

**SEWARD COUNTY COMMUNITY COLLEGE
COURSE SYLLABUS**

I. TITLE OF COURSE: RT2606- Critical Care Practicum

II. COURSE DESCRIPTION: 6 credit hours

0 credit hours of lecture and 6 credit hours of lab per week.

This is a six credit hour clinical course that exposes the student to different aspects of respiratory care in critical care areas in a clinical setting. This course allows the student to apply the knowledge they have acquired in lecture to real-life situations in the monitoring, management, and treatment of critically ill adult, neonatal, and pediatric patients. Students will take and pass a NBRC TMC-like exam with a 65% or better for successful completion of this course.

For each unit of credit, a minimum of three hours per week with one of the hours for class and two hours for studying/preparation outside of class is expected.

Pre-requisite: Admission to the Respiratory Therapy Program.

III. PROGRAM AND/OR DEPARTMENT MISSION STATEMENT:

The Respiratory Therapy Program of Seward County Community College provides an educational forum responsive to the needs of the health care community with emphasis to maximize professional potential and foster the development of competent and compassionate respiratory care practitioners.

IV. TEXTBOOK AND MATERIALS:

- A. Cairo, J. M. (2019). *Pilbeam's Mechanical Ventilation* (7th Ed.). St. Louis: Elsevier.
- B. Kacmarek, R. M., Stoller, J. K., and Heuer, A. J. (2021). *Egan's Fundamentals of Respiratory Care* (11th Ed.) St. Louis: Elsevier.
- Heuer, A. J. and Scanlan, C. L. (2014). *Wilkins' Clinical Assessment in Respiratory Care*. (8th Ed.). Maryland Heights: Mosby.
- C. Des Jardins, T. and Burton, G. G. (2016). *Clinical Manifestations and Assessment of Respiratory Disease* (8th ed.). St. Louis: Elsevier.
- D. Colbert, B., & Gonzalez, L. (2019). *Integrated Cardiopulmonary Pharmacology* (5th ed). Redding, CA: BVT Publishing LLC.
- E. American Heart Association. (2016). *Advanced Cardiovascular Life Support*.
- F. Walsh, B. K. (2015). *Neonatal and Pediatric Respiratory Care* (5th ed.). St. Louis: Elsevier.
- G. Stanley, D. (2019). *Respiratory Therapy Exam Review Study Guide*. (1st ed.). Lindsey Jones: LindseyJones, LLC.

V. SCCC OUTCOMES

Students who successfully complete this course will demonstrate the ability to do the following SCCC Outcomes.

VII. Understand each other, moving beyond simple acceptance to embracing and celebrating the rich dimensions of diversity by working as a team to learn, engaging with community, exhibiting cultural awareness, and creating equity.

IX. Exhibit workplace skills that include respect for others, teamwork competence, attendance/punctuality, decision making, conflict resolution, truthfulness/honesty, positive attitude, judgment, and responsibility

VI. COURSE OUTCOMES:

- A. Evaluate the clinical need for artificial airways.
- B. Compare and contrast the different techniques used to maintain patent airways in patients with an airway obstruction.
- C. Describe the circumstances requiring airway suctioning.
- D. Demonstrate appropriate communication skills and behaviors when working with fellow students, physicians, instructors, and other health care providers.
- E. Identify major structures of the upper airway.
- F. Recommend appropriate therapy based on the patient assessment.
- G. Evaluate patient outcome and recommend modification to respiratory care plan, as indicated.
- H. Explain the value of monitoring the patient at the bedside.
- I. Classify specific mechanical ventilators by power source, circuitry, control mechanisms, control variables, triggering variables, cycling variables, modes of ventilation, and expiratory phase variables.
- J. Differentiate the physiologic effects of various forms of positive pressure ventilation on the cardiopulmonary system.
- K. Evaluate clinical status of patients, recommend, and initiate appropriate mode of ventilatory support.
- L. Evaluate the patient's clinical status and recommend appropriate ventilator changes.
- M. Explain and discuss the clinical indications for initiating mechanical ventilatory support.
- N. Analyze arterial blood gas results and make appropriate ventilatory changes.
- O. Compare and contrast the clinical indications of CMV, SIMV, Pressure-Support, Pressure Control Ventilation, Flow-by, and PEEP.
- P. Analyze ventilatory graphics and make appropriate changes to assure patient ventilation.
- Q. Compare equipment and non-invasive techniques available to assess oxygenation and ventilation.
- R. Interpret data obtained from non-invasive monitoring of oxygenation and ventilation.
- S. Demonstrate clinical proficiency in the following procedures:

1. Adult/Ped/Neo Critical Care:

- a. Setup and Ventilation via mask and ETT
- b. Manual ventilation during transport
- c. Transport setup
- d. Pulmonary function testing
- e. Pulmonary function quality assurance
- f. Bronchoscopy assisting
- g. ECG
- h. Echocardiogram
- i. Holter Monitoring
- j. CT
- k. MRI
- l. Lung Scan
- m. X-ray interpretation
- n. Arterial line sampling
- o. Pulmonary artery sampling and pressure measurement
- p. Capillary blood sampling
- q. Thermodilution and cardiac output measurement
- r. Cardiac catheterization
- s. Medical ICU
- t. Surgical ICU
- u. Physician Contact Points – minimum of 20 pts. (1 pt. = 15 minutes)

VII. COURSE OUTLINE:

A. Clinical rotations at Wichita hospitals, Oklahoma City hospitals, or Lubbock Texas hospitals for three days a week, 12- hour shifts, for 4 weeks.

VIII. INSTRUCTIONAL METHODS:

- A. Textbooks and Journals
- B. Clinical Assignments
- C. Canvas

IX. INSTRUCTIONAL AND RESOURCE MATERIALS:

- A. Textbooks and Journals
- B. Clinical Assignments
- C. Internet Resources
- D. Canvas

X. METHODS OF ASSESSMENT:

A. CCC Outcome #1 thru #9 will be assessed and measured by participation in and assignments for case studies. Clinical performance, attendance, participation, evaluation of performance and behavior by clinical preceptors, completion of the competency requirement and of the physician contact hours requirement as logged in DataArc.

XI. ADA STATEMENT:

Under the Americans with Disabilities Act, Seward County Community College will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Dean of Students at 620-417-1106 or going to the Student Success Center in the Hobble Academic building, room 149 A.

Syllabus Reviewed: 5/16/2022

