

**SEWARD COUNTY COMMUNITY COLLEGE  
COURSE SYLLABUS**

**I. TITLE OF COURSE:** RT1502- Respiratory Therapy Pharmacology

**II. COURSE DESCRIPTION: 2 credit hours  
2 credit hours of lecture and 0 credit hours of lab per week.**

This hybrid course is designed to cover general principles of pharmacology, basic terminology, drug action, dosage, adverse reactions, and drug toxicity. The focus of this course is on pharmacologic agents affecting the respiratory system. Additionally, advanced cardiac life support medications and sedation/analgesics will be covered. Hybrid Class Code: Student meets in a traditional classroom or lab setting for part of the class, but also must participate regularly in online sessions using a course management system (Canvas).

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: Must be accepted 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. Colbert, B., & Gonzalez, L. 2019. Integrated cardiopulmonary pharmacology (5th ed.). Redding, CA: BVT Publishing LLC.
2. Kacmarek, R.M., Stoller, J.K., and Heuer, A.), (2020) Egan's fundamentals of respiratory care (12th ed.). St. Louis; Mosby.

**V. SCCC OUTCOMES**

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

- 1: Read with comprehension, be critical of what they read, and apply knowledge gained to real life
- 2: Communicate ideas clearly and proficiently in writing, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.
- 5: Demonstrate the ability to think critically by gathering facts, generating insights, analyzing data, and evaluating information.

**VI. COURSE OUTCOMES:**

1. Define basic pharmacological terminology.
2. Describe pharmacologic actions.
3. Discuss and evaluate methods of drug administration.
4. Cite normal dosage ranges for medications used in respiratory care.
5. Apply fundamental concepts of pharmacology to the respiratory system.
6. Evaluate clinical conditions and recommend appropriate pharmacologic therapy.
7. Apply the general principles of pharmacology and nervous system pharmacodynamics to medication usage in respiratory care.
8. Evaluate clinical outcomes of medications used in respiratory care.
9. Discuss the desired effects and potential side effects of medications used in respiratory care.

10. State the clinical indications of medications used by the respiratory care practitioner.
11. Recommend appropriate medications based on patient assessment.

## **VII. COURSE OUTLINE:**

1. General Pharmacology Principles
2. Pharmacology of the Autonomic Nervous System
3. Medicated Aerosol Treatments
4. Bronchodilators
5. Anti-inflammatory and Anti-asthmatic Agents
6. Mucokinetics and Surfactants
7. Antimicrobial Agents
8. Neuromuscular, sedative, anesthetic, and Analgesic agents
9. Cardiac Agents
10. Blood pressure and antithrombotic agents
11. Medications for Advanced Cardiovascular Life Support
12. Pharmacologic Management of Obstructive Pulmonary Disease: Asthma, Chronic Bronchitis, Emphysema
13. Pharmacologic Treatment of Respiratory Infectious Diseases

## **VIII. INSTRUCTIONAL METHODS:**

1. Textbooks and PowerPoints
2. Book Assignments
3. Discussion Board
4. Audiovisuals
5. Canvas

## **IX. INSTRUCTIONAL AND RESOURCE MATERIALS:**

1. Textbooks
2. Audiovisual materials
3. Canvas

## **X. METHODS OF ASSESSMENT:**

SCCC outcome #1 will read with comprehension, be critical of what they read, and apply knowledge gained to real life situations.

SCCC outcome #2 will communicate ideas clearly and proficiently in writing, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.

SCCC outcome #5 will demonstrate the ability to think critically by gathering facts, generating insights, analyzing data, and evaluating information.

## **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: 11/4/2021