INSTRUCTIONAL PACKAGE

RAD 103
Introduction to Computed Tomography

Effective Term
Fall 2023/Spring 2024/Summer 2024

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: <u>Fall 2023</u>

COURSE PREFIX: RAD 103   COURSE TITLE: Introduction to Computed Tomography

CONTACT HOURS: 2   CREDIT HOURS: 2

RATIONALE FOR THE COURSE:

This course will introduce the 2nd year radiography student to the CT department.

COURSE DESCRIPTION:

This course is a study of the technological developments behind computed tomography, an overview of scanner components, terminology, data acquisition, digital imaging, image reconstruction, display and manipulations. Current applications will be explored, including patient screening, contract utilization and administration, contrast reactions and treatment, pediatrics, conscious sedation and monitoring, and radiation protection.

PREREQUISITES/CO-REQUISITES:

Acceptance to the Radiologic Technology Program

REQUIRED MATERIALS:

No textbook required

ADDITIONAL REQUIREMENTS:

Recommended: CTTechBootCamp – Clover Learning Online learning Platform

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 vise-versa. ***You must take the responsibility for your own learning!***

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Course Student Learning Outcomes– Upon completion of the course the student will:
1. List and describe the various generations of computed tomography imaging systems

2. Describe CT image characteristics of image matrix, Hounsfield unit, and sensitivity profile.
3. Discuss image quality as it relates to spatial resolution, contrast resolution, noise, linearity, and uniformity.
4. Uses correct directional terms and regional terms to refer to specific areas of the body
5. Discuss the divisions of the mediastinum, heart and great vessels
6. Identify thoracic, abdominal, pelvic, head and vertebral cross-sectional anatomy
7. Describe anatomical relationships between body organs and body cavities
8. State anatomical landmarks of regions of the body

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

EFFECTIVE PROFESSIONAL AND INTERPERSONAL COMMUNICATION (EPIC):

This course fulfills HGTC's Quality Enhancement Plan for Effective Professional and Interpersonal Communication. Upon completion of this course, students will be able to:

(Check all that apply.)

☒ Utilize appropriate communication formats when conveying professional and interpersonal thoughts and ideas.

☒ Apply appropriate language when speaking and writing for their chosen field of study or Industry.

☒ Demonstrate appropriate communication techniques when engaging audiences.

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	10%
Projects/Portfolios	20%
	100%

*ced **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. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

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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.

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STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following <u>free</u> 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.

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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