



INSTRUCTIONAL PACKAGE

RES 131

Respiratory Skills II

Effective Term
Spring/2020

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Spring 2020 (201920)

COURSE PREFIX: RES

COURSE TITLE: Respiratory Skills II

CONTACT HOURS: 3-3

CREDIT HOURS: 4

RATIONALE FOR THE COURSE:

RES 131 is a course that will identify goals, indications, contraindications, and hazards of basic spirometry testing, arterial blood gas sampling, and suctioning. Students will learn how to calibrate pulmonary function equipment and perform diagnostic studies on patients. The course will identify specific equipment related to pulmonary function testing, arterial blood analysis, and airway suctioning.

COURSE DESCRIPTION:

This course is a study of selected respiratory care procedures and applications.

PREREQUISITES/CO-REQUISITES:

Respiratory Care Program first semester courses RES 101, RES 121, RES 246, and RES 152. Required prerequisite courses must be completed with a grade of "C" or better.

REQUIRED MATERIALS:

Kacmarek, R.M., Stoller, J.K., & Heuer, A.H. (2017). Egan's Fundamentals of Respiratory Care (11th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323341363

Kacmarek, R.M., Stoller, J.K., & Heuer, A.H. (2017). Egan's Fundamentals of Respiratory Care (11th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323358521

Kettering Classmate® Online Course [Kettering Classmate®](#)

Cairo, J. M. (2018). Mosby's Respiratory Care Equipment, 10th ed. St. Louis, MO: Elsevier/Mosby. ISBN: 9780323553131

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

[BOOKSTORE](#).

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 student portal for course materials.

WaveNet and D2L email access.

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.

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 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. Professor retains the right to disallow the use of such devices should the policy become a distraction.
6. When on clinical rotations, students are expected to abide by the policies of that institution.

PLAGIARISM & CHEATING:

Refer to the College catalog & Student 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*:

Lecture/Lab Module I

Material Covered: Blood Gas Analysis: Principles, Equipment, and Analysis

Egan's Acid-Base Balance Chapter 14

Mosby's Blood Gas Monitoring Chapter 10

Assessments:

- Case Study
- Skill Check Assessment/Laboratory Competency
- Test

Learning Outcomes:

1. List & describe the goals, indications, contraindications, and hazards of arterial blood gas (ABG).
2. Identify the standard blood gas equipment and puncture sites.
3. Perform and interpret an Allen's Tests for collateral circulation.
4. Perform a radial artery (ABG) puncture and when necessary recommend corrective action.
5. Identify the proper conditions required for (ABG) sample for transport & analyzation.
6. Demonstrate the ability to achieve the proper conditions necessary for appropriate (ABG) sample for transport and when necessary recommend corrective action.
7. Evaluate (ABG) Acid Base Balance as Normal, Impossible, Uncompensated, Partially or Fully Compensated, Respiratory or Metabolic Acidosis/Alkalosis and recommend corrective action when needed.
8. Interpret the Oxygenation status of an (ABG) Normal, Mild Hypoxemia, Moderate Hypoxemia, and Severe Hypoxemia and recommend corrective action when needed.

Lecture/Lab II

Material Covered: Endotracheal Suctioning: Indications/Contraindications, Equipment, and Patient
Egan's Flexible Bronchoscopy and the Respiratory Therapist Chapter 22
Egan's Airway Management Chapter 36

Assessments:

- Case Study
- Skill Check Assessment/Laboratory Competency
- Test

Learning Outcomes:

1. List & describe the goals, indications, contraindications, and hazards of endotracheal suctioning.
2. Identify the standard equipment required for the Sterile Suctioning & Closed Ballard Suctioning Techniques.
3. Identify the basic steps & equipment required for obtaining a Sputum sample for a C&S.
4. Identify the appropriate negative suction pressures based on patient presentation: adult, pediatric and neonatal.
5. Demonstrate the ability to calculate the maximum size suction catheter based of patient airway size.
6. Demonstrate the ability to appropriately set up and adjust suction equipment based on patient presentation: adult, pediatric and neonatal.
7. Identify proactive measures that can be employed to reduce negative side effects of endotracheal suctioning.
8. Perform endotracheal suctioning, evaluate secretions, and when necessary recommend corrective action.

Lecture/Lab Module III

Material Covered: Mucous Clearance Adjuncts/Chest Physiotherapy
Egan's Airway Clearance Therapy Chapter 43

Assessments:

- Case Study
- Skill Check Assessment/Laboratory Competency
- Test

Learning Outcomes:

1. List & Describe the Goals, Indications, and Contra-Indications & Hazards of Chest Physiotherapy
2. Identify the major components of pneumatically and electrically powered percussors.
3. Describe the theory of operation of devices that enhance clearance of airway secretions by producing high-frequency oscillations to the lungs and chest wall.
4. Discuss how mechanical insufflator-exsufflator devices can enhance airway secretions in patients with respiratory muscle weakness or paralysis.

Lecture/Lab Module IV

Material Covered: Pulmonary Function Equipment & Testing: Principles, Equipment, and Case Studies
Egan's Pulmonary Function Testing Chapter 20
Mosby's Assessment of Pulmonary Function Chapter 8

Assessments:

- Case Study
- Skill Check Assessment/Laboratory Competency
- Test

Learning Outcomes:

1. Identify the standard pulmonary function testing equipment needed for spirometer calibration.
2. Describe pulmonary function calibrating principles for Flow & Volume Spirometers.
3. Perform equipment calibration using ATS 1s, 3s, 6s criteria.

4. Evaluate calibration results and troubleshoot as needed.

Lecture/Lab Module V

Material Covered: Basic Pulmonary Function/Spirometry Perform & Interpretation

Egan's Pulmonary Function Testing Chapter 20

Assessments:

- Case Study
- Skill Check Assessment/Laboratory Competency
- Test

Learning Outcomes:

1. List and describe the goals, indications, and contraindications, hazards of PFT / Spirometry Testing.
2. Identify the required elements of patient pre-pulmonary function testing.
3. Perform basic spirometry/pulmonary function studies according to current ATS Acceptability & Repeatability standards.
4. Interpret basic spirometry/pulmonary function studies as Normal and Obstructive or Restrictive.
5. Evaluate basic spirometry/pulmonary function studies as Acceptable & Repeatable.
5. Discuss pulmonary function testing principles.
6. Identify the standard pulmonary function testing equipment.
7. Perform standard pulmonary function studies.
8. Interpret standard pulmonary function studies.
9. Evaluate standard pulmonary function studies.

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%

Competency Areas:

1. Pulmonary Function Testing/Spirometry Equipment Calibration
2. Basic Pulmonary Function/Spirometry Acquisition & Interpretation
3. Arterial Blood Gas Acquisition & Interpretation
4. Endotracheal Suctioning

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.

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

LATE ASSIGNMENTS:

1. A maximum of one (1) scheduled exam may be made up at the discretion of the course instructor. Any subsequently missed exams will receive a grade of 0.
2. Makeup examinations will be taken in the testing center on campus or a location designated by the instructor.
3. A 10% overall deduction will be applied to the makeup examination score for missed examinations unless faculty are notified in advance (more than 12 hours) or medical documentation is provided.
4. Late Homework assignments will have a deduction of ten points of the total assignment grade.
5. Homework assignments will not be accepted after 5 days of the due date.
6. Quizzes are taken in class and cannot be made up if missed.

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 ([ACADEMIC CALENDAR](#)). 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.

Attendance for Face-to-Face Courses:

For a 15-week course (fall and spring) the allowed number of absences for a M only 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.

For a 15-week course (fall and spring) the allowed number of absences for a MW class is as follows: 6 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.

A tardy is given if the student arrives ten minutes after class starts or before class ends. Three tardies are equivalent to one absent.

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.**

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, 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 coaches** for most subject areas, **Writing Center Support**, and **college success skills**.
2. **On-line student success and academic support resources**.

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, 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 any time.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

1. **Getting around HGTC**: General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: [Wavenet Central](#). Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis,

Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals 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.

Inquiries regarding the non-discrimination policies: Students and prospective student inquiries concerning Section 504, Title II, 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 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, Section 504, Title II, and Title IX Coordinator, Building 200, Room 212A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, Jacquelyne.Snyder@hgtc.edu.

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

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