohol Test result could result in the Student's suspension or dismissal from the LSNCS program and from Bellarmine University, and/or a requirement that the Student enroll and actively participate in a Drug/alcohol counseling and rehabilitation program as a condition of continued enrollment or readmission. These regulations are not substitutes for criminal sanctions provided for by state and federal statutes or regulations. Please reference the *Bellarmino University Student Handbook* for more information on student conduct proceedings.

- A. If not suspended or dismissed from the LSNHS program and/or Bellarmine University, the Student will not be allowed to participate in Instructional/Learning Activities until he/she fulfills all terms set forth by the LSNHS and Bellarmine Dean of Students.
- B. A second positive Drug or alcohol test or violation of this Policy will result in dismissal from the LSNCS program.

### **Confidentiality**

The University will take reasonable measures to ensure individual privacy under this Policy including, without limitation, keeping all Drug and alcohol test results confidential to the extent possible. Drug or alcohol test results will only be released in accordance with applicable federal and state laws and regulations.

Reviewed by Mark Wiegand, Tony Brosky and Nancy York 7/11/14, 7/2016

Approved by University Council 7/22/14, 8/10/2016

Approved by LSNHS Chairs/Deans 9/8/2014, 8/12/2016



## Appendix A

### Lansing School of Nursing & Clinical Sciences

#### Student Drug and Alcohol Policy

#### Acknowledgment Form

I hereby acknowledge that I have received a copy of the Lansing School of Nursing & Clinical Sciences' ***Student Drug and Alcohol Policy*** (the "Policy") and agree that I have read, or will read, the Policy. I understand that there may be situations where I will be required to take a drug and/or alcohol test. I also understand that if I refuse to take the test, or if a test proves positive, I may be suspended or dismissed from the Lansing School of Nursing & Clinical Sciences and may be subject to additional sanctions as described in the Policy. I also understand that if I have any questions regarding the Policy, I am to contact my department Chairperson or Lansing School of Nursing & Clinical Sciences Dean.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

## **Blood-borne Pathogens Training**

The Occupational Safety and Health Administration (OSHA) has defined requirements which specify the protective measures all healthcare personnel are required to perform in order to prevent the spread of communicable disease. All students must participate in Blood-borne Pathogens Training prior to participation in clinical and/or patient-related activities; training is provided by the Program and is required on an annual basis. Training includes proper hand-washing, use of personal protective equipment, isolation precautions, and other information targeted at exposure risk reduction. Students must pass a post-test and receive a certificate of completion to meet this requirement. Students may not participate in any clinical or patient-related activity unless certification is current.

Students are expected to keep documentation of training as each clinical site reserves the right to require a student to provide proof of training at any time. Clinical sites may also require the student to participate in additional training.

## **Occupational Exposure Policy**

Occupational Exposure: In the event of occupational exposure to a biohazard while on clinical rotation, students are to follow the clinical site's guidelines for managing, reporting, and documenting the incident. It is the student's responsibility to inform the clinical instructor of the incident and to seek their guidance in complying with all site-specific policies. If the need arises, clinical sites shall provide students with access to emergency care; however, the student shall be responsible for the cost of all emergency services rendered. The student is not covered under any worker compensation benefit; therefore, the student is also responsible for the cost of any follow-up care as a result of exposure/injury. The Program Director and/or Clinical Coordinator must be notified immediately; notification of the incident MUST occur within 24 hours of the exposure.

## **Bellarmino University Student Manual**

Students in the Radiation Therapy Program are responsible for also reviewing the Bellarmine Student Manual for all students enrolled in the university. The manual may be found at this link:

<https://www.bellarmino.edu/studentaffairs/>

## **RADIATION THERAPY SOCIAL MEDIA POLICY**

### **Social Media Policy**

The use of social media and networking is a recognized form of daily communication. The Bellarmine University Radiation Therapy Program has expectations for responsible and ethical behavior with this type of interaction. Radiation Therapy students must be aware of the risks associated with the improper use of social media as there is an ethical and legal obligation to protect the privacy and confidentiality of patients, fellow students, faculty and staff, clinical instructors/preceptors, and affiliated facilities.

Social networking examples include but are not limited to:

- Social networking sites such as Facebook, Instagram, LinkIn, etc.
- Video and photo sharing websites such as YouTube, Snapfish ,Snapchat, Flickr
- Microblogging sites such as Twitter
- Weblogs and Online forums or discussion boards
- Any other websites or online software applications that allow individual users to post or publish content on the internet (including course materials)

First and foremost, you are responsible for what you post. The content of your posting should always be respectful. You must comply with all clinical and service-learning facility Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Rights and Privacy Act (FERPA) policies. Violations of such policies may result in legal action and/or could jeopardize your standing in a clinical education or service-learning course. Absolutely no reference to patients, clinical sites, students or clinical instructors is permitted, even if names are not given or you believe you have blinded the identifying information.

Students are restricted from posting any information which may lead to the identification of a patient. Privacy settings within websites are not sufficient to protect patient privacy and confidentiality. If there is a reasonable basis to believe that the person could be identified, then use or disclosure of the information could constitute a violation of HIPAA.

Students and faculty have an ethical/legal responsibility to promptly report an identified breach of confidentiality or privacy associated with this policy to the appropriate course instructor, the Chair/Program Director or Dean of the Lansing School.

Students should not refer to patients, staff members, faculty members, clinical instructors, or other students in a harassing manner via social media, even if the individual cannot be identified. Harassment includes, but is not limited to, verbal harassment, sexual harassment, hate speech, cyber- bullying, and verbal threats. This includes conduct which is disorderly, obscene, lewd, indecent, or a breach of peace.

Students should not share any course materials (including presentation materials such as slides, instructor-developed handouts, rubrics, etc.) on any web page, discussion boards, and/or social media sites.

Students must maintain professional boundaries in the use of electronic media. The fact that a patient initiates contact with a student does not permit the student to have a personal relationship with the patient.

Non-adherence to these guidelines will result in charges under the Code of Conduct as noted in the University student handbook and can also result in academic failure or sanctions in the Radiation Therapy Program under the Conduct, Scholastic Integrity and Professional Behavior section of the Student Manual or specific clinical education course. All confirmed incidents of academic dishonesty via social media will be reported to the Assistant Vice President for Academic Affairs, and sanctions will be imposed as dictated by the academic honesty policy as described in course syllabi and the online Student Handbook. The use of social media policies apply to a student's use at any time,

in any place, and with any medium. The examples of listed in this policy are not stagnant and may change as new social networking tools/media emerge.

*(This policy adapted in part from written policies of the Bellarmine University BSN, Respiratory Therapy and DPT programs and the West Virginia University DPT Program.)*