



Nursing and Health Professions
1400 Tanyard Road, Sewell, NJ 08080
856-468-5000

NMT 215: Radiopharmacy

Syllabus

Lecture Hours/Clinical Lab/Credits: 1/3/2

Catalog Description

Prerequisite: Grade of "C" or higher in CHM 111, NMT 106, NMT 107, ALH 107, NMT 114 and NMT 116

Pre or Co-requisite: Grade of "C" or higher in NMT 205, NMT 210

This course focuses on developing the didactic knowledge and laboratory practice of all aspects of nuclear pharmacology including radiopharmaceutical kit preparation, Department of Transportation monitoring, disposal and inventory

Textbook and Course Materials

It is the responsibility of the student to confirm with the bookstore and/or their instructor the textbook, handbook, and any other materials required for their specific course and section.

Click here to see current textbook prices at rcgc.bncollege.com.

Evaluation Assessment

Online Proctoring

All courses offered at RCSJ, whether they are web-enhanced, hybrid, or fully online, may include assessments that make use of Online Proctoring. To find out more about Online Proctoring, and to learn about the minimum technical requirements, visit

rcsj.edu/elearning/online-proctoring

Grading Distribution

Grading to be determined by individual instructors.

Individual instructors may include the following assessment(s):

- Exams
- Quizzes
- Terms Identification
- Essays

- Presentations
- Group Discussions
- Attendance and Participation

Grading

The grading scale for each course and section will be determined by the instructor and distributed the first day of class.

Rowan College of South Jersey Core Competencies

(Based on the NJCCC General Education Foundation - August 15, 2007; Revised 2011; Adopted 2014)

This comprehensive list reflects the core competencies that are essential for all RCSJ graduates; however, each program varies regarding competencies required for a specific degree. Critical thinking is embedded in all courses, while teamwork and personal skills are embedded in many courses.

1. **Written and Oral Communication:** Students will communicate effectively in both speech and writing.
2. **Quantitative Knowledge and Skills:** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems
3. **Scientific Knowledge and Reasoning:** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
4. **Technological Competency:** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals
5. **Society and Human Behavior:** Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
6. **Humanistic Perspective:** Students will analyze works in the fields of art, history, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language
7. **Historical Perspective:** Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
8. **Global and Cultural Awareness:** Students will understand the importance of a global perspective and culturally diverse peoples.
9. **Ethical Reasoning and Action:** Students will understand ethical issues and situations.
10. **Information Literacy:** Students will address an information need by locating, evaluating, and effectively using information.

NMT 215 Core Competencies

This course focuses on one of RCSJ's Core Competencies:

- Quantitative Knowledge and Skills

Student Learning Outcomes: Radiopharmacy

| Successful completion of NMT 215 will help students: | RCSJ Core Competencies | Evaluation / Assessment (Additional means of evaluation may be included by individual instructors) |
|---|-----------------------------------|---|
| Calculate radiopharmaceutical Kit and dose and dose amounts. | Quantitative Knowledge and Skills | Radiopharmacy Math Test. |
| Practice radiopharmaceutical preparation, decontamination procedures, 797, and radiochemical quality control. | | Test and Quizzes Lab Competency |
| Practice and demonstrate competency in performing IV injection procedures using standard/universal precautions. | | Test and Quizzes Lab Competency |
| Review Isotope properties/ critical organs, medical abbreviations, non radioactive agents, recordable/reportable events and radioactive waste disposal guidelines and procedures. | | Test and Quizzes |
| Practice and demonstrate proper handling, labeling, monitoring and transporting radioactive packages procedures. | | Test and Quizzes Lab Competency |

It is the responsibility of the student to review the RCSJ Information and Policies, as well as the Online Syllabus at: rcsj.edu/syllabi.

Topical Outline

| Topic | Labs |
|--|--|
| <ul style="list-style-type: none"> ▪ IV Injection Lecture | <ul style="list-style-type: none"> ▪ Lab 1 <ul style="list-style-type: none"> ○ IV Injection Demonstration and Practice |
| <ul style="list-style-type: none"> ▪ Isotope Properties/Critical Organs <ul style="list-style-type: none"> ○ Medical Abbreviations ○ Non-radioactive Agents ○ Recordable/Reportable Events ○ Radioactive Waste Disposal Areas and Procedures | <ul style="list-style-type: none"> ▪ Lab 2 <ul style="list-style-type: none"> ○ IV Injection Practice ▪ Lab 3 <ul style="list-style-type: none"> ○ Practice Proper Procedures for Radioactive Waste Disposal |
| <ul style="list-style-type: none"> ▪ Dose Calculations <ul style="list-style-type: none"> ○ Pre and Post Calculations Using Decay Factors ○ Universal Dose Calculations ○ Specific Concentration ○ Dose Volume Calculations | <ul style="list-style-type: none"> ▪ Lab 4 <ul style="list-style-type: none"> ○ IV Injection Competency |

| Topic | Labs |
|---|--|
| <ul style="list-style-type: none"> ○ Dose Activity Based on Weight/ Converting between Pounds and Kilograms ○ Pediatric Dose calculations (Clark's Formula, BSA, Talbot's Nomogram) ○ Maximum/Minimum Doses ○ Unit Dose Adjustments | |
| <ul style="list-style-type: none"> ▪ Radiopharmacy Kit Preparation <ul style="list-style-type: none"> ○ Calculate Total Activity for a Given Kit ○ Calculate Total Volume for a Kit ○ Review Radioactive Waste Disposal and Radiation ○ Particle Concentration in MAA Kit ○ Kit Preparation Specifics ○ USP 797 | <ul style="list-style-type: none"> ▪ Lab 5 <ul style="list-style-type: none"> ○ Handling Radioactive Materials ▪ Lab 6 and Lab 7 <ul style="list-style-type: none"> ○ Practice ○ Radiopharmaceutical Kit Preparation Techniques |
| <ul style="list-style-type: none"> ▪ Radiopharmaceutical Packages <ul style="list-style-type: none"> ○ Transportation of Radioactive Materials ○ DOT Regulations ○ Package Labels ○ Monitoring Packages (Review GM QC) | <ul style="list-style-type: none"> ▪ Lab 8 <ul style="list-style-type: none"> ○ Radioactive Kit ○ Preparation Competency ▪ Lab 9 <ul style="list-style-type: none"> ○ Monitoring Radioactive Packages |
| <ul style="list-style-type: none"> ▪ Radiopharmaceutical Quality Control | <ul style="list-style-type: none"> ▪ Lab 10 <ul style="list-style-type: none"> ○ ITLC Radiochemical Testing ○ Alumina Testing |

Resources

Academic Support Center: The Academic Support Center (ACS), located in Room 603 above the College Store, offers FREE tutoring, student success workshops, structured study groups, and academic coaching for RCGC students seeking assistance in most subjects. The phone number is 856-681-6250. For more information about all the services provided, please visit the Academic Support Center's webpage: rcsj.edu/asc.

Affirmative Action Statement

The Board of Trustees is committed to providing a work and academic environment that maintains and promotes affirmative action and equal opportunity for all employees and students without discrimination on the basis of certain enumerated and protected categories. These categories are race, creed (religion), color, national origin, nationality, ancestry, age, sex (including pregnancy and sexual harassment), marital status, domestic partnership or civil union status, affectional or sexual orientation, gender identity or expression, atypical hereditary cellular or blood trait, genetic information, liability for military service, or mental or physical disability, including AIDS and HIV related illnesses.

For questions concerning discrimination, contact Almarie J. Jones, Special Assistant to the President, Diversity and Equity/Title IX and Compliance, 856-415-2154 or ajones@rcsj.edu or (Cumberland) Nathaniel Alridge, Jr., JD, Director, Diversity and Equity/Title IX and Judicial Affairs, 856-691-8600, ext. 1414 or nalridge@rcsj.edu. For disability issues or any barriers in the learning or physical environment related to a document condition/disability please contact: Gloucester campus – Carol Weinhardt, Director, Department of Special Services, ADA/504 Officer at 856-415-2247 or cweinhar@rcsj.edu; or Cumberland Campus – Meredith Vicente, Senior Director, Department of Special Services/Project Assist at 856-200-4688 or mvicent1@rcsj.edu.

Department of Special Services

The Department of Special Services is committed to providing support services and ensuring equal access to eligible students with documented conditions/disabilities as outlined by the Americans with Disabilities Act (ADA) and the Americans with Disabilities Act with Amendments Act (ADAAA).

(Gloucester Campus Location and Contact)

Location: Instructional Center, room 425A.

Primary Contact: Director, Carol Weinhardt, (email) cweinhar@rcsj.edu; or (phone) 856-415-2247.

(Cumberland Campus Location and Contact)

Location: Center for Academic & Student Success (CASS)

Primary Contact: Senior Director, Meredith Vicente, (email) mvicent1@rcsj.edu; or (phone) 856-200-4688.

Reporting Allegations of Sexual Assault and Resource Referrals (08/2021) Gloucester Campus

There are multiple safe places for students to report allegations of sexual assault, both on and off campus. Reports of sexual assault can be made to any of the following offices listed in the chart below.

All students are encouraged to report alleged crimes on campus. Crimes that pose a threat to the campus community must be reported to **9-1-1**, Security, the Sheriff's Office or the Deptford Township Police Department. All employees, including Security staff, must report incidents of discrimination, harassment or sexual misconduct to the Title IX Officer.

| Service | Resource | Phone Number/Location/Website |
|--|--|---|
| Non-Confidential Reporting Local Law Enforcement | Gloucester County Sheriff's Office | 856-681-2200 |
| | Deptford Township Police Dept. | 856-845-2220 |
| | Gloucester Co. Prosecutor's Office | 856-384-5500 |
| | Sexual Assault Response Team | 856-384-5555 |
| Non-Confidential Reporting 9-1-1 and Campus Security | 9-1-1 Gloucester County Emergency Management Dispatch Campus Security Blue Light Emergency Phones <u>or</u> ext. 4444 from any campus desk phone | 9-1-1 or push RED button on Campus Blue Light Emergency Phones 856-681-6287 |
| Non-Confidential On-Campus Reporting Support Services | Almarie J. Jones Special Assistant to the President Diversity and Equity/Title IX and Compliance John F. Ryder Director, Student and Veteran Affairs | 856-415-2154 College Center, Room 116 <i>ajones@rcsj.edu</i> 856-468-5000, ext. 6456 College Center, room 202 <i>jryder@rcsj.edu</i> |
| Confidential On-Campus Counseling and Support Services | Lois Y. Lawson-Briddell, Ph.D. MSW, LSW, Director Counseling & Wellness Services Center | 856-464-5236 <i>llawsonb@rcsj.edu</i> College Center, Room 206 |
| | William Leonard, Ph.D. Intervention Teams Consultant | 856-415-2119 <i>wleonard@rcsj.edu</i> College Center, STEM Office C-168 |
| | Crystal Noboa, LSW, MSW Director, The Center for People in Transition (PIT) | 856-415-2264 <i>cnoboa@rcsj.edu</i> Career & Technical Education Center, Room 809, 1492 Tanyard Road |
| | Diane Mussoline, EdS, LMFT Executive Director of Behavioral Services | 856-494-5665 <i>dmussoli@rcsj.edu</i> Rowan University Center, Room 200A |
| Confidential Off-Campus Full-Service Support | Center for Family Services/ Services Empowering Rights of Victims (SERV) | 1-866-295-7378 Camden and Gloucester counties www.centerffs.org/serv |
| Hospitals with Sexual Assault Nurse Examiners | Inspira Medical Center Jefferson Washington Township Hospital | 700 Mullica Hill Road, Mullica Hill, NJ 08062 856-508-1000 435 Hurffville-Crosskeys Rd., Turnersville, NJ 856-582-2500 |