



INSTRUCTIONAL PACKAGE

RES 244

Advanced Respiratory Skills I

AY 2020/2021

Effective Term

Spring 2021

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Spring 2021 (202020).

COURSE PREFIX: RES 244

COURSE TITLE: Advanced Respiratory Skills I

CONTACT HOURS: 3 Lecture/3 Lab

CREDIT HOURS: 4

RATIONALE FOR THE COURSE:

RES 244 is a lecture and lab course that will further classify mechanical ventilators. In RES 244, you will monitor and evaluate commonly used infant, pediatric, and adult ventilators. You will review advanced airway modalities and care. Explain the need for invasive diagnostics tools used in respiratory care. Lastly, you will explain the respiratory roles in assisting with the diagnostic tools used for diagnosing pulmonary diseases.

COURSE DESCRIPTION:

This course includes an in-depth study of mechanical ventilation and considerations for management of the critical care patient.

PREREQUISITES/CO-REQUISITES:

Respiratory Care Program course RES 141. Required prerequisite courses must be completed with a grade of "C" or better.

REQUIRED MATERIALS:

Cairo, J. M. (2020). Pilbeam's Mechanical Ventilation (7th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323551274

Cairo, J. M. (2020). Workbook for Pilbeam's Mechanical Ventilation (7th ed). St. Louis, MO: Elsevier/Mosby. ISBN: 9780323551267

Oakes, D. F. and Jones, S. N. (2018). Oakes Neonatal Pediatric Respiratory Care Pocket Guide (7th ed.). Clayton, NC: Health Educator Publications, Inc. ISBN: 9780932887542.

Please visit the [BOOKSTORE](#) online site for most current textbook information. Use the direct link below to find textbooks.

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 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*:

Lab/Lecture I

Material Covered: Difficult Airway, Ventilator Settings Management for Specific Lung Diseases, Ventilator Graphics, and Troubleshooting

Chapter 7 Final Considerations in Ventilator Setup

Chapter 9 Ventilator Graphics

Chapter 18 Troubleshooting and Problem Solving

Assessments:

- Skill Check Assessment/Laboratory Competency
- Quizzes and Classmate Assignments
- Exam

Learning Outcomes:

1. List and Identify types of difficult airways.
2. Explain emergency airway disorder etiology, clinical manifestations, diagnosis, and

treatment.

3. Use oropharyngeal and nasopharyngeal artificial airways.
4. Demonstrate oral and nasal endotracheal intubation.
5. Maintain endotracheal tubes with patients on ventilator or other respiratory devices.
6. Select appropriate equipment for alternate airways for difficult airways.
7. Perform steps to wean PEEP on mechanical ventilator.
8. Identify the steps used in a difficult airway algorithm.
9. Set appropriate ventilator alarms.
10. Set appropriate initial ventilator settings for various lung disorders.
11. Identify lung graphics for flow, pressure, volume, and time.
12. Identification of various scalars, curves, and loops.
13. Monitoring patient ventilator graphics and identification of patient-ventilator issues.
14. Troubleshooting patient or ventilator issues.

Lab/Lecture II

Material Covered: Ventilator Weaning and Mobilization

Chapter 20 Weaning and Discontinuation from Mechanical Ventilation

Assessments:

- Skill Check Assessment/Laboratory Competency
- Quizzes and Classmate Assignments
- Exam

Learning Outcomes:

1. Explain the indications, contraindications, and hazards of weaning mechanics.
2. List the different modes used for weaning.
3. Identify the different types of equipment used for weaning off mechanical ventilation.
4. Explain the steps to properly weaning off mechanical ventilation.

Lab/Lecture III

Material Covered: Liberation from Mechanical Ventilators

Assessments:

- Skill Check Assessment/Laboratory Competency
- Quizzes and Classmate Assignments
- Exam

Learning Outcomes:

1. Explain the indications, contraindications, and hazards of extubation from mechanical ventilation.
2. Explain the steps to properly remove patients from mechanical ventilation.

Lab/Lecture IV

Material Covered: Neonatal and Pediatric Mechanical Ventilation and Maintenance

Chapter 22 Neonatal and Pediatric Mechanical Ventilation

Chapter 4 Neonatal Ventilation

Assessments:

- Skill Check Assessment/Laboratory Competency
- Quizzes and Classmate Assignments
- Exam

Learning Outcomes:

1. Perform initial neonatal ventilator setup.
2. Identify endotracheal tube placement.
3. Identify ways to improve oxygenation in neonates.
4. Identify and modify ventilator to achieve optimal PEEP.
5. Identify the risk and hazards of using Pressure Control Ventilation and Volume Control Ventilation.
6. Identify the indications for Mechanical Ventilation in a Neonate using assessment and abg parameters.
7. Identify the contraindications of mechanical ventilation for Neonates.
8. Select alternative airway devices to avoid neonatal mechanical ventilation.
9. Set up alternative airway devices to avoid neonatal mechanical ventilation.
10. Perform initial Pediatric ventilator setup.
11. Identify endotracheal tube placement.
12. Identify ways to improve oxygenation in neonates.
13. Identify and modify ventilator to achieve optimal PEEP.
14. Identify the risk and hazards of using Pressure Control Ventilation and Volume Control Ventilation.
15. Identify the indications for Mechanical Ventilation in a Neonate using assessment and abg parameters.
16. Identify the contraindications of mechanical ventilation for Pediatrics.
17. Select alternative airway devices to avoid Pediatric mechanical ventilation.
18. Set up alternative airway devices to avoid Pediatric mechanical ventilation.

Lab/Lecture V

Material Covered: Fiberoptic Bronchoscopy

Assessments:

- Skill Check Assessment/Laboratory Competency
- Quizzes and Classmate Assignments
- Exam

Learning Outcomes:

1. Explain Fiberoptic bronchoscopy indications, contraindications, procedures, and hazards
2. Explain the role of the respiratory therapist in Fiberoptic bronchoscopy assisting

Lab/Lecture VI

Material Covered: Thoracentesis

1. Skill Check Assessment/Laboratory Competency
2. Quizzes and Classmate Assignments
3. Exam

Learning Outcomes:

1. Explain thoracentesis indications, contraindications, procedures, and hazards.
2. Explain the role of the respiratory therapist in thoracentesis assisting.
3. Contract one chamber, two chamber, and three chamber chest tube drainage systems.

Lab/Lecture VII

Material Covered: Chest Tube Maintenance

Assessments:

- Skill Check Assessment/Laboratory Competency
- Quizzes and Classmate Assignments

- Exam

Learning Outcomes:

1. Explain chest tube maintenance procedures.
2. Explain the role of the respiratory therapist in chest tube maintenance.

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:

Mechanical Ventilation (MV) Weaning

MV Extubation

Neonatal MV Setup

Pediatric MV Setup

EVALUATION*

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

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. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.
4. All missed exams will incur a 10% overall deduction unless medical documentation is provided.
5. Late Homework assignments will have a deduction of ten points of the total assignment grade.
6. Homework or Quiz assignments will not be accepted after 5 days of the due date. The assignment will close, and students will not have any further opportunities to submit.

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.

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.

Attendance for Face-to-Face Courses:

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

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

appointments using TutorTrac, visit the Student Services tab in WaveNet. 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.



CENTRAL 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!
2. Use the [Online Resource Center \(ORC\)](#) including scheduled technology training, Office 365 support, password resets, and username information.
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.
5. **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).

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, 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

EEO and Title IX Coordinator

Building 200, Room 212A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu