

Bergen
Community College

Radiation Therapy Technology Program

Student Handbook / 2005 - 2006

Radiation Therapy Technology – Student Handbook

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General Information

Bergen Community College Mission Statement

Bergen Community College provides high quality, relevant and varied educational programs and opportunities for the intellectual, cultural, and personal growth of all members of the community. The College values its role as an educational leader, embracing change and responding to the complex needs of those it serves.

Bergen Community College Vision Statement

As the college moves into the twenty-first century, our vision is that of a learning community which values the contributions of all students, staff, faculty, and administrators in order to provide an unparalleled educational experience. We will support an ongoing process of improvement through continued assessment of our vision, values, practices, and mission.

Radiation Therapy Technology Certificate Program Description

Radiation Therapy Technology is a one-year, college-based course of study that awards its graduates a certificate of completion with an option of an Associate of Science Degree in Health Sciences. Radiation Therapy Technology involves delivery of high-energy radiation for the management of neoplastic diseases using a variety of treatment machines and techniques. Qualified, certified and state-licensed radiographers are the only applicants eligible to apply to the program.

Radiation Therapy Technology Program Mission Statement

The Radiation Therapy Program sponsored by Bergen Community College is committed to the development of a high quality educational program that cultivates competent, knowledgeable and compassionate radiation therapists that will meet the needs of the radiation oncology community and the patients they serve.

Program Goals

- The program will provide students with a college-based radiation therapy program that meets the needs of the community.
- Graduates will perform the tasks and responsibilities of a radiation therapist in a competent and compassionate manner.
- Graduates will demonstrate effective communication skills and participate as a collaborative team member with other medical professionals.
- Graduates will value the importance of professional development and growth, and demonstrate professional ethics in the clinical setting.
- Graduates will demonstrate problem solving and critical thinking skills essential to

the practice of state-of-the-art radiation therapy.

Radiation Therapy Code of Ethics

The Radiation Therapist Code of Ethics as published by the American Society of Radiologic Technologists states:

1. The radiation therapist advances the principal objective of the profession to provide services to humanity with full respect for the dignity of mankind.
2. The radiation therapist delivers patient care and service unrestricted by concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion or socioeconomic status.
3. The radiation therapist assesses situations; exercises care, discretion and judgment; assumes responsibility for professional decisions and acts in the best interest of the patient.
4. The radiation therapist adheres to the tenets and domains of the scope of practice for radiation therapists.
5. The radiation therapist actively engages in lifelong learning to maintain, improve and enhance professional competence and knowledge.

Radiation Therapy Program's Philosophy Statement

The educational structure for Bergen Community College's certificate program in Radiation Therapy Technology has three primary areas of concentration:

- ❑ liberal arts and sciences
- ❑ radiotherapy core courses
- ❑ clinical education

The liberal arts, science and professional components deal with theoretical studies and principles, while the clinical education component concerns itself with its application and the cultivation of sound professional and ethical practices. Since this is an advanced certificate program, student radiotherapists are expected to demonstrate a personal commitment to their education and training. In light of this commitment, the Bergen Community College Radiotherapy Program created its policies to provide the student with the proper didactic and clinical education for success in becoming a contributing professional member of the health care team. The primary purpose of these policies is two-fold: the welfare of the patient and the perpetuation of professional standards.

This handbook consists of a basic outline of the standards, regulations and requirements that have been formulated as a guide for the student to follow. It is important that the student study these pages in order to become aware of the policies that will govern their education. These standards, regulations and requirements closely parallel curriculum guidelines established by our accreditation agencies.

The Radiotherapy Program Director [and other designated faculty] will advise and counsel the students regarding:

- ❑ Professional Societies
- ❑ Radiotherapy curriculum
- ❑ Graduation requirements
- ❑ ARRT Exam eligibility requirements
- ❑ Protocol for achieving a New Jersey State License

Radiation Therapy Program Calendar

The Radiation Therapy Program follows the same Holiday and Vacation schedule as stated in the Bergen Community College Catalog. Designated holidays and recess times are listed below. For exact dates the student is requested to reference a current College Catalog or check the BCC online calendar at <http://www.bergen.edu>

Labor Day Holiday
Yom Kippur Holiday
Thanksgiving Holiday
Winter Recess
July 4th Observed Holiday

Martin Luther King Jr. Holiday
Spring Recess
Good Friday Holiday
Memorial Day Holiday

In the event that any condition threatens to close the college temporarily, in addition to the above web site, listen to the following broadcasting stations for official instruction:

WCBS / 88
1010WINS
WOR / 710
WVNJ 1160
Cablevision / News 12 NJ

Radiation Therapy Program Accreditations

The Radiation Therapy Program is presently seeking accreditations from the Joint Review Committee on Education in Radiologic Technology.

The program has been approved by the New Jersey Department of Environmental Protection Radiologic Technology Board of Examiners.

Radiation Therapy Program Policies and Regulations

Admission Policies

Admission to the Radiation Therapy Technology Program is open to all individuals who meet the following Admission Requirements:

- Be a graduate from a radiography program that is accredited by the Joint Review Committee on Education in Radiologic Technology and New Jersey Radiologic Technology Board of Examiners (if attended a radiography program in New Jersey)
- Be a technologist in good standing with the American Registry of Radiologic Technologists [ARRT]. Be a licensed Radiographer in the state of New Jersey (if applicable).
- Have successfully completed the following courses:

BIO-109 Human Anatomy and Physiology I

BIO-209 Human Anatomy and Physiology II

(Prerequisite: BIO-109)

MAT-045 Intermediate Algebra

(Prerequisite: MAT-031/032 sequence or MAT-035 or proficiency examination)

MAT-180 Precalculus: College Algebra and Trigonometry

(Prerequisite: MAT-045)

PHY-185 Introduction to Physics

- Have successfully completed two of the following four General Education courses*:

CIS-158 Introduction to Computer Science

(Prerequisite: MAT 032 or MAT 035)

WRT-201 English Composition II

(Prerequisite: WRT 101)

SPE-111 Speech Communication

MAT-250 Statistical Analysis

(Prerequisite: MAT 150)

* Two of the above listed General Education courses may be taken concurrent with the Radiation Therapy Program. Successful completion of all four courses is required by the ARRT and the NJDEP.

Bergen Community College mandates a standardized placement examination for those wishing to complete an Associate Degree or Certificate Program. It is to be administered to those candidates who have not completed a college level degree. After filling out an application, the candidate is referred to the testing center to schedule Basic Skills Placement Testing. Students must complete this test before registering for classes. This examination tests English and Math skills. A passing grade on this examination or a passing grade in the remedial corresponding courses will render the candidate eligible for application into the Radiation Therapy Technology Program.

The Admissions Committee of the Program will review applications. The program has a rolling admissions policy and admission decisions are based on academic performance, experience and achievement of the applicant. Completed applications will be evaluated in April, June and August. Admission into the program is limited.

It is highly recommended that the applicant:

- Supply three letters of recommendation – preferably from a workplace and/or educational institution source
- Submit a letter of intent to the program coordinator
- Schedule an advisement session with the program coordinator

Applicant Procedures

1. Obtain application material from Bergen Community College Admission Department. The address is: 400 Paramus Road, Paramus, NJ 07652; telephone number: 201-447-7200; E-mail: www.bergen.edu.
2. Completed application forms must be returned to the Admissions Department.
3. For each application, one set of official transcripts of all high school, radiologic technology, and college courses must be sent to the Admissions Department.
4. Verification of ARRT registration in good standing and NJ state licensure (if applicable) in diagnostic radiography must be sent to the Admissions Department.
5. All other supporting credentials such as recommendations and test scores should be sent to the Admissions Department.

Classroom Attendance Policy

- ❑ Students are expected to notify the instructor of an absence prior to the start of the class
- ❑ The student is responsible for all information covered while absent
- ❑ Please be advised that a medical note does not excuse the absence
- ❑ Students will be afforded one excused absence per class per semester.
- ❑ Students are expected to arrive on time and stay for the entire class. This factor will be used in determining borderline grades.
- ❑ Student are expected to attend 90% of the content of the classroom; that is 14 out of the 15 times that the class meets.

For a second missed class, the student will be required to submit a 4 page paper covering the topic(s) discussed in the missed class. Upon notification, the instructor will determine the specific topic assignment. All assignments must be submitted no later than the last day of class. Failure to submit this project will result in a one letter (10 point) final grade deduction.

If the last day of class is missed, the student must contact the instructor for assignment instructions or submit to a one letter (10 point) final grade deduction.

If the student is absent for three (3) or more classes, the student will receive an “F” for the course.

Health / Medical Requirements

- ❑ All students must meet the college's medical clearance requirements before entering the clinical site.
- ❑ Students must have a physical examination and maintain immunizations, as required. Please be advised that there are no exceptions to this policy.
- ❑ Medical records will be maintained in the BCC Health Services Office
- ❑ It is the student’s responsibility to keep their medical records and immunizations up- to- date.
- ❑ Students are not permitted to participate in clinical activities when found in noncompliance with this requirement.

CPR Requirement Policy

- ❑ Students must be certified in “CPR-BLS for Health Care Providers” prior to the beginning of the second semester.
- ❑ Validation in the form of a card is to be provided to the program and will be maintained as a part of the student’s clinical folder.

Communicable Disease Policy

- ❑ The Radiotherapy Program has, in place, a policy that addresses communicable disease in order to prevent its spread among patients, staff, faculty and classmates.
- ❑ The “Health/ Medical Requirements” section of this handbook informs students of the physical examination and immunization requirements.
- ❑ The physical examination section of the Health Services Medical Record documents immunization history and requirements.
- ❑ The program must be informed immediately whenever the student discovers that he/she has a communicable condition. If this happens at the clinical site, the clinical instructor will dismiss the student from clinical participation.
- ❑ The student is responsible to seeking medical attention.
- ❑ Students may participate in clinical education when a medical clearance note is received.

Drug and Alcohol Policy

- Bergen Community College prohibits the possession or consumption of alcohol

on the college campus and prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol on college property.

- Intoxication and/or disorderly conduct resulting from alcohol consumption violates college policy.
- Students may not attend classroom or clinical instruction under the influence of alcohol and / or illicit drugs.
- In the clinical setting, the provision of client care in a safe and appropriate manner cannot be compromised at any time.
- The health and safety of employees, students and others in the educational / clinical setting cannot be jeopardized.
- Refer to Bergen Community College Catalog 2004 -2005, Rules and Regulations page 45.

Smoking Policy

Bergen Community College facilities are smoke free. Refer to the Rules and Regulations section of the College Catalog for enforcement and violation information.

During clinical rotation, the student will be required to follow the rules and regulations of the clinical education center regarding smoking policy.

Radiation Safety Practices Policy

- ❑ Radiation safety principles are introduced during student orientation and then after, will be reinforced throughout all other RTT courses
- ❑ The Radiography Program Director will serve in the capacity of the program's Radiation Safety Officer
- ❑ Students will be given occupational monitoring devices
- ❑ Students are to have their monitoring devices/dosimeter exchanged promptly
- ❑ Students must not attend clinical without the monitoring device
- ❑ Students with expired or outdated badges may not attend clinical.
- ❑ Each student will be informed of their most recent radiation exposure report.
- ❑ To assure confidentiality, exposure reports will be kept locked in the Radiation Therapy Department office.

Fluoroscopic Equipment Usage

- ❑ **From: New Jersey X-Ray Technologist Board of Examiners**
- ❑ The X-Ray Technologist Board of Examiners at their meeting on December 10, 1980 re-affirmed their prohibition of licensed X-Ray Technologists utilizing fluoroscopic equipment.

- ❑ This is a violation of Public Law 1968 – Chapter 291 which states that “health and safety of the people of the State must be protected against harmful effects of excessive and improper exposure to ionizing radiation.” Further, The Board of Medical Examiners has ruled that fluoroscopy is the practice of medicine.
- ❑ Therefore, the Board’s position on this matter remains “no technologist or student shall fluoroscope a patient at any time for any reason”.

Accident/ Incident Reports

- ❑ Students must report any accident, incident or unusual occurrence involving a patient and/or student to the clinical supervisor.
- ❑ Students should document the incident in his/her own words, making sure to include the following information:
 - a. Patient’s name,
 - b. Date, time and place of the incident
 - c. Names of others involved
 - d. Names of witnesses to the incident
 - e. Name(s) of the Radiation Therapy / Radiology Department personnel notified of the incident
- ❑ The clinical supervisor will determine if a Bergen Community College incident report is necessary. A hospital incident report may also be needed.

Professional Liability Insurance

- ❑ Bergen Community College furnishes the student with liability insurance while in the clinical setting during assigned times only.
- ❑ Students must provide their own Medical Insurance.
- ❑ Should a student become injured or ill while at the clinical site, any charge incurred will be the responsibility of the student.

Professional Behavior Policy

Radiotherapy students are required to:

- ❑ comply with the policies of the affiliate since students are guests of the Hospital.
- ❑ conduct themselves in a professional manner at all times.
- ❑ adhere to all Hospital policies.
- ❑ avoid eating, drinking and gum chewing within the sight of patients.
- ❑ never leave patients unattended.
- ❑ address faculty, management, staff and patients in a professional manner.
- ❑ inform the program of address or phone number changes

- ❑ avoid using the department's telephones for personal use- emergencies only
- ❑ notify the instructor or designee before leaving the department
- ❑ maintain pagers on "pulse" mode

Patient Care Practices

- ❑ Patient care encompasses a patient's physical, emotional and psychological needs
- ❑ The student radiation therapist must be aware of the patient's rights.
- ❑ **"A Patient's Bill of Rights" [American Hospital Association, 1975]**

According to this bill, the patient has the right to:

1. care that is respectful and considerate.
2. privacy regarding his care and condition.
3. refuse treatment.
4. be informed of the nature, probable length of recovery time, and the risks involved prior to the start of any procedure.
5. receive, in understandable terms, current information regarding diagnosis treatment and prognosis from a physician.
6. confidentiality with respect to all records and communication related to his care.

Confidential Patient Information - Cooperate Compliance Policy

All patient information is strictly confidential and is not to be discussed with anyone beyond what is required in a private medical therapeutic setting. Additionally, it is not appropriate for the student / therapist to discuss personal problems with patients.

Personal Call Policy

Personal calls are prohibited during classroom, lab, and clinical training time. In the event of an emergency, the student will be excused to respond to the call.

Professional Attire/ Uniform Policy

- ❑ Students are expected to wear the regulation uniform.
- ❑ Uniforms are to be worn at all times while at the Clinical Education center.
- ❑ Students will receive information regarding uniform requirements at the January orientation meeting.
- ❑ Uniforms must be replaced as needed due to excessive wear and discoloration.
- ❑ Shoes are to be kept clean and presentable.

- ❑ Hair should be neatly arranged. If long, it must be worn up, securely fastened and off the shoulder. This applies to both male and females.
- ❑ Male students may wear a beard and/or mustache provided they are kept neatly trimmed.
- ❑ Tattoos or body piercing must not be visible in the clinical setting.
- ❑ Jewelry – male/female
 - a. Rings - one – band type
 - b. Earrings - small post type (one per ear lobe)
 - c. Neck chain - worn beneath the uniform
 - d. Bracelets – none
 - e. Watch - sweep hand to be worn at all times
- ❑ Make-up - must be applied subtly
- ❑ Finger nails – trimmed and clean
- ❑ A regulation name badge will be worn on the left side of the uniform.
- ❑ Perfume or other strong smelling cosmetics are not to be worn.
- ❑ Students are expected to maintain high standards of personal hygiene.
- ❑ Students are responsible for their transportation to the clinical site.

Pregnancy Policy

Statement: The radiation therapy program complies with the New Jersey Radiologic Technology Board of Examiners, and its policy regarding pregnant students in an accredited Radiologic Technology training program in New Jersey.

1. No pregnant student should receive a radiation dose of more than 0.5 rem during the nine-month gestation.
2. All students shall wear whole body radiation dosimeter (e.g., film badges or thermoluminescent dosimeters) when in the vicinity of radiation producing machines. This practice must be particularly enforced with respect to pregnant students.
3. The relative risk to the embryo and/or fetus from x-rays should be thoroughly explained to students prior to the actual operation of x-ray machines. The United States Nuclear Regulatory Commission (NRC) Regulatory Guide No. 8.13, “instruction concerning prenatal radiation exposure” and NRCP Report No. 91, “Protection of embryo-fetus” are suggested as references for all students. Refer to appendices #1 & #2.
4. The Radiologic Technology Board of Examiners recommends that adequate controls and monitoring be instituted to limit the dose to all students to as low as reasonably achievable. The Radiologic Technology Board of Examiners recommends a total equivalent limit (excluding medical exposure) of 0.5 rem (5 mSv) for the embryo-fetus. Once a pregnancy becomes known, exposure of the embryo-fetus shall be no greater than 0.05 rem (0,5 mSv) in any month (excluding medical exposure).

5. The Radiation Safety Officer should review the student's radiation exposure reports to assure compliance with the above dose limits.
6. Provisions shall be made for re-entry into the program, when the student takes a leave of absence.
7. All didactic and clinical education hours as mandated by the program must be completed prior to graduation.
8. A student may notify the Program Director of her pregnancy by submitting a completed Pregnancy Declaration Form.

A student's declaration of pregnancy is voluntary. A physician's note supporting the student's chosen option must be presented to the Program Director at the time of declaration.

**BERGEN
COMMUNITY COLLEGE
DIVISION OF SCIENCE and HEALTH
Radiation Therapy Technology Program**

Pregnancy Declaration Form

Name: _____ Date: _____

I, _____ am declaring my pregnancy. I have met with the Program Director/ Radiation Safety Officer and

I am choosing the following option:

- Withdrawal from the program, immediately.
- Withdraw from clinical, while completing the didactic courses for the semester.
- Request a leave of absence from the program, returning in the appropriate semester.
- Continue with the didactic and clinical components, until the pregnancy terminates.

Student Signature

Program Director/ Radiation Safety Officer

I understand I have the right to withdraw this declaration. _____ (initial)

preg/declaration
Form # 813

Extended Absence Policy

- ❑ It is the student's responsibility to notify the program as soon as possible
- ❑ Extenuating circumstance
- ❑ Written documentation needs to be provided regarding reason and time frame
- ❑ Each circumstance will be reviewed by the Radiation Therapy Program Advisory Committee on an individual basis
- ❑ A release must be provided to the program before the student can participate in clinical activities.

Program Dismissal Policy

- ❑ The Radiotherapy Program reserves the right to recommend to the Dean of the Department of Health and Science, the dismissal of a student for any serious reason, e.g. failing academic performance, unsafe clinical practices; health problems which interfere with the attainment of program goals and which cannot be resolved; behavior which is contrary to the ethical code of our profession; and misuse of privileges extended by the clinical education centers.
- ❑ The recommendation to dismiss a student is made by the faculty of the Radiotherapy Program. A student that is dismissed from the Program is not eligible for re-admission or re-enrollment.
- ❑ The student has the right to appeal the decision by following the Due Process Policy as outlined in the radiation therapy student handbook.
- ❑ The program has the right to dismiss a student from the program when any two core RTT courses are failed.
- ❑ The Program reserves the right to dismiss a student from the clinical education center immediately, when the health and safety of a patient is affected by the negligent, incompetent, unethical or illegal practice of the student.
- ❑ The student will be notified verbally [and in writing] through the Student Conference form.
- ❑ The Clinical Supervisor will notify the Program Director of an immediate dismissal.
- ❑ The student may not return to clinical rotation until the incident has been reviewed by the Program Director and a determination is made as to whether the incident warrants Program Dismissal.
- ❑ The student may continue to attend all course lectures until disposition of the incident has been determined.

Due Process Policy

Statement: It is recommended that any concern or issue be addressed as soon as possible. Those students having a didactic or clinical grievance must follow the protocol or steps as indicated below. The program has a Grievance Committee that consists of the Program Director, Department Chair and Faculty.

Steps	Action	Time Frame
1	The student must make an appointment with the program director.	Within 3 days of the incident
2	Following this meeting, if the issue is still unresolved, the student must meet with the Radiation Therapy Program Grievance Committee within 5 working days. A report documenting the outcome must be forwarded to the program director and student.	Report must be received within 4 working days of the meeting date.
3	If unresolved, the student will schedule a meeting with an external source to the program, such as a member of BCC's Counseling Center. A report documenting the outcome must be forwarded to the student and program director. The decision of the Dean of Student Affairs is final.	Report must be received within 4 working days of the meeting date.

Sexual Harassment Policy

Sexual Harassment is defined as unwelcome sexual advances or sexually explicit comments. Bergen Community College is committed to providing all students and employees an environment free from sexual harassment or discrimination. As stated in the College catalog, the College and the Radiation Therapy Department deems sexual harassment in any form as prohibited, unprofessional and unacceptable behavior and in violation of Title VII of the Civil Rights Acts of 1964 and 1990, as amended, Title IX of the Education Amendments of 1972, and the New Jersey Law Against Discrimination, established case law and State Policies. Additional information regarding Bergen Community College Sexual Harassment Policy is published in the 2004-2005 College Catalog on page 49.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

- ❑ **BUCKLEY AMENDMENT** – Bergen Community College’s Radiation Therapy Program informs students of the Family Educational Rights and Privacy Act of 1974.
- ❑ This Act, with which the college complies fully, was designated to protect the privacy of education records, to establish the right of students to inspect and review their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, to submit an explanatory statement for enclosure in the record if the outcome of the hearing is unsatisfactory, to prevent disclosure, and to secure a copy of the College policy which includes the location of all education records.
- ❑ Students also have the right to file complaints with the Family Educational Rights and Privacy Office (FERPA), Department of Education, Room 4511, Switzer Building, Washington, D.C. 20202, telephone (202) 655-4000, concerning alleged failures by the College to comply with the Act.

Non-Compliance/ Complaint Resolution Policy

- ❑ Bergen Community College is fully accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools.
- ❑ Since Radiation Therapy Technology is a highly specialized field, the Program is avidly seeking accreditation with the:
 1. Joint Review Committee on Education in Radiologic Technology [JRCERT]
 2. New Jersey Radiologic Technology Board of Examiners [NJ RTBE].
- ❑ Similar to Radiography educational programs, Radiation Therapy Technology educational programs follow the Standards of An Accredited Program in Radiologic Sciences.
- ❑ Students are provided a copy of the Standards at orientation, when a detailed explanation of accreditation is provided. The Standards are posted in the classroom and laboratory as well.
- ❑ Issues of non-compliance with the Standards must be brought to the attention of the program director.
- ❑ The Complaint Resolution Form will be used to document and track the allegation.
- ❑ The program will immediately take action to investigate the allegation(s)
- ❑ If found to be in non-compliance, the program will take immediate action for correction.
- ❑ Corrective action will take place within 30 days of the initial report.
- ❑ Issues of non-compliance with the Standards should be addressed or reported with the following agencies:
 - 1) Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive
Chicago, Illinois, 60606
312-704-5300
 - 2) New Jersey Radiologic Technology Board of Examiners
Department of Environmental Protection
Bureau of Radiologic Health
P.O. Box 415
Trenton, New Jersey 08625
609-984-5890

Radiation Therapy Program Education Policies and Regulations

Certificate Curriculum

The curriculum for this 12 month / 36 credit certificate program is:

First Semester

RTT 110	Introduction to Radiotherapy and Patient Care Management	2.0 credits
RTT 120	Radiation Therapy Practices I	4.0 credits
RTT 130	Radiation Biology and Safety	3.0 credits
RTT 150	Principles of Diagnostic Radiation Physics	3.0 credits
RTT 121	Radiation Therapy Clinical Practicum I	2.0 credits
	General Education Elective*	<u>3.0 credits</u>
		17.0 credits

Second Semester

RTT 200	Survey of Diseases	3.0 credits
RTT 210	Dosimetry and Treatment Practices	3.0 credits
RTT 220	Radiation Therapy Practices II	4.0 credits
RTT 230	Quality Control and Instrumentation	2.0 credits
RTT 221	Radiation Therapy Clinical Practicum II	2.0 credits
	General Education Elective**	<u>3.0 credits</u>
		17.0 credits

Third Semester

RTT 222	Radiation Therapy Clinical Practicum III	<u>2.0 credits</u>
		2.0 credits

* Successful completion of English Composition II is required during this semester. If this requirement has been completed, then the student may choose an alternate general education course. Successful completion of SPE-111, CIS-158 or MAT-250 is required by the American Registry of Radiologic Technologists and the New Jersey Department of Environmental Protection.

** Choose SPE-111, CIS-158 or MAT-250. Successful completion of these courses is required by the ARRT and the NJDEP.

General Information

Validation of professional credentials is a part of the program's admission process.

Criminal background checks are required of all students entering the program

Didactic Courses will be offered during the day (Monday – Saturday) and/or evening (Monday – Friday).

Presently, six medical facilities are available for clinical education.

Clinical courses will be offered during the day and/or evening (Monday – Friday).

Clinical is a competency-based course of education.

Program content is designed to prepare the graduate for successful completion of the National Registry Examination in Radiation Therapy administered by the ARRT.

Radiation Therapy Technology Certificate Program

Program Course Description

Course Title: RTT 110 Introduction to Radiotherapy and Patient Care Management
Instructor: Carol Chovanec
Credits / Hours: 2.0 credits / 2.0 lecture hours

Course Description:

This course is an exploration of the foundation of radiation therapy practices and the variety of roles for the professional in the delivery of health care. Principles of practice, professional responsibilities, medical law and ethics will be addressed.

Course Title: RTT 120 - Radiation Therapy Practices I
Instructor: Carol Chovanec
Credits / Hours: 4.0 credits - 3.0 lecture hours/ 3 lab hours
Corequisite: RTT 110

Course Description:

This course introduces the student radiation therapist to treatment equipment and techniques. Topics include patient immobilization, localization, simulation, documentation, patient positioning, treatment delivery parameters, prescriptions, patient care, and various laboratory experiments.

Course Title: RTT 130 Radiation Biology and Safety
Instructor: Carol Chovanec
Credits / Hours: 3.0 credits / 3.0 lecture hours

Course Description:

This course explores the cellular and systemic effects of radiation exposure. Radiation health, safety, and federal and state requirements will be enforced.

Course Title: RTT 150 Principles of Diagnostic Radiation Physics
Instructor: Mr. Paul Griffo
Credits / Hours: 3.0 credits / 3.0 lecture hours

Course Description:

This course is a continuation of the exploration of radiation physics. Emphasis will be on basic principles of physics, atomic structure, electro-magnetic and particulate radiation, x-ray circuits, radiographic tubes and radiation production.

Course Title: RTT 200 Survey of Disease
Instructor: Carol Chovanec
Credits / Hours: 3.0 credits / 3.0 lecture hours
Prerequisites: RTT 120

Course Description:

This course orients students to disease and disorders that compromise the human body. Emphasis is on cellular, systemic and manifestations. There will be an emphasis on the management of pathologies as well.

Course Title: RTT 210 Dosimetry and Treatment Practices
Instructor: Mr. Allan J. Caggiano and staff (Dr. Venkat N. Kanumalla / Prof. Farshad Ravanshad)
Credits / Hours: 3.0 credits / 3.0 lecture hours
Prerequisites: RTT 110, RTT 150
Corequisite: RTT 230

Course Description:

In this course, the student learns to apply the concepts of radiation physics to therapy practice. Treatment units, scatter radiation analysis, isodose curves, patient contouring, dosimetric calculations, compensating filtration and equipment calibration are introduced

Course Title: RTT 220 - Radiation Therapy Practices II
Instructor: Carol Chovanec
Credits / Hours: 4.0 credits - 3.0 lecture hours / 3.0 lab hours
Prerequisites: RTT 120
Corequisite: RTT 210, RTT 230

Course Description:

This course is an exploration of cancer; its detection, diagnosis, correlation and prognosis. The focus of the course is on the management of neoplastic disease and its mechanism of spreading. Various laboratory experiments will be used to demonstrate the role of radiation therapy in the treatment of cancer

Course Title: RTT 230 - Quality Control and Instrumentation
Instructor: Carol Chovanec
Credits / Hours: 2.0 credits / 1.0 lecture hour / 2 lab hours
Prerequisites: RTT 120, RTT 150
Corequisite: RTT 210

Course Description:

This course explores quality control programs and protocols for various radiation therapeutic facilities. There will be an introduction to computing, information processing, computer concepts and various laboratory experiments.

Course Title: RTT 121 Radiation Therapy Clinical Practicum I
Clinical Supervisor: College and Hospital Staff
Credits / Hours: 2.0 credits / 352 hours

Course Description:

This course serves as a clinical orientation to radiation therapy where students are afforded an opportunity to develop professional skills and knowledge through structured rotations and assignments in radiation therapy. Treatment competencies and related objectives will be used to measure clinical outcomes. Students will be afforded 352 hours for this clinical experience.

Course Title: RTT 221 Clinical Practicum II
Clinical Supervisor: College and Hospital Staff
Credits / Hours: 2 credits / 352 hours

Prerequisites: RTT 121 Radiation Therapy Clinical Practicum I

Course Description:

This course provides the student radiation therapist with an avenue to continue their development of professional skills through rotations in treatment delivery, simulation, dosimetry, beam modification devices, and patient care. Objectives and treatment competencies will be used to assess outcomes. The student will be afforded 352 hours for this clinical experience.

Course Title: RTT 222 Clinical Practicum III
Clinical Supervisor: College and Hospital Staff
Credits / Hours: 2 credits / 360 hours

Prerequisites: RTT 221 Clinical Practicum II

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 360 hours of clinical experience.

Program content is designed to prepare the eligible candidate for the National Registry Examination in Radiation Therapy Technology sponsored by the American Registry of Radiologic Technologists.

Academic Regulations

Academic integrity is challenged when a student is charged with academic irregularities, such as cheating during an examination or plagiarism in the preparation of an essay, laboratory report, or oral presentation.

The program will adhere to BCC Policies regarding academic integrity as found on page 36 of the 2004-2005 College Catalog.

Licensure Requirements and Professional Organizations

New Jersey State [Temporary] Licensure Requirements:

- ❑ Completion of all radiation therapy didactic courses, clinical competency requirements and the 6 credits of general education courses
- ❑ A License is required for radiation therapy technologists to work in the State of NJ
- ❑ A temporary and permanent license may be obtained through:
 - State of New Jersey
 - Department of Environmental Protection
 - Bureau of Radiologic Health
- ❑ Holders of an ARRT certification must also possess a current valid New Jersey license

Professional Organizations

Organization	Address	Phone/ E-Mail
American Registry of Radiologic Technologists	1255 Northland Drive St Paul, MN, 55120-1155	651-687-0048
American Society of Radiologic Technologists	15000 Central Avenue Albuquerque, NM 87123-3917	505-298-4500
New Jersey Society of Radiologic Technologists	Atlantic Highlands New Jersey	
Joint Review Committee on Education in Radiologic Technology	20 N Wacker Drive Chicago, IL, 60606	312-704-5300
Department of Environmental Protection; Bureau of Radiologic Health	PO Box 415 Trenton, NJ 08625	609-984-5890

Grading Scale

Final course grades awarded are as follows:

Letter Grade	Numerical Range	Conversion
A	90% to 100%	Excellent
B+	85% to 89.9%	Very Good
B	80% to 84.9%	Good
C+	75% to 79.9%	Marginal / Acceptable
C	70% to 74.9%	Poor
F	Below 70%	Failing
I	Incomplete	
E	Unofficial withdrawal	
W	Official Withdrawal	
D	Does not apply to RAD courses	

Didactic and Clinical Radiotherapy Course Policies

- ❑ All clinical courses are to be taken in sequence with its appropriate didactic portion of the curriculum.
- ❑ In order to successfully pass a core RTT course, a final course grade of 75% is required.
- ❑ The student **MUST** earn a passing grade of C+ or better in both the didactic and

clinical courses in each semester in order to progress to the next level of professional studies.

- ❑ Students auditing clinical courses must meet all requirements stated in the syllabus.
- ❑ Poor attendance in didactic classes can affect clinical participation.
- ❑ Students will be dismissed from the program when any two core RTT course are failed.

Radiation Therapy Basic Skill Evaluation

To demonstrate the goals of the program, upon completion the graduate will be able to perform the following:

- Administer radiation therapy as prescribed by the physician.
- Display professional conduct essential to the well being of the radiation oncology patient.
- Demonstrate effective written communication skills; Maintain accurate and detailed treatment chart documentation.
- Demonstrate effective verbal communication skills in the clinical setting.
- Observe the clinical progress of the radiation oncology patient, use clinical decision making skills to recognize and report any signs of complications.
- Utilize treatment accessories to accurately reproduce the radiation treatment.
- Adhere to radiation safety procedure protocol.
- Safely and effectively operate a variety of computerized simulation and treatment machines.
- Perform machine safety checks, know safe limits of equipment operations, and report abnormalities or inconsistencies to the proper authority.
- Construct immobilization devices and employ custom blocking techniques that are conducive to conformal radiation therapy.
- Utilize sophisticated imaging equipment and treatment planning systems for precise tumor localization.
- Work closely with the radiation Oncologist and the therapy team in the preparation of a treatment plan that is customized to the patient's needs.
- Adhere to the Radiation Therapist Code of Ethics.

Program Graduation Requirements

Graduation from the radiotherapy program is contingent upon successful completion of the following:

- ❑ didactic radiotherapy courses
- ❑ clinical radiotherapy education courses
- ❑ Radiotherapy Program Exit/ Final Examination
- ❑ liberal arts and sciences courses

In order for the graduate to be eligible to apply to the American Registry of Radiologic Technologists [ARRT] for the radiotherapy certification examination and NJ Department of Environmental Protection for a temporary license, all of the requirements listed above must be completed entirely.

The student must provide documentation of compliance with this policy with a college transcript or evaluation form, to the Program Director.

Student Services

All student services that are offered by the college are accessible to the Radiation Therapy Student. These services include The Sidney Silverman Library and Learning Resource Center, Academic Advising Center, Financial Aid Office, Tutoring Center and the Bookstore.

BERGEN COMMUNITY COLLEGE

Radiation Therapy Technology Program

File COPY

It is extremely important that you take time to read and digest the information contained in the STUDENT HANDBOOK and the CLINICAL EDUCATION MANUAL.

Students are expected to behave in a professional manner at all times. Your signature indicates that you completely understand all the material contained therein and that you will abide by all the rules, regulations and policies set forth.

Infractions of any rules, regulations, and/or policies stated in the handbook, manual, syllabi and College catalog will result in your removal from the clinical externship.

STUDENT NAME _____
Please Print

STUDENT SIGNATURE _____

Date: _____

Course Number: RTT _____

Semester: Fall
 Spring
 Summer

ALL POLICIES AND COURSE REQUIREMENTS ARE SUBJECT TO REVISION ON A SEMESTER BY SEMESTER BASIS. STUDENTS WILL BE NOTIFIED OF ANY REVISION (S) AT THE BEGINNING OF THE SEMESTER IN WHICH THE POLICY OR REQUIREMENTS IS/ARE TO BE IMPLEMENTED. THIS WILL TAKE PLACE DURING THE FIRST MEETING OF THE APPROPRIATE RADIATION THERAPY CLASS.

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Radiation Therapy Technology Program

Student's COPY

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STUDENT NAME _____
Please Print

STUDENT SIGNATURE _____

Date: _____

Course Number: RTT _____

Semester: _____

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