



INSTRUCTIONAL PACKAGE

RES 111
Pathophysiology

Effective Term
Fall 2025

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Part I: Course Information

Effective Term: Fall 2025

COURSE PREFIX: RES 111. COURSE TITLE: Pathophysiology.

CONTACT HOURS: 2. CREDIT HOURS: 2.

RATIONALE FOR THE COURSE:

RES 111 is a lecture course that will identify and describe the components of patient assessment. In RES 111, you will evaluate patient clinical assessments and identify the lung disease associated with the patient. Students will also formulate the respiratory care treatment plan using SOAP notes, and the proper respiratory modality commonly used for pulmonary diseases.

COURSE DESCRIPTION:

This course is a study of the general principles and analyses of normal and diseased states.

PREREQUISITES/CO-REQUISITES:

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

REQUIRED MATERIALS:

Des Jardins, T. and Burton, G.G. (2024). Clinical Manifestations & Assessment of Respiratory Diseases, 9th ed. Elsevier St. Louis, MO. ISBN# 9780323571501

Des Jardins, T. and Burton, G.G (2002). Case Studies to Accompany Clinical Manifestations & Assessment of Respiratory Diseases, 2nd ed. Elsevier St. Louis, MO. ISBN# 978-0323-010757

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.

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.

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 an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

It is recognized that personal communication devices, including smart phones, can play a fundamental role in both education and urgent personal connections (for example, a school calling about a sick child). For this reason, use of such devices is permitted in the classroom, with specific reservations:

1. Please set all devices to 'silent' or 'vibrate' during instructional time.
2. Use of devices during testing is NOT allowed.
3. Please limit the use of devices to urgent personal connections and educational purposes directly related to the course material being discussed.
4. If you receive an urgent text/call during class that requires immediate attention, please quietly excuse yourself from the classroom to respond to the call.
5. Please refrain from using 'ear buds' or continually using the device as a learning distraction. The professor retains the right to disallow the use of such devices should the policy become a distraction.
6. When on experiential rotations, students are expected to abide by the policies of that institution.

PLAGIARISM & CHEATING:

Refer to the College catalog & Student handbook HGTC Handbook.

The student may be assigned a failing grade for the course or may be required by the professor to withdraw from the course and/or the respiratory care program. Such actions are deemed to be unprofessional behavior within this program and will not be tolerated.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Module I

Material Covered:

ECG Rhythms Chapter 7

Diagnostic Tests and Procedures Chapter 9

COPD, Chronic Bronchitis, and Emphysema Chapter 13

Asthma Chapter 14

Cystic Fibrosis Chapter 15

Bronchiectasis Chapter 16

Assessments:

- Homework
- Quiz
- Test

Learning Outcomes:

1. Describe the electrocardiogram pattern of a normal cardiac cycle.
2. Evaluate and identify arrhythmias.

3. Describe different types of Echocardiograms and specific conditions that can be identified.
4. Describe the diagnostic value of the sputum and skin testing examination.
5. Describe the diagnostic tests and procedures presented in this chapter.
6. Describe the components of hematology testing.
7. Describe the role of platelets.
8. Identify blood chemistry tests commonly monitored in respiratory care.
9. Identify the electrolytes commonly monitored in respiratory care.
10. Recognize abnormal results of the following tests: arterial blood gases, complete blood count, platelet count, electrolytes, liver function, cardiac biomarkers, and urinalysis.
11. Describe the American Thoracic Society (ATS) guidelines for chronic obstructive pulmonary disease (COPD), chronic bronchitis, and emphysema.
12. Describe the Global Initiative for Chronic Obstructive Lung Disease (GOLD) definition of COPD.
13. Explain the anatomic alterations of the lungs associated with chronic bronchitis and emphysema.
14. Describe the etiology and epidemiology of COPD.
15. Discuss the risk factors associated with COPD.
16. Describe the GOLD guidelines for the diagnosis and assessment of COPD.
17. Identify the key distinctive differences between chronic bronchitis and emphysema—the “pink puffer” and the “blue bloater.”
18. Describe the cardiopulmonary clinical manifestations associated with chronic bronchitis and emphysema (COPD).
19. Describe the GOLD global strategy for the diagnosis, management, and prevention of COPD.
20. Describe the role of national and international guidelines in the management of asthma.
21. Describe the anatomic alterations of the lungs associated with asthma, cystic fibrosis, and bronchiectasis.
22. Describe the etiology and epidemiology of asthma, cystic fibrosis, and bronchiectasis.
23. List of risk factors associated with asthma.
24. Describe the cardiopulmonary clinical manifestations associated with asthma, cystic fibrosis, and bronchiectasis.
25. Describe the general management of asthma, cystic fibrosis, and bronchiectasis.

Module II

Material Covered:

Atelectasis Chapter 17

Pneumonia Chapter 18

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Tuberculosis Chapter 19

Pulmonary Edema Chapter 20

Assessments:

- Homework
- Quiz
- Test

Learning Outcomes:

1. List the anatomic alterations of the lungs associated with atelectasis, pneumonia, tuberculosis, and pulmonary edema.
2. Describe the specific causes of atelectasis, pneumonia, tuberculosis, and pulmonary edema.
3. List the respiratory disorders associated with atelectasis.
4. List the cardiopulmonary clinical manifestations associated with postoperative atelectasis, pneumonia, tuberculosis, and pulmonary edema.
5. Describe the general management of atelectasis, pneumonia, tuberculosis, and pulmonary edema.
6. List the anatomic alterations of the lungs associated with pneumonia.
7. Describe the causes and classifications of pneumonia.

Module III

Material Covered:

Pulmonary Embolism Chapter 21

Flail Chest Chapter 22

Pneumothorax Chapter 23

Pleural Effusion and Empyema Chapter 24

Assessments:

- Homework
- Quiz
- Test

Learning Outcomes:

1. List the anatomic alterations of the lungs associated with pulmonary embolism, flail chest, pneumothorax, pleural effusion, and empyema.
2. Describe the causes of pulmonary embolism, flail chest, pneumothorax, pleural effusion, and empyema.
3. List the cardiopulmonary clinical manifestations associated with pulmonary embolism, flail chest, pneumothorax, pleural effusion, and empyema.
4. Describe the general management of pulmonary embolism, flail chest, pneumothorax, pleural effusion, and empyema.
5. Define pulmonary hypertension.
6. Differentiate the five clinical classifications of pulmonary hypertension.

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7. Identify the common signs and symptoms associated with pulmonary hypertension.
8. Describe the tests and procedures used to diagnose pulmonary hypertension.
9. Describe the pulmonary hypertension severity rating.
10. Differentiate between the signs and symptoms of right-sided heart failure and left-sided heart failure.
11. Describe the role of the respiratory therapist in pulmonary vascular disorders.
12. Discuss the treatment selections used to manage acute pulmonary embolism, pulmonary infarction, and pulmonary hypertension.

Module IV

Material Covered:

Kyphoscoliosis Chapter 25

Lung CA Chapter 26

Interstitial Lung Diseases Chapter 27

ARDS Chapter 28

Guillain-Barre Syndrome Chapter 29

Myasthenia Gravis Chapter 30

Smoke Inhalation, Thermal Lung Injuries, and Carbon Monoxide Intoxication Chapter 45

Assessments:

- Homework
- Quiz
- Test

Learning Outcomes:

1. List the anatomic alterations of the lungs associated with Kyphoscoliosis, lung cancer, ILD, ARDS, Guillain-Barre Syndrome, and Myasthenia Gravis.
2. Describe the causes of Kyphoscoliosis, lung cancer, ILD, ARDS, Guillain-Barre Syndrome, and Myasthenia Gravis.
3. List the cardiopulmonary clinical manifestations associated with Kyphoscoliosis, lung cancer, ILD, ARDS, Guillain-Barre Syndrome, Myasthenia Gravis, smoke inhalation, thermal injuries, and carbon monoxide intoxication.
4. Describe the general management of Kyphoscoliosis, lung cancer, ILD, ARDS, Guillain-Barre Syndrome, Myasthenia Gravis, smoke inhalation, thermal injuries, and carbon monoxide intoxication.
5. List the anatomic alterations of the lungs associated with chronic interstitial lung disease for BOOP, Pulmonary Fibrosis, Sarcoidosis.
6. Overview of Causes of ILDs.

****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*

Homework/Quizzes/Projects	15%
Test	60%
Final Exam	25%
	100%

****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 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 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.

Attendance for Face-to-Face Courses:

For a 15-week course (fall and spring) the allowed number of absences for an M only class is as follows: 2 absences are allowed regardless of reason. After the allowed number of misses, the student will be dropped from the course with a W or a WF.

For a 15-week course (fall and spring) the allowed number of absences for a MW class is as follows: 3 absences are allowed regardless of reason. After the allowed number of misses, the student will be dropped from the course with a W or a WF.

Tardy is given if the student arrives ten minutes after class starts or before class ends. Three tardies are equivalent to one absence for a 15-week course, and two (2) tardies are equivalent to one absence for a 10-week course.

Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

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 Academic Coaching for 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](https://www.penjiapp.com) website for more information. To schedule tutoring or coaching, 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 SSTC [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. In-person and remote assistance are available for Desire2Learn, Student Portal, Degree Works, and Office 365.
3. 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 have librarians and staff who can aid with research, computers to support academic research and related school-work, and individual/group study rooms. Printing is available as well at each location. 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.

Testing candidates must make their appointments 24 hours in advance.

Students must bring a physical ID in order to take a test.

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. Students seeking accommodations are encouraged to visit HGTC's [Accessibility and Disability Service webpage](#) for detailed information.

It is the student's responsibility to self-identify as needing accommodations and to provide appropriate documentation. Once documentation is submitted, the student will participate in an interactive process with Accessibility and Disability Services staff to determine reasonable accommodations. Students may begin the accommodations process at any time; however, accommodations are **not retroactive** and will only be applied from the point at which they are approved. Students must contact the office **each semester** to renew their accommodations.

For assistance, please contact the Accessibility and Disability Services team at disabilityservices@hgtc.edu or 843-796-8818 (call or text).

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:

Our sincere commitment to both effective business management and equitable treatment of our employees requires that we present this Policy Statement as an embodiment of that commitment to the fullest.

Discrimination is conduct that includes unjust or prejudicial treatment based upon an individual's sex, race/color, religion, national origin, age, disability, service in the uniformed services (as defined in state and federal law), veteran status, political ideas, marital or family status, pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation, genetic information, genetic identity, gender expression, or sexual orientation that excludes an individual from participation in, denies the individual the benefits of, treats the individual differently, or otherwise adversely affects a term or condition of a person's working or learning environment. This includes failing to provide reasonable accommodation, consistent with state and federal law, to persons with disabilities.

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

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).

Student and prospective student inquiries concerning Title IX and its application to the College or any student decision may be directed to the Vice President for Student Affairs.

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Jacquelyne Snyder, VP Human Resources

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PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@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* that can be found [here](#).