

# COURSE SYLLABUS

## RC 223

### CLINICAL-3

Class Hours: 0

Laboratory Hours: 24

Credit Hours: 4

Course Description: This course will emphasize neonatal-pediatric intensive care, pulmonary function testing, respiratory home health care, and additional topics in adult mechanical ventilation.

Entry Level Standards: Advancement to Semester VI in the Respiratory Care Program.

Prerequisites: RC 212, RC 212, RC 222,

Co Requisites: RC 214

Textbooks: Persing, Gary Respiratory Care Exam Review, 3<sup>rd</sup> ed.  
Faculty prepared Clinical Skills Procedure Manual  
Respiratory Therapy Review Seminars Written Registry and Clinical Simulation  
Review Books

Class Web Site: RC 223 ELearn

Internet Access: All students are required to have internet access to check elearn for course updates and materials. Internet access is available in the RC Lab and the HSC Resource room, 1002.

Presentation

- 1) Demonstration and student use of equipment in laboratory prior to hospital rotations.
- 2) Performance of clinical skills on assigned patients in hospital or outpatient setting while supervised by faculty or hospital staff.
- 3) Occasional guest lectures and demonstrations by physicians and hospital staff respiratory therapists.

Specific Evaluation Process Missed Class Tests – at discretion of instructor

Testing sources:

Written test material will come from text reading, handouts and laboratory activities. Written test objectives (all of which pertain to clinical skills) will be given to the student at the beginning of the semester. The student will also be evaluated for technical competency in certain clinical skills at mid-term and end of the semester. A list of these clinical skills is provided at the beginning of the semester.

Academic dishonesty

See program policy handbook

Misc

The use of calculators during testing will be at the instructor's discretion.

Under no conditions will preprogramed calculators be allowed. The TI calculators are acceptable if not preprogramed before test. The instructor may provide basic calculators for test taking.

The use of tape recorders and other recording devises will be at the instructor's discretion.

No beepers or cellular phone calls during clinical.

Grade  
Calculation

Grading is satisfactory/ no credit ("S" or "NC"). A grade of "satisfactory" requires completion of all clinical objectives, a passing score on the written evaluation, completion of all required professional points, satisfactory completion of daily clinical forms, demonstration of competency in all required clinical skills, and make up of all clinical days missed with no more than three unexcused absences.

Course  
Testing,  
Grading And  
Retesting

1. Each week, either a faculty member or a pre-designated staff respiratory therapist will assign the student a list of patient care duties which will be completed during the clinical rotation. The student must obtain a daily, signed, written evaluation of his or her clinical competency by appropriate clinical faculty. An evaluation form is provided for this purpose.

2. More than three absences will result in a semester grade of "NC" or no credit. If the student has three absences or less, these must be made up before the end of finals week. The director of clinical education will schedule the makeup days at a clinical facility.

3. Student must demonstrate proficiency in a laboratory testing situation, in setting up respiratory therapy equipment, changing parameters, performing mechanical ventilator changes in infants, children and adults, and troubleshooting CPAP and

mechanical ventilator problems. Students may also be asked to perform any of the competencies from previous clinical classes, RC 221 and RC 222.

Attendance : More than three absences will result in a semester grade of “NC” or no credit. If the student has three absences or less, these must be made up before the end of finals week. The director of clinical education will schedule the make- up days at a clinical facility.

Instructors John Cousino, Sharon Hall, Mickey Rountree

Office Hours: Office hours are posted on each faculty member’s office door. All faculty members carry beepers and are available at all times during students’ hospital rotations.

Disabilities Statement Students who have educational, psychological, and/or physical disabilities may be eligible for accommodations that provide equal access to educational programs and activities at Chattanooga State. These students should notify the instructor immediately, and should contact Disabilities Support Services within the first two weeks of the semester in order to discuss individual needs. The student must provide documentation of the disability so that reasonable accommodations can be requested in a timely manner. All students are expected to fulfill essential course requirements in order to receive a passing grade in a class, with or without reasonable accommodations. .

Disruptive Students: The term "classroom disruption" means - student behavior that a reasonable person would view as substantially or repeatedly interfering with the activities of a class. A student who persists in disrupting a class will be directed by the faculty member to leave the classroom for the remainder of the class period. The student will be told the reason(s) for such action and given an opportunity to discuss the matter with the faculty member as soon as practical. The faculty member will promptly consult with the division dean and the college judicial officer. If a disruption is serious, and other reasonable measures have failed, the class may be adjourned, and the campus police summoned. Unauthorized use of any electronic device constitutes a disturbance. Also, if a student is concerned about the conduct of another student, he or she should please see the teacher, department head, or division dean.

Affirmative Action: Students who feel that he or she has not received equal access to educational programming should contact the college affirmative action officer.

Changes. This syllabus can be changed at the discretion of the instructor with written or oral notice.

## **Respiratory Care Program Student Learning Outcomes (PSLO)**

PSLO #1: Show the ability to interpret, comprehend, apply and evaluate patient data and clinical information relative to their role as an Advanced-Level Respiratory Therapist.

CSLO 2, 3

PSLO #2: Demonstrate the proficiency in all the mechanical and physical skills necessary to fulfill their role as an Advanced-Level Respiratory Therapist.

CSLO 1, 2, 3, 4

PSLO #3 : Demonstrate behaviors and attitudes consistent with professional and employer expectations for an Advanced-Level Respiratory Therapist.

CSLO 5

PSLO #4: Provide the community with qualified individuals who can meet current and future needs of the workplace as respiratory therapists.

CSLO 1, 2, 3, 4

## **Course Student Learning Outcomes (CSLO)**

CSLO #1: Assist in pulmonary function testing and bronchoscopy procedures.

CSLO #2: Demonstrate advanced respiratory practitioner skills in pediatric and neonatal Critical Care

CSLO # 3: Demonstrate advanced respiratory practitioner skills in adult critical care, including complications and recommend treatment for specific unique medical conditions that require specialized mechanical ventilation techniques

CSLO # 4: Perform advanced artificial airway care.

CSLO #5: Demonstrate professionalism through attendance, punctuality and continuing education and community service.

### **Instructional Indicators:**

*For CSLO #1:*

1. Explain basic breathing maneuvers performed by patients for routine bedside spirometry.
2. Instruct patient in techniques used to perform spirometry.
3. Operate bedside pulmonary function equipment competently.
4. Know normal and critical values for tests such as FEV1, FEV1%, FVC, TLC, RV/TLC ratio, FEF 25%-75%, diffusion capacity, helium dilution and body plethysmography.
5. Obtain flow rates and volumes of a flow-volume loop or volume-time curve on a pulmonary function test.
6. Applying American Thoracic Society standards, analyze pulmonary function tests for

- reproducibility and acceptability.
7. Interpret pulmonary function test results as a normal, restrictive, mixed or obstructive pattern
  8. Identify various diseases or conditions that could cause a restrictive, mixed or obstructive pattern on a pulmonary function test.
  9. Assist pulmonary lab staff in preparing bronchoscope, medications and patient prior to bronchoscopy.

*For CSLO #2:*

1. Calibrate and place transcutaneous O<sub>2</sub> and CO<sub>2</sub> sensors and saturation monitors on patients.
2. Initiate, monitor and document mechanical ventilation on infants and children, including volume limited, pressure limited and high frequency modes..
3. Suction the artificial airways of infant and pediatric patients.
4. Set up, change out and monitor infant nasal CPAP systems.
5. Recommend mechanical ventilator setting changes based on the patient's clinical condition and arterial blood gas results.
6. Recognize and rectify any problems that arise during a patient's stay on mechanical ventilation.
7. Interpret arterial blood gas results and recommend any necessary ventilator setting changes.
8. Identify infant or pediatric conditions that may lead to acute respiratory failure.
9. Analyze patient vital signs, arterial blood gases, and work of breathing to determine if mechanical ventilation is necessary.

*For CSLO # 3*

1. Discuss and compare the pulmonary physiologic changes that occur in patients with Adult Respiratory Distress Syndrome (ARDS), asthma, smoke inhalation, burns, chest trauma, neuromuscular diseases and Chronic Obstructive Pulmonary disease (COPD) that may create unique mechanical ventilation needs.
2. Describe how specialized modes of ventilation work, such as airway pressure release ventilation (APRV), pressure control-inverse ratio (PCIRV), Volume-inverse ratio (VCIRV), proportional assist ventilation, and auto flow.
3. List all of the ventilator parameters that a respiratory therapist sets and all of the ventilator parameters that a patient might set in the ventilator modes listed in #2.
4. Correctly set up the ventilator modes listed in # 2 on a Draeger, Servo I, or Puritan Bennett 840 mechanical ventilator, including appropriate alarms, on patients in intensive care units.
5. Assess patients and analyze their pulmonary condition, using vital signs, arterial blood gases, chest auscultation, laboratory test results, chest x-rays, microbiology, hematology, electrolytes, and ventilatory mechanics.
6. Describe the unique tidal volumes, mechanical respiratory rates, oxygen concentrations and other specialty settings that should be used for patients with Adult Respiratory

Distress Syndrome (ARDS), asthma, smoke inhalation, burns, chest trauma, neuromuscular diseases and Chronic Obstructive Pulmonary disease (COPD).

7. Describe and apply the ARDS Net method of ventilation.
8. Describe “prone positioning” and assist in applying it to the appropriate patients.

*For CSLO #4*

1. Recognize complications (accidental extubation, ruptured cuff, bleeding, obstruction of airway) that may occur with the presence of an artificial airway and respond correctly.
2. Perform routine extubation and follow-up care using proper technique.
3. Evaluate patient for any complications created by extubation and recommend appropriate treatment.
4. Analyze the patient’s condition and decide if extubation is appropriate.
5. Demonstrate proper routine cleaning for a tracheostomy.
6. Determine if artificial airway is properly placed in patient.

*For CSLO #5*

1. Student has no more than three unexcused absences from clinical rotations.
2. All absences are made up by finals week.
3. Student obtains fifteen professional points. (see list in Clinical Policy).

**Required Assessments**

**Assessment Descriptions:**

Assessment #1: Practical laboratory skills testing

Assessment #2: Clinical attendance and punctuality. (see Clinical Policies)

Assessment #3: Written testing on ABG interpretation, neonatal and adult ventilator changes,

Assessment #4: Documentation of professional points (see list in Clinical Policies)

Assessment #5: Satisfactory completion of daily clinical records (evaluations signed by clinical preceptors)

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CSLO	#1	#2	#3	#4	#5
Assessment	#5	#1, #3, #5	#1, #3, #5	#1, #5	#2, #4, #5

Student Acceptance Of Policies

I have read all of the policies contained in the syllabus for Respiratory Care (RC 223) and understand them and agree to abide by them.

Student Signature \_\_\_\_\_

Date \_\_\_\_\_

(tear this page out and return this page to the instructor)