

**RT 120 - Concepts in Respiratory Care****Catalog Description****Transfer Status:** NT**Prerequisite:** RT 115**Corequisite:** RT 125**Unit(s):** 7.00**Lecture:** 102.00 Contact hours/204.00 Out of class hours/306.00 Total hours/6.00 Unit(s)**Lab:** 51.00 Contact hours/0.00 Out of class hours/51.00 Total hours/1.00 Unit(s)**Total:** 153.00 Contact hours/204.00 Out of class hours/357.00 Total hours/7.00 Unit(s)

Course Description: This course is a survey of cardiorespiratory disease with a focus on the role that the respiratory care practitioner plays in professional and culturally appropriate clinical assessment, diagnosis, and treatment. Cultural awareness, sensitivity and communication will be emphasized. Selected respiratory care techniques, equipment, and procedures will be introduced in the laboratory. Graded only.

Objectives

Upon successful completion of this course, the student should be able to:

1. Explain the importance of professionalism and culturally sensitive patient interactions during the delivery of respiratory care.
2. Explain the importance of the concept of health promotion, and demonstrate how to provide effective patient education.
3. Employ basic pre-treatment physical assessment at the bedside of a patient requiring respiratory care, including appropriate patient education based on the situation.
4. List and explain the importance of the professional organizations and licensing agencies associated with practice of respiratory care
5. Access medical literature pertinent to the care of the patient with cardiopulmonary disease.
6. Explain the etiology, signs and symptoms, pathophysiology, diagnosis, and common medical treatment of selected cardiopulmonary diseases.
7. Administer, with minimal supervision, the respiratory care treatment modalities practiced in the laboratory including appropriate patient education based on the situation.
8. Demonstrate a basic understanding of chest x-ray interpretation, and basic ECG pattern recognition.

Course Content**Topic Titles / Suggested Time Topic****Lecture**

<u>Topics</u>	<u>Lec Hrs</u>
Critical thinking	3.00
Preparing for the professional and culturally appropriate patient encounters	6.50
Physical examination of the patient with cardiopulmonary disease	12.00
Basic chest x-ray interpretation	6.00
Ethics and cultural diversity in respiratory care	3.00
Arterial blood gas interpretation	8.00
Common clinical laboratory tests	9.00
Basic EKG interpretation	9.00
Pulmonary Function testing	3.00
Introduction to Respiratory Failure	3.00
Asthma	4.00
Chronic bronchitis	3.00
Emphysema	3.00
Cystic fibrosis	3.00
Postoperative atelectasis	3.00
Bacterial pneumonias	3.00
Neuromuscular disorders	3.50
Pulmonary thromboembolic disease	3.00
Heart failure	3.50
Interstitial lung disease	3.00
Tuberculosis	3.00

<u>Topics</u>	<u>Lec Hrs</u>
Smoke inhalation/Toxic gas inhalation	4.50

Total Hours: 102.00

<u>Topics</u>	<u>Lab Hrs</u>
Breath Sounds and Vital Signs	9.00
Positive Expiratory Pressure (PEP) and Positive Airway Pressure (PAP) Therapy	3.00
Bronchial Hygiene	3.00
Manual Resuscitation	3.00
Nasotracheal Airway Aspiration	6.00
Orotracheal Airway Aspiration	6.00
Endotracheal and Tracheostomy Tubes	6.00
Tracheostomy Care	6.00
Monitoring cuff pressures	3.00
Bedside Pulmonary Function Parameters	3.00
Introduction to Non-Invasive Positive Pressure Ventilation (NIPPV)	3.00

Total Hours: 51.00

Methods of Instruction

- A. Collaborative Group Work
- B. Demonstrations
- C. Discussion
- D. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- E. Lecture
- F. Problem-Solving Sessions
- G. Reading Assignments

Methods of Evaluation

- A. Quizzes
- B. Demonstration
- C. Homework
- D. Class participation
- E. Lab Projects
- F. Final Examination
- G. Written Examinations
- H. Return demonstration, Graded homework

Examples of Assignments

Reading Assignments

1. Read the assigned, required readings for Introduction to Patient Assessment and be prepared for a classroom discussion on the topic.
2. Read the assigned, required readings for Introduction to Respiratory Failure and be prepared to participate in a clinical scenario discussion on the topic in class.

Writing Assignments

1. Complete the end of chapter Assessment questions for Chapters 1 and 2 in the "Clinical Assessment" textbook.
2. Complete all of the items listed in the Learning Objectives associated with the Initial Patient Assessment readings.

Out-of-Class Assignments

1. Complete the Introduction to Respiratory Failure homework in our online learning management system.
2. Successfully interpret 25 arterial blood gas results, using Medical Educational Software.

Recommended Materials of Instruction

Corning, H., et al. (2013). Mosby's Respiratory Care PDQ. *Mosby, 2nd*.
 Wilkins, R. (2018). Clinical Assessment in Respiratory Care. *Mosby, 8th*.
 Wilkins, R. (2020). Egan's Fundamentals of Respiratory Care. *Mosby, 12th*.

Minimum Qualifications

Respiratory Technician
 Respiratory Technologies

Created/Revised by: Davis, Donna

Date: 12/02/2019