



INSTRUCTIONAL PACKAGE

RES/131

Respiratory Skills II

Effective Term
Spring/2018

INSTRUCTIONAL PACKAGE

PART I: COURSE INFORMATION

Effective Term: Spring 2018

COURSE PREFIX: RES 131

COURSE TITLE: Respiratory Skills II

CONTACT HOURS: 3 Lecture/3 Lab

CREDIT HOURS: 4

RATIONALE FOR THE COURSE:

This course is a study of selected respiratory care procedures and applications. This course will detail the advanced skills required to practice as an advanced respiratory care professional. Modalities and therapeutic procedures are covered in this course to prepare the student to build on the knowledge obtained in RES 121.

COURSE DESCRIPTION:

NOTE: Copy from Banner Course Catalog and paste here. Course description must include the description from the CAC. A department may add additional lines to the CAC description to help students gain a better understanding of the course.

PREREQUISITES/CO-REQUISITES:

General Education courses BIO 210, 211, 225, MAT 120, ENG 101, PSY 201, and HUM. 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

ClassmateI.R. (2018). Classmate Learning Resources. Kettering National Seminars Retrieved from, <http://www.classmateI.R.com/acct/HomePage.aspx>

OakesRespiratorySimulations.com. (2017). Dana Oaks Respiratory Simulations. Retrieved from, <https://www.oakesacademy.com/members/login.cfm?hpage=Adult-Respiratory-Simulations.cfm>

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:

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 experiential rotations, students are expected to abide by the policies of that institution.**

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](#).

PLAGIARISM & CHEATING:

Refer to the College catalog & Student handbook (<http://www.hgtc.edu/documents/policys/Chapt9.pdf>). 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 unprofessional behavior within this program and will not be tolerated.

Part II: Program and Student Learning Outcomes

Perform in an ethical and professional manner during all aspects of clinical, classroom and, working environments. (Affective-Behavior)

Demonstrate knowledge and application of appropriate respiratory care in the clinical setting. (Cognitive-Knowledge)

Demonstrate proficiency in technical and clinical skills applicable for a Registered Respiratory Therapist. (Psychomotor-Skills)

Exhibit professional attitudes and behaviors appropriate for the Registered Respiratory Therapist. (Affective-Behavior)

Successfully pass credentialing examinations offered by the National Board of Respiratory Care (NBRC). (Cognitive)

Seek employment as Respiratory Care Therapists.

COURSE LEARNING OUTCOMES:

1. Describe in writing and verbally the factors relating to the goals, indications, and contraindications, hazards of lung inflation therapy, PFT, ABG, and Endotracheal suctioning. (Cognitive-Knowledge)

2. Demonstrate in writing and verbally the ability to identify the lung volumes and capacities, American Thoracic Society Acceptability & Repeatable criteria for Spirometry. (Cognitive-Knowledge)
3. Demonstrate the ability to perform and evaluate the FVC maneuver, Flow Volume and Volume Time Curves: applying the ATS Criteria for Acceptability. (Psychomotor-Skills) & (Affective-Behavior)
4. Perform mathematical calculations to evaluate the FVC maneuver, Flow Volume and Volume Time Curves: Normal and Obstructive or Restrictive. (Cognitive-Knowledge)
5. Demonstrate the ability to perform Arterial Blood Gas puncture, analysis, and when necessary recommend corrective action. (Psychomotor-Skills) & (Affective-Behavior)
6. Demonstrate the ability to perform endotracheal suctioning, evaluate secretions, and when necessary recommend corrective action. (Psychomotor-Skills) & (Affective-Behavior)

TOPICAL OUTLINE

- I. Pulmonary Function Testing Equipment
 - a. Principles
 - b. Equipment Calibration (Psychomotor-Skills)
- II. Pulmonary Function Interpretation
 - a. Goals/Indications/Contraindications/Hazards for Spirometry Studies
 - b. Evaluate
 - c. Interpretation
- III. Blood Gas Analysis
 - a. Goals/Indications/Contraindications/Hazards for ABG's
 - b. Equipment
 - c. Analysis
- IV. Endotracheal Suction
 - a. Goals/Indications/Contraindications/Hazards for Suctioning
 - b. Equipment
 - c. Patient Assessments

Lecture/Lab Module I

Material Covered:

Pulmonary Function Equipment & Testing: Principles, Equipment, and Case Studies

Assessments:

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

Learning Outcomes: (Affective-Behavior)

1. Identify the standard pulmonary function testing equipment needed for spirometer calibration. (Cognitive-Knowledge)
2. Describe pulmonary function calibrating principles for Flow & Volume Spirometers. (Cognitive-Knowledge)
3. Perform equipment calibration using ATS 1s, 3s, 6s criteria. (Psychomotor-Skills) & (Affective-Behavior)
4. Evaluate calibration results and troubleshoot as needed. (Cognitive-Knowledge)

Lecture/Lab Module II

Material Covered:

Basic Pulmonary Function / Spirometry Perform & Interpretation

Assessments:

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

Learning Outcomes: (Cognitive-Knowledge)

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

Lecture/Lab Module III

Material Covered:

Blood Gas Analysis: Principles, Equipment, and Analysis

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). (Cognitive-Knowledge)
2. Identify the standard blood gas equipment and puncture sites. (Cognitive-Knowledge)
3. Perform and interpret an Allen's Tests for collateral circulation. (Psychomotor-Skills) & (Affective-Behavior)
4. Perform a radial artery (ABG) puncture and when necessary recommend corrective action. (Psychomotor-Skills) & (Affective-Behavior)
5. Identify the proper conditions required for (ABG) sample for transport & analyzation. (Cognitive-Knowledge)
6. Demonstrate the ability to achieve the proper conditions necessary for appropriate (ABG) sample for transport and when necessary recommend corrective action. (Psychomotor-Skills) & (Affective-Behavior)
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. (Cognitive-Knowledge)
8. Interpret the Oxygenation status of an (ABG) Normal, Mild Hypoxemia, Moderate Hypoxemia, and Severe Hypoxemia and recommend corrective action when needed. (Cognitive-Knowledge)

Lecture/Lab IV

Material Covered:

Endotracheal Suctioning: Indications/Contraindications, Equipment, and Patient Assessments

Assessments:

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

Learning Outcomes:

1. List & Describe the goals, indications, contraindications, and hazards of Endotracheal suctioning. (Cognitive-Knowledge)
2. Identify the standard equipment required for the Sterile Suctioning & Closed Ballard Suctioning Techniques. (Cognitive-Knowledge)
3. Identify the basic steps & equipment required for obtaining a Sputum sample for a C&S. (Cognitive-Knowledge)
4. Identify the appropriate negative suction pressures based on patient presentation: adult, pediatric and neonatal. (Psychomotor-Skills)
5. Demonstrate the ability to calculate the maximum size suction catheter based of patient airway size. (Cognitive-Knowledge)
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. (Cognitive-Knowledge)
8. Perform endotracheal suctioning, evaluate secretions, and when necessary recommend corrective action. (Psychomotor-Skills) & (Affective-Behavior)

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

Quizzes and HW	10%
Case Studies	20%
Skill Check Assess/Lab Comp.	20%
<u>Test & Final Exam</u>	<u>50%</u>
	100%

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

GRADING SYSTEM:

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.

Purpose:

To provide information to each student concerning the calculation of grades and to assure consistency and fairness in assigning grades. The Respiratory Care Program grading policy is different than the HGTC grading policy.

Policy:

A grade of "C" or better must be achieved in all required respiratory care program courses in order 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

Each student must demonstrate safety and competence in required laboratory skill check assessments and laboratory competency practical examinations. Each course with a laboratory component includes skill check assessments that must be mastered within the course.

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. The course instructor will announce the due date of the skill check assessments in the course calendar informational sheet. Failure to complete a skill check assessment will not allow the student to complete the laboratory competency practical examination, which will result in failure of the course.

Laboratory Competency Practical Examination

A minimum of 75% and all critical elements must be achieved to pass the laboratory competency practical examination. Two attempts will be given for the competency. Repeat competency will be awarded a maximum of 75%. Students will only be allowed to try the competency one time per day. Failure to pass the competency within two attempts will result in repeat of the failed lab course.

Summary Performance Evaluation

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

- Satisfactory – Completion of first attempt (90-100%) agrees with HGTC grading scale ready for clinical application with minimal supervision. Performed procedure accurately, or was able to correct performance without injury to the patient or decreasing effect of therapy being given.
- Minor-Unsatisfactory – Completion of first attempt (85-89%) needs to review fundamental concepts or requires re-evaluation of minor deficiency (s) (ex. Forgets to wash hands during the Follow-up stage. Must be re-evaluated on this step not the whole procedure).

- ✓ Unsatisfactory performance – Completion of first attempt (<80%) not ready for clinical application. Requires remediation under one of the following categories.
- ✓ Major-Unsatisfactory – Completion of 1st attempt (No grade must repeat check-off) requires additional supervised clinical practice and complete re-evaluation of the procedure.

--Completion of 2nd attempt Check-off with a Satisfactory = 75%

--Completion of 2nd attempt Check-off with Minor Unsatisfactory or Major Unsatisfactory = 0%

EVALUATION OF REQUIRED COURSE ASSIGNMENTS

Students' performance will be assessed and the weight associated with the various measures are listed below:

LATE ASSIGNMENTS:

1. A maximum of one (1) scheduled test can be made up during the semester, (at the discretion of the course instructor). Any subsequently missed tests will receive a grade of 0.
2. Makeup tests / 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 the instructor is 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.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a 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 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. Room locations and Live Chat is available on the SSTC website.



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 Jocelyn Williams, 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.

Title IX Requirements

The South Carolina Technical College System does not discriminate on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and activities as required by Title IX. As outlined in the Violence Against Women Act, Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Students who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking are encouraged to report such incidents to the Title IX Coordinators:

Dr. Melissa Batten, AVP of Student Affairs
Building 1100, Room 107A, Conway Campus
843-349-5228

Melissa.Batten@hgtc.edu

Jacquelyne Synder, AVP of Human Resources
Building 200, Room 212A, Conway Campus
843-349-5212

Jacquelyne.Snyder@hgtc.edu

*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).