

Course Syllabus

RC CLINICAL 2

RC 222

Class Hours: 0

Laboratory Hours: 24

Credit Hours: 5

<u>Course Description:</u>	This course is designed familiarize the student with respiratory care procedures in the hospital setting. Patient care experience will include all procedures from the previous clinical class (RC 221) in addition to: analyzing arterial blood gases, initiating and monitoring mechanical ventilation, performing artificial airway care, demonstrating isolation techniques, participating in cardiopulmonary resuscitation, and performing physical assessment on intensive care patients. The students will also begin performing basic respiratory care on pediatric patients.
<u>Entry Level Standards:</u>	Advancement to Semester V in the Respiratory Care Program.
<u>Prerequisites:</u>	RC 210, RC 243
<u>Co Requisites:</u>	RC 212, RC 213
<u>Textbooks:</u>	Persing, Gary <u>Respiratory Care Exam Review, 3nd ed.</u> Faculty prepared <u>Clinical Skills Procedure Manual</u>
<u>Class Web Site:</u>	RC 222 ELearn
<u>Library Usage:</u> <u>Internet Access:</u>	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.
<u>Presentation</u>	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.
<u>Specific Evaluation</u>	<u>Missed Class Tests</u> – At the discretion of the 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 analyzing arterial blood gases, initiating and monitoring mechanical ventilation, performing artificial airway care, demonstrating isolation techniques, participating in cardiopulmonary resuscitation, and performing physical assessment on intensive care patients and performing basic respiratory care on pediatric patients.

<u>Clinical Attendance :</u>	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.
<u>Instructors</u>	John Cousino, Sharon Hall, Mickey Rountree
<u>Office Hours:</u>	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.
<u>Disabilities Statement</u>	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.
<u>Disruptive Students:</u>	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.
<u>Affirmative Action:</u>	Students who feel that he or she has not received equal access to educational programming should contact the college affirmative action officer.
<u>Changes.</u>	This syllabus can be changed at the discretion of the instructor with written or oral notice.

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 5

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, 6

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

CSLO 8

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, 5, 6, 7

Course Student Learning Outcomes (CSLO)

CSLO #1: Perform mechanical ventilation setup, monitoring, modification and documentation.

CSLO #2: Perform routine CPAP (continuous positive airway pressure devices) and BiPAP monitoring and documentation.

CSLO #3: Perform routine artificial airway care.

CSLO #4: Perform weaning parameters on both intubated and non-intubated patients.

CSLO #5: Perform patient assessment on critical and non-critical patients.

CSLO #6: Perform basic and advanced respiratory care procedures on infants and children.

CSLO #7: Recognize potentially life-threatening conditions, recommend appropriate interventions and perform CPR as needed.

CSLO #8: Demonstrate professionalism through attendance, punctuality and continuing education and community service.

Instructional Indicators

For CSLO #1

1. Correctly and swiftly assemble mechanical ventilators such as Drager, Servo I and Puritan Bennett 840 prior to initial patient use.
2. Determine appropriate mechanical ventilator settings, including tidal volume, mechanical respiratory rate, oxygen concentration, and mode of ventilation based on patient's size and medical condition.
3. Apply mechanical ventilation to a new patient, following each hospital site's respiratory care policies.

4. Calculate static compliance, dynamic compliance, alveolar minute ventilation, and P/F ratio.
5. Assess patient's status and vital signs, including heart rate, blood pressure, chest auscultation, hemodynamics, arterial blood gases, chest x-ray, and work of breathing.
6. Set appropriate mechanical ventilator alarms, including low pressure, high pressure, low exhaled tidal volume, low exhaled minute volume, apnea and high respiratory rate.

For CSLO #2:

1. Correctly assemble CPAP devices.
2. Determine appropriate CPAP settings based on patient's size and medical condition.
3. Apply CPAP device to patient, while giving the patient appropriate instructions.
4. Set alarms for CPAP device.
5. Monitor, evaluate and document patient response to CPAP treatment.
6. Correctly assemble BiPAP devices.
7. Determine appropriate BiPAP settings based on patient's size and medical condition.
8. Apply BiPAP device to patient, while giving the patient appropriate instructions.
9. Set alarms for BiPAP device.
10. Monitor, evaluate and document patient response to BiPAP treatment

For CSLO # 3:

1. Using proper sterile technique, suction patient's artificial airway using either an inline suction catheter or an external catheter.
2. Monitor endotracheal or tracheostomy tube cuff pressures and modify the pressures if necessary.
3. Retape and/or secure the endotracheal tube or tracheostomy tube.
4. Assess patient for extubation, perform extubation, reassess patient and document.

For CSLO #4

1. Assemble the one-way valve device, pressure manometer and respirometer needed to perform weaning parameters.
2. Explain testing procedure to the patient.
3. Measure respiratory rate, vital capacity, exhaled minute volume, maximum inspiratory pressure, maximum expiratory pressure.
4. Calculate spontaneous tidal volume and rapid, shallow, breathing index.
5. Know normal and "critical" values for the tests in # 3 and determine suitability for weaning.
6. Recommend appropriate weaning techniques, based on the results from the tests in # 3.

For CSLO #5.

1. Assess patient's breath sounds, using correct auscultation technique.
2. Evaluate laboratory test results in patient's chart, including fluids and electrolytes, hematology, microbiology, radiology and arterial blood gases.

3. Evaluate the patient's chart for previous history and physical, physician's progress notes, and diagnosis.
4. Document patient assessment findings per department policy and protocol.

For CSLO #6

1. Assess both infants' and children's respiratory rate, breath sounds and heart rates.
2. Evaluate patients using established asthma and bronchiolitis guidelines.
3. Demonstrate proper technique in administering aerosol and/or MDI therapy to infants and children.
4. Perform chest physiotherapy on infants and children, including vest therapy.
5. Correctly perform nasotracheal suctioning on infants.
6. Calibrate and place transcutaneous O₂ and CO₂ sensors and saturation monitors on patients.
7. Initiate, monitor and document mechanical ventilation on infants and children, including volume limited, pressure limited and high frequency modes.
8. Suction the artificial airways of infant and pediatric patients.
9. Set up, change out and monitor infant nasal CPAP systems.
10. Recommend mechanical ventilator setting changes based on the patient's clinical condition and arterial blood gas results.
11. Recognize problems that arise during mechanical ventilation and take appropriate action.
12. Interpret arterial blood gas results and recommend any necessary ventilator setting changes.
13. Analyze patient vital signs, arterial blood gases, and work of breathing to determine if mechanical ventilation is necessary.

CSLO #7:

1. Demonstrate proper cardiopulmonary resuscitation techniques used for patients in cardiopulmonary arrest.
2. Recognize potentially life-threatening EKG (electrocardiogram) patterns on a patient's cardiac monitor, including ventricular fibrillation, ventricular tachycardia, and asystole.
3. Evaluate both ventilator changes and vital sign changes that may indicate the presence of tension pneumothorax, pulmonary edema, bronchospasm and pulmonary embolism.

For CSLO #8

1. Student has no more than three unexcused absences from clinical rotations.
2. All absences are made up by finals week.
3. Student obtains ten 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)

RC 222

CSLO	#1	#2	#3	#4	#5	#6	#7	#8
Assessment	#1	#1	#5	#1	#3	#3	#1	# 2 #4, #5

Student Acceptance Of Policies

I have read all of the policies contained in the syllabus for Respiratory Care (RC 222) and understand them and agree to abide by them.

Student Signature _____

Date _____

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