



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	RC
Course Number:	286
Descriptive Title:	Fundamentals of Pulmonary Rehabilitation and Home
Division:	Health Sciences and Athletics
Department:	Respiratory Care
Course Disciplines:	Respiratory Technologies
Catalog Description:	This course focuses on the treatment and management of adult patients that have chronic respiratory conditions and diseases. The course provides the student with the opportunity to develop skills managing patients requiring pulmonary rehabilitation and home respiratory care. The problem-oriented approach to developing a Respiratory Care plan will be covered emphasizing the use of, and the ability to collect, patient data. Skills to be learned will include performance of a physical exam of the patient, arterial puncture, establishment of intravenous fluid lines, exercise evaluation, patient education and prevention of infection.
Prerequisite:	
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	Students must be admitted to the El Camino College Respiratory Care Program or have graduated from an accredited respiratory care program.
Hours Lecture (per week):	2
Hours Laboratory (per week):	3
Outside Study Hours:	4
Total Course Hours:	90
Course Units:	3
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	Pending
Transfer UC:	Yes
Effective Date:	
General Education: ECC	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	

Term:	
Other:	
Student Learning Outcomes:	<p>SLO #1 Appropriate and Competent FIO2 Management</p> <p>Given an in-class patient care scenario during an oral examination based on assigned reading, demonstrate appropriate and competent FIO2 management using guidelines set in clinical competencies section of the Data Arc system for clinical practice.</p> <p>SLO #2 Demo or Explain RC pulmonary Rehab Procedures</p> <p>During classes & labs, students will demonstrate and explain appropriate respiratory care competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy.</p> <p>SLO #3 Comprehensive Final Exam on Pulmonary Rehabilitation & Home Respiratory Care</p> <p>Students who stay in the course till the end of semester will take a comprehensive final multiple choice examination and 80% will obtain a grade of 70% or better.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Perform pulmonary rehabilitation and home respiratory care procedures. 2. Identify subjective and objective indicators of effectiveness for each therapeutic modality provided to the chronically ill adult respiratory patient. 3. Based on the patient's response, identify and/or verbalize modifications to the respiratory care plan of the pulmonary rehabilitation and/or home care patient. 4. Given access to appropriate patient information and results of functional task evaluations, identify appropriate exercise prescriptions. 5. Identify and collect physical exam data from patients with chronic lung diseases to include percussion, inspection, palpation, auscultation and interview data. 6. Instruct patient and family about disease management and infection control in the home care setting. 7. Identify appropriate assembly, function, operation, and cleanliness of home respiratory care equipment.
Major Topics:	<p>I. The Respiratory Care plan for pulmonary rehabilitation and home care patients (8 hours, lecture)</p> <ol style="list-style-type: none"> A. Oxygen orders complying to Medicare guideline B. Patient training in usage of home care oxygen equipment. <p>II. Physical exam procedures of patients with chronic respiratory diseases such (8 hours, lecture)</p> <ol style="list-style-type: none"> A. Auscultation B. Chest radiograph interpretation <p>III. Introduction to exercise physiology and chronic lung diseases (8 hours, lecture)</p> <ol style="list-style-type: none"> A. Exercise test result interpretation. B. Physiological changes during exercise sessions. <p>IV. Pulmonary rehabilitation and home respiratory care equipment (6 hours, lecture)</p> <ol style="list-style-type: none"> A. Oxygen concentrators B. Liquid oxygen dispensers <p>V. Education of the patient and family about chronic respiratory disease management and infection control (6 hours, lecture)</p> <ol style="list-style-type: none"> A. Optimum living space design for infection control. B. Educational strategies in the teaching of the patient and family members. <p>VI. CLINICAL LAB TO BE ARRANGED HOURS (54 hours, lab)</p>

	<p>Lab/Clinic Hours to be arranged, to perform RC skills in patient care areas. RC 286 rehabilitation maybe on Adult Floor Units or health fairs or home care settings. Students will be required to know how and to be able to perform:</p> <ol style="list-style-type: none"> 1. Physical Assessment of the Chest in a patient with injury or disease. 2. Patient Respiratory Assessment to determine next course of action. <p>There are specific competency procedures, skills and knowledge outlined in competency evaluation forms online thru DataArc, each student & instructor have access, if audited we can provide access to auditors or committee members.</p>
Total Lecture Hours:	36
Total Laboratory Hours:	54
Total Hours:	90
Primary Method of Evaluation:	2) Problem solving demonstrations (computational or non-computational)
Typical Assignment Using Primary Method of Evaluation:	Given access to a patient with chronic obstructive pulmonary disease, the student will perform an interview and physical exam, correctly identifying the major signs and symptoms of the patient's condition.
Critical Thinking Assignment 1:	Given access to data about the patient's response to oxygen therapy, identify and/or verbalize modifications to the respiratory care plan to improve the chronic obstructive pulmonary disease patient's quality of life at home.
Critical Thinking Assignment 2:	After reviewing chronic obstructive pulmonary disease patient exercise evaluation data, identify appropriate exercise prescriptions designed to improve the patient's cardiorespiratory function.
Other Evaluation Methods:	Class Performance, Completion, Essay Exams, Fieldwork, Homework Problems, Laboratory Reports, Matching Items, Multiple Choice, Objective Exam, Performance Exams, Quizzes, Reading Reports, Term or Other Papers, True/False, Written Homework
Instructional Methods:	Demonstration, Discussion, Field trips, Group Activities, Guest Speakers, Lab, Lecture, Multimedia presentations, Role play/simulation
If other:	Clinical performance at the patient's bedside in our clinical affiliate hospitals, clinics, health fairs and elementary schools indicating understanding of patient's therapy and capable of recommending changes when indicated.
Work Outside of Class:	Answer questions, Observation of or participation in an activity related to course content (such as theatre event, museum, concert, debate, meeting), Problem solving activity, Required reading, Skill practice, Study, Written work (such as essay/composition/report/analysis/research)
If Other:	Group active learning assignments simulating equipment situations that require information collection and decision making in order to solve malfunction problem and/or determine course of action.
Up-To-Date Representative Texts:	James Stoller. <u>Fundamentals of Respiratory Care</u> . 13th ed. Elsevier, 2024.
Alternative Texts:	
Required Supplementary Readings:	
Other Required Materials:	
Requisite:	
Category:	

Requisite course(s): List both prerequisites and corequisites in this box.	
Requisite and Matching skill(s):Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	
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Enrollment Limitations and Category:	Students must be admitted to the El Camino College Respiratory Care Program or have graduated from an accredited respiratory care program.
Enrollment Limitations Impact:	Students begin the clinical phase (A.S. degree requirements) of the Respiratory Care program after being accepted into the program.
Course Created by:	Stanley M. Baldwin
Date:	07/30/2015
Original Board Approval Date:	07/01/1990
Last Reviewed and/or Revised by:	Roy Mekaru
Date:	03/22/2024
Last Board Approval Date:	06/17/2024
Effective Term:	FA 2025