

Bergen Community College  
Health Professions Division  
Radiation Therapy Technology Program

Course Syllabus  
RTT- 222-001 Radiation Therapy Clinical Practicum III

**Course Description:**

This course affords student radiation therapists with an avenue to continue development of advanced professional clinical skills through correlation of didactic theory. Students continue towards competency and mastery and will be afforded 448 hours of clinical experience.

**Credits / Hours:** 38 lab / 2 credits

**Prerequisites:** RTT 221

**Co-requisites:** None

**Summer (SU) Semester**

**Narrative:**

This course is an imperative component of the program as it provides a mechanism for the student to apply theoretical principles to clinical practice. The designated length of time required for this course allows the student sufficient time to meet clinical objectives and ARRT competency-based requirements.

**Educational Outcomes:**

Upon completion of this course, the student will be able to:

1. Demonstrate behavior and attitudes congruent with the profession's standards and ethics.
2. Perform and/or assist with the delivering of a prescribed course of treatment adhering to acceptable departmental, institutional, governmental and professional standards.
3. Demonstrate critical thinking and patient assessment skills in order to deliver a prescribed course of radiation therapy.
4. Demonstrate standardized radiation safety practices and radiation protection for each treatment procedure performed.
5. Demonstrate appropriate and effective communication amongst colleagues, health care professionals and patients.

6. Interpret patient treatment charts and treatment plans for proper implementation.
7. Utilize appropriate principles regarding safety, patient transfer and immobilization devices.
8. Understand, evaluate and validate treatment plans and dosimetric calculations.
9. Demonstrate proficiency in simulation and localization procedures, including the preparation of immobilization and beam modification devices.
10. Demonstrate proper documentation, including errors and discrepancies.
11. Demonstrate competency in performing venipuncture.

**Grading/Course Evaluations:**

The final course grade for RTT 222 will be delivered from the following evaluations;

Final Exit Examination	10%
Treatment Competencies	25%
Simulation Procedures	25%
Patient Care, Treatment Devices and Dosimetry	20%
Student Assessment	<u>20%</u>
	100%

Final Exit Examination:

The student will be required to achieve a passing grade of 75% on a final exit examination this semester. A passing grade of 75% on the exit examination is a necessary requirement for a student to receive a certificate of completion in Radiation Therapy Technology from Bergen Community College.

Venipuncture:

The student will be required to attend a one-day venipuncture training session and demonstrate competence in venipuncture administration. This session will identify basic concepts of pharmacology, theory and practice of basic techniques of venipuncture and administration of diagnostic contrast agents and/or intravenous medications and the appropriate delivery of patient care during medication administration. The student will be required to complete an on-line test to achieve a certificate of completion.

Clinical Competency Evaluations:

The student will be required to complete a minimum of 4 (four) and a maximum of 10 (ten) treatment related competency evaluations this semester. Additionally, 3 (three) participatory procedure competencies are required for successfully completion of the

program. These competencies must be completed by the end of this semester. If a cumulative total of 18 (eighteen) treatment related competencies and 3 (three) participatory procedures are not successfully completed, the student will receive a zero grade for each evaluation not completed. Additionally, the student will not be granted a certificate of completion in Radiation Therapy Technology from Bergen Community College and will not be eligible to take the ARRT National Registry Examination. The student must follow the steps and guidelines for the clinical competency evaluations as outlined in the Student Handbook and Radiotherapy Clinical Education Manuals. The student must demonstrate proficiency in the preparation and delivery of the prescribed treatment while adhering to acceptable departmental, institutional, governmental and professional standards. Students are expected to complete their clinical competency evaluations in a timely manner. All clinical competencies will be submitted electronically by a designated clinical supervisor.

The student is required to submit to the Clinical Coordinator, a Treatment Concept Evaluation form for every Treatment Machine Procedure completed. The Treatment Concept Evaluation form will be reviewed with the student and assigned a numeric grade. This grade will represent 50% of the Treatment Machine Procedure grade.

Additionally, 3 (three) participatory procedure competencies are required for successful completion of the program. Participation means that the candidate takes an active role in the procedure and understands the critical concepts vital to the success of the procedure. These three participatory procedures may be completed during the spring and/or summer semester.

The student will be required to complete a minimum of 2 (two) and a maximum of 4 (four) simulation procedure competency evaluations this semester. If a cumulative total of 7 (seven) simulation procedure competencies are not successfully completed, the student will receive a zero grade for each evaluation not completed. Additionally, the student will not be granted a certificate of completion in Radiation Therapy Technology from Bergen Community College and will not be eligible to take the ARRT National Registry Examination.. The student must follow the steps and guidelines for the clinical competency evaluations as outlined in the Student Handbook and Radiotherapy Clinical Education Manuals. The student must demonstrate proficiency in performing, discussing and reviewing the preparation and delivery of the prescribed simulation procedure while adhering to acceptable departmental, institutional, governmental and professional standards. Students are expected to complete their simulation procedure competency evaluation in a timely manner. All clinical competencies will be submitted electronically by a designated clinical supervisor.

The student will be required to complete a minimum of 6 (six) and a maximum of 10 (ten) competencies in the area of dosimetry, treatment accessory devices and/or patient care. If a cumulative total of 6 (six) competencies from dosimetry, 4 (four) competencies from treatment accessory devices and/or 4 (four) competencies from patient care are not successfully completed, the student will receive a zero grade for each competency not completed. Additionally, the student will not be granted a certificate of completion in

Radiation Therapy Technology from Bergen Community College and will not be eligible to take the ARRT National Registry Examination. The student must follow the steps and guidelines for the clinical competency evaluations as outlined in the Student Handbook and Radiotherapy Clinical Education Manuals. The student must demonstrate proficiency in the preparation, delivery and evaluation of the treatment planning procedures and patient protocols while adhering to acceptable departmental, institutional, governmental and professional standards. Students are expected to complete their treatment planning/dosimetry/patient care competency evaluation in a timely manner. All clinical competencies will be submitted electronically by a designated clinical supervisor.

The student will be required to complete (1) one or (2) two quality control procedure on either the linear accelerator or simulator. If one competencies from this area is not successfully completed in this semester for a required total of 3 quality control procedures, the student will receive a zero grade for the competency not completed. Additionally, the student will not be granted a certificate of completion in Radiation Therapy Technology from Bergen Community College and will not be eligible to take the ARRT National Registry Examination. The student must follow the steps and guidelines for the clinical competency evaluations as outlined in the Student Handbook and Radiotherapy Clinical Education Manuals. The student must demonstrate proficiency in performing the quality control procedure while adhering to acceptable departmental, institutional, governmental and professional standards. Students are expected to complete their quality control procedure competency evaluations in a timely manner. All clinical competencies will be submitted electronically by a designated clinical supervisor.

The student will be required to attend a venipuncture workshop. Upon successful completion of this workshop, the student will be required to complete the on-line component of the training to achieve a certificate of competency in venipuncture.

Clinical Profiles / Anecdotal Notes:

An appointed clinical supervisor will electronically submit a Student Assessment Form for each student at the end of each clinical rotation (3 per semester). Anecdotal notes may be utilized to document performance during the semester. The profile will include the student's performance in demonstrating dependability, professional attire, communication skills, professional skills, record keeping tasks, radiation safety practices, safety practices, and critical thinking, reasoning and problem solving skills. The numerical average of all of the assessments will be worth ten percent of the students' final clinical grade. The student must follow the steps and guidelines for the student assessment as outlined in the Student Handbook and Radiotherapy Clinical Education Manuals. The student must demonstrate proficiency in professional and ethical skills while adhering to acceptable departmental, institutional, governmental and professional standards. Upon request, a student / faculty conference will be scheduled to review each graded profile.

**Dress Code / Professionalism:**

This category reflects the student's professional appearance, attire and ethical practice at the clinical site. All students are expected to comply with the regulations found in the course syllabus, student handbook, as well as the rules and policies in the College Catalog.

Regardless of the students' competency levels, they must always work under the direct supervision of a licensed Radiation Therapist.

**Attendance:**

The students are expected to familiarize themselves with, and adhere to, the attendance-related policies that are published in the Student Handbook and Radiotherapy Clinical Education Manual.

Radiation Therapy Clinical Practice I – III involves a total of nine clinical rotations. The student will spend approximately one month in each rotation. A total of at least 1152 clinical hours are recommended to each student to assure clinical competence.

Students must be at their assignment at 8:00am, unless otherwise stated by the program (as per the designated clinical site clock). Students are considered late to clinical when they arrive 15 minutes after the required start time. Students are afforded one excused absence and/or late event each semester. Students who will be late or absent from clinic must call the college appointed clinical educator within one-half hour of scheduled start time. Failure to call will result in a loss of three (3) points from the students' final grade. Students are required to document attendance electronically. Extended absences due to extenuating circumstances will be reviewed on an individual basis. All clinical time must be performed during the assigned hours. Students are not permitted in the clinical setting during off-hours without permission of the program and the clinical education center.

**Required Text:** None

**Bergen Community College Radiation Therapy Program  
Competency Requirements – Course Distribution Table**

(Maximum Cumulative Totals)	Treatment Procedures	Participatory Procedures	Simulation Procedures	Quality Control Procedures	Treatment Accessory Devices	Patient Care	Dosimetry
RTT 121 (Fall)	3 – 5 (5)	0	1 – 3 (3)	0	3 – 5 (5)		0
RTT 221 (Spring)	5 – 9 (14)	3	2 – 3 (5)	1 - 2 (2)	4 – 6 (11)		
RTT 222(Summer)	4 – 10 (18)		2 – 4 (7)	1 – 2 (3)	6 – 10 (17)		
<b>Total 48</b>	<b>18</b>	<b>3</b>	<b>7</b>	<b>3</b>	<b>17</b>		
					<b>4</b>	<b>7</b>	<b>6</b>

## Other College, Divisional, and/or Departmental Policy Statements

The Radiation Therapy Program adheres to all Bergen Community College policies, including drug and alcohol use and smoking on campus, discrimination and harassment, rules and regulations governing conduct, rules governing academic integrity and acceptable use of information technology resources as stated in the BCC College Catalog – Policies. These policies apply to student conduct at the clinical education center. The Bergen Community College Radiation Therapy Program adheres to a no cell phone policy in the classroom, laboratory and clinic.

### Topics/Activities

Acquire clinical experience:

1. Observe and assist on all clinical set-ups.
2. Perform basic set-ups under the supervision of the therapist.
3. Assist therapist with advanced set-ups as your level of expertise increases.
4. Review daily treatment chart for patient's prescription and set-up information.
5. Record daily treatment information in the chart of those patients the student has set up.  
The chart must then be given to the supervising therapist to be checked and signed.

Assist the therapist in:

1. Preparing the treatment room for each patient.
2. Preparing the treatment machine for each patient.
3. Preparing the appropriate accessory equipment for each patient.

Assist in patient care:

1. Become familiar with the patient's name, face, medical history, and plan for treatment.
2. Observe the general condition of the patient and report any obvious changes to the appropriate team member.
3. Provide supportive care of the patient.
4. Refer all questions concerning the patient's plan for treatment to the therapist responsible for treatment.
5. Engage the patient in conversation on topics unrelated to treatment to establish professional rapport.

Professional ethics and conduct:

1. Display appropriate behavior in the student/patient (patient's family) relationship.
2. Display appropriate behavior in the student/health care team relationship.
3. Display professional behavior by asking appropriate questions at the appropriate time – the care of the patient always takes precedence.

Professional rapport:

1. Work side by side with the staff therapists.
2. Develop communication with all members of the staff.
3. Develop comradeship with peers.

Student goals:

1. Demonstrate thoroughness and accuracy in clinical activities.
2. Grasp directions and act on them quickly.

3. Utilize time efficiently.
4. Apply and relate theory to clinical practice.

Expectations and attitude:

1. Ensure confidentiality of patient information.
2. Respond attentively to patients.
3. Show enthusiasm and initiative in performing tasks.
4. Communicate easily with patients and staff.
5. Assume responsibility for actions.
6. Cooperate with supervisors and therapists to maximize learning.