



INSTRUCTIONAL PACKAGE

RES 101

Introduction to Respiratory Care

Effective Term

Fall 2024/Spring 2025/Summer 2025

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Fall 2024/Spring 2025/Summer 2025

COURSE PREFIX: RES 101

COURSE TITLE: Introduction to Respiratory Care

CONTACT HOURS: 2 Lec/3 Lab

CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

The Introduction to Respiratory Care is a foundational course for learning the basic skills respiratory therapist need in the healthcare field. In Respiratory 101, you will gain knowledge of the history, professional organizations, laws, ethics, and behaviors expected in a respiratory therapist. You will also learn about the basic anatomy and physiology of the respiratory system, infection control procedures, and how oxygen and carbon dioxide is transported in the body.

COURSE DESCRIPTION:

This course includes introduction topics pertinent to entering the respiratory care profession, i.e., medical terminology, ethical issues, and legal issues.

PREREQUISITES/CO-REQUISITES:

Admission to the Respiratory Care Program. Required prerequisite courses must be completed with a grade of "C" or better.

***Online/Hybrid** courses require students to complete the [Distance Learning Orientation Video](#) prior to enrolling in an online course.

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.

Kacmarek, R.M., Stoller, J.K., & Heuer, A.H. (2025). Egan's Fundamentals of Respiratory Care (13th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323931991

Kacmarek, R.M., Stoller, J.K., & Heuer, A.H. (2025). Workbook for Egan's Fundamentals of Respiratory Care (13th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323932004

Beachey, W. (2023). *Respiratory Anatomy and Physiology: Foundations for Clinical Practice* (5th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323757034

Beachey, W. (2013). *Workbook for Respiratory Anatomy and Physiology: Foundations for Clinical Practice* (3rd ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323085861

ADDITIONAL REQUIREMENTS:

Stethoscope, finger pulse oximeter, blood pressure cuff, and pocket calculator.

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.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

1. Explain the purpose of professional elements of Respiratory Care.
2. Apply patient assessment skills to perform basic respiratory therapy procedures.
3. Perform proper Universal Precautions and Isolation Procedures.
4. Describe the anatomy and physiology of the respiratory system and cardiovascular system
5. Apply the anatomy and physiology of the respiratory system to ventilation.
6. Apply the factors that involve diffusion of gases within the body.
7. Describe the anatomy and physiology of the circulatory system.
8. Explain the factors that are involved in oxygen transport throughout the body.
9. Explain the factors that involve the movement of carbon dioxide and its role in acid-base balance.

10. Explain the effects of aging, high altitude, and high-pressure environments on the cardiopulmonary system.

Lab/Lecture 1

Material Covered: The Respiratory Care Profession, Laws, Ethics, Behaviors

History of Respiratory Care Chapter 1

Delivering Evidence Based Respiratory Care Chapter 2

Quality, Patient Safety, Communication, and, Recordkeeping Chapter 3

Ethical and Legal Implications of Practice Chapter 5

E-medicine in Respiratory Care Chapter 7

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes: (Affective-Behavior)

1. Learn about the respiratory care profession, laws, ethics, and behaviors.
2. Identify different recordkeeping practices and electronic applications.

Lecture/Lab 2

Materials Covered:

Principles of Infection Prevention and Control Chapter 4

Bedside Assessment of the Patient Chapter 16

Interpreting Clinical and Laboratory Data Chapter 17

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. How the physiological principles relate to respiratory care.
2. Performing patient interviews and patient assessments at the bedside.
3. Interpretation of normal clinical, laboratory data, and arterial blood gas analysis.

Lecture/Lab 3

Material Covered:

Gas Laws, Diffusion, and Oxygen Transport

Physical Principles of Respiratory Care Chapter 6 (Egans)

Ventilation Chapter 4 (Beachey)

Gas Diffusion Chapter 7 (Beachey)

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. Explain the factors that are involved in oxygen transport throughout the body.
2. Explain the factors that involve the movement of carbon dioxide and its role in acid-base

balance.

3. Explain the effects of aging, high altitude, and high-pressure environments on the cardiopulmonary system.

Lecture/Lab 4

Material Covered:

The Airways and Alveoli Chapter 1 (Beachey)

The Lungs and Chest Wall Chapter 2 (Beachey)

Assessments

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. Identify the anatomy of the lungs and thoracic cavity.
2. Explain the transport of air into the respiratory system.
3. Explain the functions of ventilation in the respiratory system.
4. Identify the parts of the cardiovascular system.
5. Describe how blood travels through the cardiovascular and pulmonary system.

Lecture/Lab 5

Material Covered:

Lung Volumes and Capacity Chapter 5 (Beachey)

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. List the different lung volume values and capacities.
2. Explain why restrictive and obstructive diseases affect the FRC, the residual volume, and the work of breathing differently.

Lecture/Lab 6

Material Covered: X-ray Interpretations

Review of Thoracic Imaging Chapter 21

Assessments:

Case Study

Skill Check Assessment/Laboratory Competency

Exam

Learning Outcomes:

1. Describe how to evaluate the technical quality of a chest radiograph.
2. List the anatomic structures seen on the chest radiograph.
3. Describe the common radiographic abnormalities seen in the pleura, lung parenchyma, and mediastinum.
4. Understand the value of a computed tomography scan and the use of intravenous contrast.
5. Understand the role of ultrasound and magnetic resonance imaging in imaging the chest.

****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.

Competency Areas:

Patient Assessment

Lung/Heart Anatomy

Breath Sounds Identification and Patterns

Calculations and Terminology

Radiology Interpretation

EVALUATION*

Homework/Quizzes/Assignments	15%
Tests	60%
<u>Final Exam</u>	<u>25%</u>
	100%

Cognitive

- Quizzes, tests, case studies, and presentations, etc.

Psychomotor

- All course required Skill Check Assessment and Laboratory Competency Practical Examination must be completed.

Clinical Competency and Skill Check Assessment:

The student is required to successfully complete each skill check assessment for the course prior to the final laboratory competency practical examination or per the instructor’s schedule. Two attempts can be made to pass the lab competencies and skill check. The course instructor will announce the due date of the skill check assessments in the course calendar informational sheet.

Summary Performance Evaluation

The following will be used to evaluate the clinical/lab performance:

Satisfactory – Completion of first attempt (85-100%) Performed procedure accurately or was able to correct performance without injury to the patient or decreasing effect of therapy being given.

Each competency and skill check are considered a pass/failure. If a student makes less than 85% on the first attempt. The student may repeat the competency/skill check an additional time after the first attempt.

Unsatisfactory performance – Completion of first attempt (less than <85%. Requires remediation under the following categories.

- The psychomotor portion of the performance evaluation is a pass/fail grading criterion. After a student's second attempt, if the student does not pass the physical portion with an 85% or greater. Failure of the physical portion of the course will result in failure of the course.
- Failure to complete a critical skill after the first attempt within the psychomotor evaluation will also result as a failure of the course.

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

GRADING SYSTEM:

A grade of "C" or better must be achieved in all required respiratory care program courses for a student to progress through the program. A final grade of less than 75% is not passing in the Respiratory Care Program and does not meet the requirements for progression within the program. This policy is different than the Horry Georgetown Technical College Grading Policy.

GRADING SCALE:

100 - 90 =	A
89 - 80 =	B
79 - 75 =	C
74 - 69 =	D
68 - 0 =	F

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. The Respiratory Care Program adheres to a 90% attendance requirement. Please refer to the Respiratory Student Handbook for the full attendance policy.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

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 ssc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email ssc@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.



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 Services staff will review documentation of the student's disability and, in a confidential setting with the student, engage in an interactive process to 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. Students will need to reach out to the Accessibility and Disability Services staff each semester to renew their accommodations.

COUNSELING SERVICES:

HGTC Counseling Services strives to optimize student success through managing personal and academic concerns that may interfere with achieving educational goals. Staff are available to every student for assistance and guidance on personal matters, academic concerns and other areas of concern. HGTC offers free in-person and telehealth counseling services to students. For more information about counseling services, please reach out to counseling@hgtc.edu or visit the website the [Counseling Services webpage](#).

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College shall not discriminate in employment or personnel decisions or in student admissions or in student decisions, or in all other segments of the College community 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 the educational programs and activities which it operates, and the college is prohibited from discrimination in such manner by applicable laws. Practices and requirements for nondiscrimination extend to the enrollment of students in programs and activities of the College and employment by the College.

All inquiries regarding the federal laws as they relate to discrimination on the basis of sex may be directed to Tamatha Sells, Title IX Coordinator, Horry-Georgetown Technical College, Building 1100C, Room 107B, 2050 Hwy 501 E, PO Box 261966, Conway, SC 29528-6066, 843-349-5218, tamatha.sells@hgtc.edu or to the US Department of Education Office of Civil Rights. (Telephone: 800-421-3481/Email: OCR@ed.gov).

Other employee and applicant inquiries concerning the federal laws and their application to the College may be directed to Jacquelyne Snyder, Vice President, Human Resources and Employee Relations & the College's Affirmative Action/Equal Opportunity Officer, Horry-Georgetown Technical College, Building 200C, Room 205B, 2050 Hwy 501 E, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, jacquelyne.snyder@hgtc.edu.

Other student and prospective student inquiries concerning the federal laws and their application to the College or any student decision may be directed to Dr. Melissa Batten, Vice President, Student Affairs, Section 504 & Title II Coordinator Horry-Georgetown Technical College, Building 1100C, Room 107A, 2050 Hwy 501 E, PO

Box 261966, Conway, SC 29528-6066, 843-349-5228, melissa.batten@hgtc.edu.

TITLE IX REQUIREMENTS:

Title IX of the Education Amendments of 1972 protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination.

HGTC prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking and will provide students, faculty, and staff with necessary information regarding prevention, policies, procedures, and resources.

Any student, or other member of the college community, who believes that they have been a victim of sexual harassment, domestic violence, dating violence, sexual assault, or stalking may file a report with the college's Title IX Coordinator or campus law enforcement*.

*Faculty and Staff are required to report these incidents to the Title IX Coordinator 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).

For more information, contact Tamatha Sells, Title IX Coordinator, Conway Campus, Building 1100C, Room 107B, 843-349-5218, tamatha.sells@hgtc.edu.

PREGNANCY ACCOMMODATIONS

Under Title IX, colleges must not exclude a pregnant student from participating in any part of an educational program. Horry-Georgetown Technical College is committed to ensuring that pregnant students receive reasonable accommodations to ensure access to our educational programs.

Students should advise the Title IX Coordinator of a potential need for accommodations as soon as they know they are pregnant. It is extremely important that communication between student, instructors, and the Title IX Coordinator begin as soon as possible. Each situation is unique and will be addressed individually.

Title IX accommodations DO NOT apply to Financial Aid. Financial Aid regulations do not give the College any discretion in terms of Financial Aid eligibility.

Certain educational programs may have strict certification requirements or requirements mandated by outside regulatory agencies. Therefore, in some programs, the application of Title IX accommodations may be limited.

To request pregnancy accommodations, please complete the [Pregnancy Intake Form](#).