

**SEWARD COUNTY COMMUNITY COLLEGE
COURSE SYLLABUS**

I. TITLE OF COURSE: RT2125- Respiratory Therapy Procedures II

II. COURSE DESCRIPTION: 5 credit hours

4 credit hours of lecture and 1 credit hours of lab per week.

This is a four hour lecture and one hour lab course that through classroom discussion and laboratory/clinical experiences, the student will develop an appropriate knowledge base of respiratory care practices utilized when providing care to critically ill patients. Course content includes airway management, suctioning, intubation, extubation, and mechanical ventilation. The laboratory component is graded as a pass/fail and the theory with a letter grade. If either component is failed, the concurrent component is also failed.

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:

1. Cairo, J. M. (2019). Pilbeam's Mechanical Ventilation (7th Ed.). St. Louis: Elsevier.
2. Kacmarek, R. M., Stoller, J. K., and Heuer, A. J. (2021). Egan's Fundamentals of Respiratory Care. (12th Ed.) St. Louis; Elsevier.

V. SCCC OUTCOMES

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

- I. Read with comprehension, be critical of what they read, and apply knowledge gained to real life situations.
- II. Communicate ideas clearly and proficiently in writing, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.
- VI. Exhibit skills in information and technological literacy.
- 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.

VI. COURSE OUTCOMES:

1. Evaluate the clinical need for artificial airways.
2. Compare and contrast the different techniques used to maintain patent airways in patients with airway obstruction.
3. Describe the circumstances requiring airway suctioning.
4. Demonstrate appropriate communication skills and behaviors when working with fellow students, physicians, instructors, and other health care providers.
5. Identify major structures of the upper airway.

6. Recommend appropriate therapy based on the patient assessment.
7. Evaluate patient outcome and recommend modification to respiratory care plan, as indicated.
8. Explain the value of monitoring the patient at the bedside.
9. Classify specific mechanical ventilators by control mechanisms, control variables, triggering variables, cycling variables, modes of ventilation, and expiratory phase variables.
10. Differentiate the physiologic effects of various forms of positive pressure ventilation on the cardiopulmonary system.
11. Evaluate clinical status of patients, recommend, and initiate appropriate mode of ventilatory support.
12. Evaluate the patient's clinical status and recommend appropriate ventilator changes.
13. Explain and discuss the clinical indications for initiating mechanical ventilatory support.
14. Analyze arterial blood gas results and make appropriate ventilatory changes.
15. Compare and contrast the clinical indications of CMV, SIMV, Pressure-Support, Pressure Control Ventilation, Flow-by, and PEEP.
16. Analyze ventilatory graphics and make appropriate changes to assure patient ventilation.
17. Compare equipment and non-invasive techniques available to assess oxygenation and ventilation.
18. Interpret data obtained from non-invasive monitoring of oxygenation and ventilation.
19. Demonstrate clinical proficiency in the following procedures:

Adult Critical Care:

- a. Cuff Pressure Monitoring
- b. Endotracheal Suctioning
- c. Nasotracheal Suctioning
- d. Intubation
- e. Extubation
- f. Securing Artificial Airway
- g. Tracheostomy and Stoma Care
- h. Tracheostomy Tube Changes

VII. COURSE OUTLINE:

1. Airway Management
 - a. Simple Artificial Airways and Manual Airway Techniques
 - b. Endotracheal Tubes, Tracheostomy Tubes, Endotracheal Intubation
 - c. Airway Suctioning
 - d. Patient Assessment and Endotracheal Intubation and Extubation Support
2. Introduction to Mechanical Ventilation/Assessment of Need for Mechanical Ventilatory
3. Classification of Mechanical Ventilators
4. Modes of Ventilation
5. Mechanical Ventilator Controls, Trouble Shooting, Initial Setup, and Patient Circuit.
6. Patient Management while Receiving Mechanical Ventilation
7. Positive-End expiratory Pressure
8. Weaning discontinuance of mechanical ventilation

VIII. INSTRUCTIONAL METHODS:

1. Textbooks and Journals
2. Lecture and Discussion
3. Laboratory and Clinical Assignments
4. Canvas

IX. INSTRUCTIONAL AND RESOURCE MATERIALS:

1. Textbooks and Journals
2. Laboratory Equipment
3. Internet Resources
4. Canvas

X. METHODS OF ASSESSMENT:

SCCC Outcomes #2 & #6 will be assessed and measured by satisfactory scores of 75% or better on the Article Review assignment. SCCC Outcome #7 will be assessed and measured by satisfactory scores of 75% or better on the discussion board assignment.

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 Hobbie Academic building, room 149 A.

Syllabus Reviewed: 5/16/2022