

**Bergen Community College
Division of Health Professions
Department of Radiography**

RAD 288 – Radiography IV

Basic Information About Course

Course Typically Offered: Spring
Semester and Year: Spring, Year 2
Course and Section Number: RAD 288
Locations: HP-124

Course Description

This course incorporates three major areas of study - radiation protection, computed tomography, and sectional anatomy. There will be an introduction to sectional anatomy. The use of computer software programs will also be used in the laboratory.

Credits – 3 CR, Lecture [2.00], Laboratory [3.00]
Prerequisites - RAD 276 Principles of Imaging Equipment
RAD 285 Radiography III
RAD 286 Radiography Practicum III

Co Requisites - RAD 289 Radiography Practicum IV

Student Learning Objectives: As a result of meeting the requirements in this course, students will be able to:

1. Discuss the various sources of ionizing radiation and the impact on living tissue.
2. Describe the various methods to limit radiation exposure to a patient and occupational worker.
3. Identify the SI units related to ionizing radiation.
4. Demonstrate the ability to identify various quality control tests and issues encountered in an imaging facility.
5. Apply their knowledge of radiation safety to protect the patient and participating occupational workers.

Means of Assessment

Students in this course will:

1. Complete a midterm and final examination in class.
2. Demonstrate their understanding of material by participating in laboratory sessions and completing a laboratory practical at the end of the semester.
3. Complete short assignments, quizzes, and discussions related to current topics.

Course Content

In this course, radiography students will be introduced to contrast media studies and skull positioning. Included in this material is associated anatomy, technical considerations, and procedure modifications. Students are expected to review previously covered anatomy and physiology in preparation for each class. Students will demonstrate their knowledge through class participation and discussion, laboratory assessment, and examination

Course Texts and/or Other Study Materials

Lampignano, John & Kendrick, Leslie. *Bontrager's Textbook of Radiographic Positioning and Related Anatomy 10th Edition*. Elsevier, 2021. ISBN 978-0-323-65367-1

Callaway, William. *Mosby's Comprehensive Review of Radiography: The Complete Study Guide and Career Planner 8th Edition*. Mosby, 2022. ISBN 978-0323694889

Adler, Arlene & Carlton, Richard & Stewart, Kori. *Introduction to Radiologic & Imaging Sciences & Patient Care 8th Edition*. Saunders, 2022. ISBN 9780323872249

Fauber, Terri. *Radiographic Imaging and Exposure 6th Edition*. Mosby, 2020. ISBN 978-0323661393

RadTech Bootcamp by Clover Learning. Academic License.

Research, Writing, and/or Examination Requirement(s)

Quizzes, Short Writing Assignments

Students will be given short writing assignments or quizzes to complete. Timelines for completion will be determined by the course instructor.

Midterm and Final

The midterm and final will be objective, computerized tests that demonstrate the student's ability to identify and apply course material. Students will be expected to evaluate various radiographic images and identify related course material.

Grading Policy**Recommended Grade Structure**

Written assignment and participation grading will be defined by the instructor.

The Radiography program grading scale is outlined in the program handbook available here <https://bergen.edu/radiography/more-info/>

Recommended Policy for Late Assignments:

Students will receive a zero (0) for late assignments.

Attendance Policy**BCC Attendance Policy:**

All students are expected to attend every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

Attendance Policy for this Course.

To be determined by the instructor.

Other College, Divisional, and/or Departmental Policy Statements**Accommodations for Disabilities:**

Bergen Community College aims to create inclusive learning environments where all students have maximum opportunities for success. Any student who feels he or she may need accommodation based on the impact of a disability should contact the Office of Specialized Services at 201-612-5269 or via email at ossinfo@bergen.edu for assistance.

Statement on Mental Health and Wellbeing

Mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. Bergen Community College has licensed Personal Counselors available to assist you with addressing these and other concerns you may be experiencing.

You can learn more about the confidential mental health services available on campus via the Health and Wellness Center at www.bergen.edu/personalcounseling

BCC Statement on Plagiarism: Plagiarism is a form of academic dishonesty and may be a violation of U.S. Copyright laws. Plagiarism is defined as taking someone else's words, opinions, or ideas and claiming them as one's own.

Examples of plagiarism include instances in which a student:

- knowingly represents the work of others as his/her own
- represents previously completed academic work as current
- submits a paper or other academic work for credit which includes words, ideas, data or creative work of others without acknowledging the source
- uses another author's exact words without enclosing them in quotation marks and citing them appropriately
- paraphrases or summarizes another author's words without citing the source appropriately

Instructors may define their own policies regarding plagiarism. See the Academic Regulations section of the college catalog for college policies.

Available Online and On-Campus Resources

Office of Testing and Tutoring at the Meadowlands LYN 202

<https://bergen.edu/tutoring/tutoring-testing-center-at-the-meadowlands/>

The Writing Center and Tutoring Center L-125 <https://bergen.edu/tutoring/writing-center/>

OWL (Online Writing Lab) <http://www.owl.english.perdue>

The English Language Resource Center (ELRC) C-212

<https://bergen.edu/tutoring/english-language-resource-center/>

The Library <https://bergen.edu/library/>

MLA Formatting Guides <https://bergen.libguides.com/citationguides/mla>

Library Research Guides <https://bergen.libguides.com/index.php?b=s>

Free Time Computer Labs <https://bergen.edu/technology-assistance/computer-lab-availability/>

The Center for Student A-118 (Academic, Career, International, and Transfer Counselors)

<https://bergen.edu/center-for-student-success/>

Academic Support <https://bergen.edu/academics/pathway-scholars-program/academic-support/>

Personal Counseling HS-100

<https://bergen.edu/health-wellness-and-personal-counseling/personalcounseling/>

Sample Course Outline

Week	Topic/Activity	Assignments/Events
1	Orientation & Introduction to Cell Bio	
2	Cellular Proliferation	
3	Tissue & Organ Systems	
4	Cellular Survival	
5	Radiation Effects & Exposure I	
6	Radiation Effects & Exposure II	
7	Systemic Response to Radiation	
8	Midterm Examination	
9	Radiation Protection	
10	Minimizing Exposure	
11	Image Intensification Safety	
12	Quality Control & Quality Assurance	
13	Modalities	
14	Modalities & Review	Laboratory Practical
15	Final Examination	

Important dates for the semester can be found at <https://bergen.edu/events/category/academic-calendar/list/>

Note to Students: This Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class.

Date of Most Recent Syllabus Revision: 01/2023