



INSTRUCTIONAL PACKAGE

RAD 102
Radiology Patient Care Procedures

Effective Term
Fall 2023/Spring 2024/Summer 2024

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Summer 2024

COURSE PREFIX: RAD 102

COURSE TITLE: Patient Care Procedures

CONTACT HOURS: 3

CREDIT HOURS: 2

RATIONALE FOR THE COURSE:

This course provides a study of the procedures and techniques used in the care of the diagnostic imaging patient. This course serves to prepare the student for the clinical process as a beneficial component of their total education. It will provide the student an overview of the organizations governing the radiological technology profession. It also provides a study of the Healthcare system administrative services. This course assists the student with the skills necessary to provide safe, courteous patient care. It will provide detailed, concise instructions for the physical protection of the student as well as the patient. Emphasis is placed on professional ethics, patient and student confidentiality.

COURSE DESCRIPTION:

This course provides a study of the procedures and techniques used in the care of the diagnostic imaging patient. The course will include basic patient care skills to include CPR, vital signs, medical Asepsis and Sterile technique, assisted patient transfers and care of medical equipment (radiography equipment, oxygen tanks, I.V tubing, catheters etc.) and venipuncture. Additionally, MRI safety will be taught in the first week of the course prior to the student attending clinical rotations.

PREREQUISITES/CO-REQUISITES:

BIO 210 Acceptance to Radiologic Technology program.

REQUIRED MATERIALS:

Please visit the [BOOKSTORE](#) online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

1. Introduction to Radiologic & Imaging Sciences & Patient Care

By Arlene Adler, Richard Carlton, Stewart Kori

Edition: 8th

ISBN 13: 9780323872225

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.

Access to myHGTC portal for student self-services.

College email access – this is the college's primary official form of communication.

STUDENT IDENTIFICATION VERIFICATION:

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate. Use of electronic devices other than for academic participation will result in the student being asked to leave the classroom and count as one absence. **Audio and/or Video recording is prohibited unless authorized by the instructor.**

Demonstrating the following qualities will uphold the integrity of the learning environment:

1. Arrive on time to class.
2. Bring the materials needed for class.
3. **Turn off cell phones and texting devices in class.** First incident you will be asked to leave the classroom and be charged an absence and a written warning for insubordination. A second incident will result in a final written warning. A third incident is grounds for dismissal.
4. Use laptops/computers as it relates to classroom activities only.
5. Create appropriate emails from your HGTC email account. Contact Ms. MocarSKI at the following email address; casey.mocarSKI@hgtc.edu
6. Be attentive in class. Be respectful of your fellow classmates, Professors and Clinical instructors. You are entering **Professional Career path**. **We are all here for the same reason: For you to be successful in this program.**
7. Dress appropriately.
8. Stay the entire class.
9. **Do the work and avoid excuses/complaints.**
10. Use professional language and **avoid sarcastic and inappropriate comments.**
11. Take your own notes and do your own work.
12. **Avoid asking inappropriate or thoughtless questions.** (Example: "What's on the test?" "Are we getting out early?").

Abide by the honor and conduct code of HGTC as outlined in the College

Class Preparation: This Instructional Pkg. is subject to change; however, every effort will be made to adhere to it. This is an intense course with many new concepts. Some concepts will be easy while others will take more thought. Reading the chapters prior to class is a must. I will try to present the material as simply as possible. Everyone learns differently and at a different pace. If you see a classmate struggling

with a concept, offer to help them better understand after class and vice-versa. **You must take the responsibility for your own learning!**

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

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Module #1- Weeks 1—3 Chapters 1,2,7,8,11&12

Materials Covered: Introduction to Radiologic Sciences and Patient Care

***Assessment(s):** Complete D2L activities/Review questions and Unit Test

Learning Outcomes: Ch. 1&2

1. Explain the use of radiation in medicine
2. Describe the discovery of x-rays
3. Define terms related to radiologic technology
4. Introduction to the various specialties within a radiology department MRI, Ultrasound, Nuclear Medicine, Bone Densitometry, Interventional Radiography etc. *Note: MRI Safety Video and training will be performed prior to student attending clinic.
5. Describe the typical responsibilities of the members of the radiology team.
6. Differentiate accreditation, certification, and representation functions of various professional organizations

Learning Outcomes: Ch. 7&8

1. Describe the fundamentals of image production
2. Discuss image quality in terms of image receptor exposure/density, contrast, recorded detail, and distortion.
3. Discuss primary, scatter, and remnant radiation
4. Describe the three major categories of image receptor systems used in radiography
5. Identify beginning radiologic technology terminology.
6. Recognize components of the radiology department
7. Identify the typical features of a radiographic system
8. Explain the major controls on the radiographic system table and control console

Learning Outcomes: Ch. 11&12

1. Identify qualities needed to be a caring radiologic technologist
2. Explain why patient interaction is important to patients, as well as their family and friends.
3. Analyze effective methods of communicating with patients of various ages
4. Discuss considerations of the physical changes of aging with regard to radiologic procedures
5. Describe the role of the radiologic technologist in taking patient clinical histories
6. Differentiate objective from subjective data.
7. Describe the importance of clarifying the chief complaint
8. Detail the important elements of each of the sacred seven elements of the clinical history.

Module #2- Weeks 4&5 Chapters 15-19

Materials Covered: Introduction to Radiologic Sciences and Patient Care

***Assessment(s):** Complete D2L activities/Review questions and Unit Test

Learning Outcomes: Ch. 17,18 &19

1. Define a terminology related to infection control
2. Explain the steps involved in the establishment of an infectious disease
3. Discuss the four factors involved in the spread of disease and the chain of infection
4. Describe the various sources of nosocomial infection
5. List the chemical and physical methods of asepsis
6. Demonstrate the medically aseptic handwashing technique
7. Describe the basic premises of standard precautions
8. Demonstrate competency for sterile gowning and gloving
9. Provide care to patients with various medical tubes and line

Learning Outcomes: Ch. 15

1. Discuss the significance of homeostasis
2. Discuss the significances of each of the 4 vital signs: temperature, respiration, pulse and blood pressure
3. Identify the normal range for each of the vital signs
4. Explain the implications of abnormal vital signs
5. Demonstrate competency in performing/obtaining vital sign procedures in interprofessional lab activity.
6. Describe the uses of, or indications for, the following thoracic tubes and lines to manage compromised patients; endotracheal tubes, thoracostomy tubes, and central venous lines.
7. Define terms related to medical emergencies
8. List the objectives of first aid
9. Explain the purpose of an emergency cart and its contents
10. Describe the signs and symptoms of various medical emergencies
11. Describe the appropriate procedures for handling patients with various medical images emergencies.
12. Demonstrate appropriate principles of cardiopulmonary resuscitation

Module #3- Weeks 6&7 Chapters 21,22,23,13,14 &20

Materials Covered: Introduction to Radiologic Sciences and Patient Care

***Assessment(s):** Complete D2L activities/Review questions and Unit Test

Learning Outcomes: Ch. 21,22&23

1. Recognize common definitions and nomenclature associated with pharmacology
2. Recognize the various classifications of drugs
3. List the 5 rights of drug administration
4. List the methods of drug administration
5. Describe documentation procedures related to drug administration.
6. Demonstrate competency with venipuncture procedures during Interprofessional education competency activity with Phlebotomy Program.
7. State the purpose of contrast media
8. Differentiate between high and low subject contrast; and compare negative and positive agents
9. List the complications of the administration of contrast media
10. Relate the patient history to the possibility of adverse reactions

Learning Outcomes: Ch. 13&14

1. Define the terms associated with body mechanics

2. Describe the cause, signs, symptoms, and treatment of orthostatic hypotension
3. Describe the basic principles of proper lifting and transfer techniques
4. Identify five standard patient positions
5. Demonstrate a range of immobilization techniques
6. Explain the importance of high quality communication with the patient
7. Describe reduction of patient radiation exposure by using the proper and immobilization

methods

8. Apply immobilization techniques in routine situations
9. Use these devices effectively

Learning Outcomes: Ch. 20, Also covered in CPR prior to entering program.

1. Define terms related to medical emergencies.
2. List the objectives of first aid.
3. List general priorities for working with patients in acute situations.
4. Explain the purpose of an emergency cart and its contents.
5. Explain the four levels of consciousness.
6. Describe the signs and symptoms of various medical emergencies.
7. Discuss methods of avoiding factors that contribute to shock.
8. Discuss factors that contribute to the development of hypoglycemia.
9. Describe the appropriate procedure for handling patients with various medical emergencies.
10. Describe the correct procedure for administration of cardiopulmonary resuscitation.
11. Differentiate between the two primary types of external cardiac defibrillators.
12. Describe the general procedure for the use of an automatic external cardiac defibrillator.
13. Demonstrate appropriate principles of cardiopulmonary resuscitation.

Module #4- Weeks 8—10 Chapters 26,24,4

Materials Covered: Introduction to Radiologic Sciences and Patient Care

***Assessment(s):** Complete D2L activities/Review questions and Unit Test

Learning Outcomes: Ch. 26

1. Outline how the standard of care is established for radiologic technologist
2. Discuss the concepts of privacy of records, respondent superior, informed consent and medical negligence.
3. Explain negligence and the four elements necessary to meet the burden of proof in a medical negligence claim.
4. Outline the information the patient must have before an informed consent may be given.
5. Define human diversity and list some characteristics
6. Describe the human diversity traits of age, ethnicity or national origin, race, gender or sexual orientation, and mental and physical ability.
7. List the elements associated with cultural competency.
8. Discuss valuing diversity and know the empathetic practices that help foster cultural insight and produce improved outcomes
9. Describe the 6 areas of human diversity that health care providers need to understand to provide high-quality and affective care.

Learning Outcomes: Ch. 4&24

1. Explain the ethics of the radiologic technology profession
2. Identify moral dilemmas encountered in patient relationships

3. Recognize values associated with ethical decision-making in the practice of radiologic technology.
4. Apply critical analysis to ethical decision-making
5. Define critical thinking and problem solving and discuss the importance in radiologic technology field
6. Analyze and determine appropriate actions for situations that require critical thinking
7. Develop critical-thinking and problem-solving skills as a radiologic science professional.

Module #5- Weeks 10-11 Chapter 10 & Review

Materials Covered: Introduction to Radiologic Sciences and Patient Care

***Assessment(s):** Complete D2L activities/Review questions and Final Exam

Learning Outcomes:

1. Define human diversity and List some of the human diversity characteristics.
3. Describe the human diversity traits of age, ethnicity or national origin, race, gender or sexual orientation, and mental and physical ability.
4. Name the values that are prescribed to United States mainstream culture.
5. List the elements associated with cultural competency.
6. Discuss valuing diversity.
7. Know the empathetic practices that help foster cultural insight and produce improved outcomes.
8. Describe the six areas of human diversity that healthcare providers need to understand to provide high-quality and effective care. Discuss ways in which professional medical imaging organizations have expressed valuing human diversity.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Tests	70%
Assignments	15%
Final Exam	15%
	<hr/> 100%

****Students, for the specific number and type of evaluations, please refer to the Instructor’s Course Information Sheet.***

GRADING SYSTEM:

State the College's or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10 point grading scale A = 100 – 90, B = 89- 80, C = 79 – 70, D = 69 – 60, F = 59 and below. You must have your Dean's approval if changes in the scale are made.

Due to the nature of this program the grading scale is as follows: A= 100 – 92, B= 91 – 83, C= 82 – 74, D= 73 –65, and F= 64 and below. Achievement of total points equaling a "C" or higher is required to pass each course and progress within the program. Scores on individual weighted components are not rounded but calculated to the 100th place. Calculation of the final score is NOT rounded. As an example, a final calculation of 73.99 will NOT be rounded to a 74.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. However, due to nature of this program students must be present for 90 percent (90%) of this class. For this class you are allotted ONE absence in the 10-week course. After one absence you will receive a written warning, after two absences you will receive a final written warning, and this will follow you throughout the program. More than one Final Written Warning will result in your dismissal from the program.

TARDY POLICY:

Students are expected to be on time for class and to stay for the entire session. Tardy is considered one minute after the scheduled start time for lecture, quiz or test. After one Tardy you will receive a verbal warning, two tardies a written warning, three tardies a final written warning and count as the one absence you are allotted. The fourth tardy will result in a second final written warning and dismissal from the program.

MAKE-UP TEST POLICY:

If a student must be absent on the day of an assigned test or quiz the student must call the instructor, the day of absence **and** testing center within 24 hours of absence to schedule an appointment to make-up the test/quiz before the next scheduled class.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email sstc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center \(ORC\)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.



HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic research and related school work; printing is available as well. Visit the [Library](#) website for more information or call (843) 349-5268.

STUDENT TESTING:

Testing in an **online/hybrid** course and in **make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms (which may have a fee associated with the usage)

Furthermore, tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college’s Chief Student Services Officer, campus law enforcement, or with the college’s Title IX Coordinator or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, Title VII, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX, Section 504, and Title II Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

Affirmative Action/Equal Opportunity Officer and Title IX Coordinator

Building 200, Room 205B, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu