



INSTRUCTIONAL PACKAGE

RES 220

Hemodynamic Monitoring

Effective Term

Summer/2018

INSTRUCTIONAL PACKAGE

PART I: COURSE INFORMATION

Effective Term: Summer 2018 (201730)

COURSE PREFIX: RES 220

COURSE TITLE: Hemodynamic Monitoring

CONTACT HOURS: 1

CREDIT HOURS: 1

RATIONALE FOR THE COURSE: Hemodynamic monitoring is a course that will introduce the critical care techniques for hemodynamic monitoring with invasive and noninvasive devices. The course will allow respiratory care students to understand how hemodynamic and laboratory values assist with the management of critically ill patients within the hospital setting.

COURSE DESCRIPTION:

This course is a study of basic hemodynamic monitoring. This course will also integrate the basic concepts of Math, Physics, and Chemistry used by the Respiratory Care Professionals in their daily practice.

PREREQUISITES/CO-REQUISITES:

Respiratory Care Program second semester courses RES 111, 131, and 232. *Required prerequisite courses must be completed with a grade of "C" or better.*

REQUIRED MATERIALS:

Heuer, A. & Scanlan, C.L. (2014). Wilkins' Clinical Assessment in Respiratory Care. Elsevier.

ISBN# 9780323100293

Sibberson, R. (Nov, 1995). Practical Math for Respiratory Care. Elsevier. ISBN# 9780815180012

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.

ADDITIONAL REQUIREMENTS:

List other tools, resources, and materials needed by the student for success in the course, including specific costs associated (i.e., calculators proctor fees, hardware/software). Remove section if you don't plan to use.

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](#). 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:

1. Discuss indications and hazards for arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurements, and noninvasive monitoring. (Cognitive-Knowledge)
2. Perform or compute arterial pressure values, central venous values, pulmonary artery values, and cardiac output. (Psychomotor-Skills)
3. Discuss and explain the measured value significance of arterial pressures, central venous pressures, pulmonary artery pressures, cardiac output, and noninvasive monitoring values. (Affective-Behavior) & (Cognitive-Knowledge)

COURSE OBJECTIVES

Module 1

Material Covered: Arterial Pressures Monitoring

Assessments:

- Homework
- Quiz
- Exam

Learning Outcomes:

1. Discuss indications and hazards for arterial pressure monitoring.
2. Perform or compute arterial pressure values, pulmonary artery values, and cardiac output.
3. Discuss and explain the measured value significance of arterial pressures, pulmonary artery pressures, cardiac output, and noninvasive monitoring values.

Module 2

Material Covered: Central Venous Catheters

Assessments:

- Homework
- Quiz
- Exam

Learning Outcomes:

1. Discuss indications and hazards for central venous catheters, cardiac output measurements, and noninvasive monitoring.
2. Perform or compute central venous values and cardiac output.
3. Discuss and explain the measured value significance of central venous pressures and noninvasive monitoring values.

Module 3

Material Covered: Pulmonary Artery Catheters

Assessments:

- Homework
- Quiz
- Exam

Learning Outcomes:

1. Discuss indications and hazards for arterial pressure monitoring, pulmonary artery catheters, cardiac output measurements, and noninvasive monitoring.
2. Perform or compute arterial pressure values, central venous values, pulmonary artery values, and cardiac output.
3. Discuss and explain the measured value significance of arterial pressures, central venous pressures, pulmonary artery pressures, cardiac output, and noninvasive monitoring values.

Module 4

Material Covered: Cardiac Output Measurements

Assessments:

- Homework
- Quiz
- Exam

Learning Outcomes:

1. Discuss indications and hazards for arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurements, and noninvasive monitoring.
2. Perform or compute arterial pressure values, central venous values, pulmonary artery values, and cardiac output.
3. Discuss and explain the measured value significance of arterial pressures, central venous pressures, pulmonary artery pressures, cardiac output, and noninvasive monitoring values.

Module 5

Material Covered: Noninvasive Monitoring Techniques

Assessments:

- Homework
- Quiz
- Exam

Learning Outcomes:

1. Discuss indications and hazards for arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurements, and noninvasive monitoring.
2. Perform or compute arterial pressure values, central venous values, pulmonary artery values, and cardiac output.
3. Discuss and explain the measured value significance of arterial pressures, central venous pressures, pulmonary artery pressures, cardiac output, and noninvasive monitoring values.

Module 6

Material Covered: Oxygen Monitors and CO2 Monitoring

Assessments:

- Homework
- Quiz
- Exam

Learning Outcomes:

1. Identify reference ranges for both arterial blood gases and oximetry parameters.
2. Identify the indications for blood gas and oximetry analysis.
3. Specify methods used to assuring valid measurement and use of blood gas data.
4. Accurately interpret arterial blood gas and/or oximetry data.

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	10%
Project	15%
Test	50%
Final Exam	25%
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	100%

GRADING SYSTEM:

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.

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.

GRADING SCALE:

100-90 = A

89-80 = B

79-75 = C

74-69 = D

68-0 = F

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.

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 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. Quizzes cannot be made up if you are absent a grade of zero (0) will be assigned.

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 (20%) of the total contact hours for a course. ****Two consecutive weeks of absences will result in a withdrawal of the course.**

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:

6. **Getting around HGTC:** General information and guidance for enrollment!
7. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
8. **Drop-in technology support or scheduled training** in the Center or in class.
9. **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.

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, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*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 Associate 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 Associate Vice President for Human Resources.
Dr. Melissa Batten, AVP Student Affairs <i>Title IX Coordinator</i> Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Jacquelyne Snyder, AVP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i> Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu