

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

RT 120 - Concepts in Respiratory Care

7 Unit(s)

Prerequisite(s): RT 115

Co-requisite(s): RT 125, RT 128, BCIS 33

Recommended Prep: NONE

Transfer Status: NT

102 hours Lecture

51 hours Lab

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.

II. OBJECTIVES

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

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

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Professional organizations/Licensing agencies/Medical literature	3.50
2. Preparing for the professional and culturally appropriate patient encounters	3.50
3. Interviewing and patient history	3.50
4. Physical examination of the patient with cardiopulmonary disease	10.50
5. Common clinical laboratory exams	7.00
6. Arterial blood gas interpretation	7.00
7. Basic chest x-ray interpretation	4.00
8. Basic EKG interpretation	6.50
9. Airway care procedures	10.50

10. Bronchial hygiene procedures	7.00
11. Ethics in respiratory care	1.50
12. Introduction to Respiratory Failure	3.00
13. Asthma	3.00
14. Chronic bronchitis	3.00
15. Emphysema	3.00
16. Cystic fibrosis	3.00
17. Postoperative atelectasis	1.50
18. Bacterial pneumonias	3.00
19. Neuromuscular disorders	3.00
20. Pulmonary thromboembolic disease	1.50
21. Heart failure	3.00
22. Interstitial lung disease	3.00
23. Tuberculosis	3.00
24. Adult Respiratory Distress Syndrome	3.00
25. Smoke inhalation/Toxic gas inhalation	1.50
Total Hours	102.00

Lab

<u>Topics</u>	<u>Hours</u>
1. Vital Signs	3.00
2. Breath Sounds	6.00
3. Physical Assessment	6.00
4. Chest x-ray (CXR) Interpretation	3.00
5. Patient positioning	3.00
6. Postural Drainage & Percussion	3.00
7. Manual Resuscitation	3.00
8. Nasotracheal Airway Aspiration	3.00
9. Orotracheal Airway Aspiration	3.00
10. Endotracheal and Tracheostomy Tubes	6.00
11. Intermittent Positive Pressure Breathing (IPPB)	3.00
12. Monitoring cuff pressures	3.00
13. Administration of metered dose inhaler (MDI) therapy	3.00
14. Peak Flow monitoring/Diary	3.00
Total Hours	51.00

IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Guest Speakers
- C. Collaborative Group Work
- D. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- E. Discussion
- F. Demonstrations

- G. Problem-Solving Sessions
- H. Reading Assignments
- I. Multimedia Presentations
- J. Laboratory Experiments

V. METHODS OF EVALUATION

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

VI. EXAMPLES OF ASSIGNMENTS

- A. 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 clinical scenario discussion on the topic in class.
- B. 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.
- C. Out-of-Class Assignments
 - 1. Successfully interpret 25 arterial blood gas results, using the Team Play ABG computer program located on the computers in AHPS 219 and 122.
 - 2. Complete the Introduction to Respiratory Failure mini-quiz in Blackboard.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Corning, H., et al. Mosby's Respiratory Care PDQ. 2nd Edition. Mosby, 2010.
- B. Wilkins, R., . Clinical Assessment in Respiratory Care. 6th Edition. Mosby, 2010.
- C. Wilkins, R.. Egan's Fundamentals of Respiratory Care. 9th Edition. Mosby, 2009.

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