

Respiratory Care

Degree: A.S. - Respiratory Care

Area: Health & Education
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Most people take breathing for granted. But for the thousands of Americans who suffer from breathing problems, each breath is a major accomplishment. Those people include patients with chronic lung problems such as asthma, bronchitis and emphysema, but they also include heart attack and accident victims, premature infants, and people with cystic fibrosis, lung cancer, or AIDS.

In each case, the patient will most likely receive treatment from a respiratory care practitioner (RCP) under the direction of a physician. Respiratory care practitioners, including both respiratory therapists and respiratory therapy technicians, work to evaluate, treat, and care for patients with breathing disorders.

Career Opportunities

There are more than 100,000 respiratory care practitioners in the United States. Typically they are a vital part of a hospital's lifesaving response team that answers patient emergencies. An increasing number of practitioners have branched out into alternate care settings such as nursing homes, physicians' offices, home health agencies, specialized care hospitals, medical equipment supply companies, and patients' homes.

The outlook for respiratory care professionals is expected to grow in the coming years due to the large increase in the elderly population, the impact of environmental problems that have contributed to breathing problems, and technological advances that are prolonging the lives of those suffering from heart attack, cancer and accidents, as well as premature babies.

The ARC Program

The program is accredited by the Commission on Accreditation of Allied Health Programs. Successful completion of the program qualifies the graduate to apply for the Credentialing examinations offered through the State of California and the National Board for Respiratory Care. A grade of "C" or better is re-

quired in BIOL 430, 431, 440; CISA 300, 310; CISC 300; Physics 310 and Psychology 300. If the grade in the Respiratory Care courses for performance in the clinical care area is unsatisfactory and/or if the grade for performance in theory is less than a "C", the course grade will be an "F".

The student is responsible for providing laboratory coats, laboratory fees, malpractice insurance and transportation to off-campus facilities. There may be morning, afternoon or evening clinical experiences in a variety of clinical settings with limited notice.

NOTE: In accordance with Article 5 of the Respiratory Care Practice Act, a person convicted of any offense other than a minor traffic violation, may not qualify to be licensed as a Respiratory Care Practitioner. Questions regarding this matter must be directed to the Respiratory Care Board, Board of Medical Quality Assurance.

Requirements for Pre-enrollment to the Program

1. Graduation from an accredited high school or G.E.D. equivalent as defined by the current requirements of the State of California and the National Board for Respiratory Care.
2. Minimum cumulative GPA of 2.0.
3. BIOL 430 with a grade of "C" or better
4. College level Algebra (Math 100)--verified by transcript

Pre-enrollment Deadlines

Applications may be obtained at the Allied Health Building, Room 290, and must be filed by the date stated on the program information sheet.

Enrollment

1. Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
2. Selection is based on a random selection process from among the qualified applicants.
3. The student admitted to the respiratory care program is required to have a physical examination and required inoculations prior to the start of the first semester.

Respiratory Care

NOTE: Meeting all the course requirements does not guarantee admission to the program.

Requirements for Degree Major: **69-70 units**

Required Courses: **29-30 units**

BIOL 430	5
BIOL 431	5
BIOL 440 or 442	4-5
CISA 300	1
CISA 310	1
CISC 300	1
ENGWR 300 or ESLW 340	3
MATH 100	3
PHYS 310	3
PSYC 300	3

Concentration Requirements **40 units**

RC 110	2
RC 111	3
RC 112	2
RC 113	2
RC 120	3
RC 121	3
RC 122	3
RC 123	2
RC 130	3
RC 131	7
RC 140	3
RC 141	7

General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

RC 110 Introduction to Health Care for the Respiratory Care Practitioner 2 Units

Formerly: RC 51A

Prerequisite: Acceptance into the Respiratory Care Program.

Corequisite: RC 111 and 112.

Course Not Transferable UC or CSU

Hours: 36 hours LEC

The course describes the organizational context of the U.S. health care system as it relates to the role and function of respiratory care practitioners. It focuses on the skills of communication and human interaction within the context of the modern health care delivery system. It also presents the ethical, legal, interprofessional and economics aspects of health care. It also identifies health care related safety techniques including universal precautions and infection control. Critical thinking processes are presented as a basis for comprehension of course content.

RC 111 Applied Cardiopulmonary Physiology 3 Units

Formerly: RC 51B

Prerequisite: Acceptance into the Respiratory Care Program.

Corequisite: RC 110 and 112; BIOL 431.

Course Not Transferable UC or CSU

Hours: 54 hours LEC

This course provides a foundation for the development of critical thinking skills necessary for the clinical practice of respiratory care. It gives a comprehensive overview of the cardiopulmonary system with emphasis on applied physiology expanding on the concepts introduced in anatomy and physiology, and provides in depth information on ventilation, gas transport and acid-base balance, including interpretation of data and the relationship of physiological principles to patient care.

RC 112 Patient Assessment - Introduction to Clinical Problem Solving 2 Units

Formerly: RC 51C

Prerequisite: Acceptance into the Respiratory Care Program.

Corequisite: RC 110, 111, and 113.

Course Not Transferable UC or CSU

Hours: 36 hours LEC

The course presents a clinically oriented guide to assessment of the patient's cardiopulmonary system with emphasis on its application to respiratory care procedures. It also describes assessment procedures, equipment, and the interpretation of results arising from the gathered information.

RC 113 Patient Assessment Techniques 2 Units

Formerly: RC 51L

Prerequisite: Acceptance into Respiratory Care program.

Corequisite: RC 110, 111, and 112.

Course Not Transferable UC or CSU

Hours: 108 hours LAB

This course consists of laboratory introduction of skills and procedures as well as supervised clinical experience, with emphasis on the application of theories and techniques related to assessment of patients with cardiopulmonary illness. It integrates the patient assessment procedures, manipulation, examination, plus assessment of equipment, with the evaluation, interpretation, and application of patient data in the clinical setting.

RC 120 Pharmacology for Respiratory Care 3 Units

Formerly: RC 52A

Prerequisite: RC 110, 111, 112, and 113 with a grade of "C" or better.

Corequisite: RC 121, 122, 123.

Course Not Transferable UC or CSU

Hours: 54 hours LEC

The course covers the concepts and principles of pharmacology required in the practice of respiratory care, including medications, actions, dosages, routes of administration and adverse reactions. It also includes patient education of medication delivery devices, patient monitoring devices, utilization techniques, and the standards for therapeutic efficacy in relation to asthma, chronic obstructive pulmonary disease and smoking cessation.

RC 121 Cardiopulmonary Pathophysiology 3 Units

Formerly: RC 52B

Prerequisite: RC 110, 111, 112 with a grade of "C" or better.

Corequisite: RC 120 and 122.

Course Not Transferable UC or CSU

Hours: 54 hours LEC

This course covers the manifestations of cardiopulmonary and related diseases encountered in respiratory care practice. It presents the causes for and general treatment, as well as respiratory care treatment of these diseases. It also includes the evaluation for possible diagnoses, treatment approaches and evaluation of patient response to treatment for possible modification.

RC 122 Theory and Techniques I - Fundamental Respiratory Care 3 Units

Formerly: RC 52C

Prerequisite: RC 110, 111, 112, and 113 with a grade of "C" or better.

Corequisite: RC 120, 121, and 123; and PHYS 310.

Course Not Transferable UC or CSU

Hours: 54 hours LEC

The course presents the principles of medical gas delivery devices; humidity, aerosol and hyperinflation therapies and chest physiotherapy. It also presents the application, patient assessment, patient monitoring, and the evaluation of the efficacy of medical gas, humidity, aerosol and hyperinflation therapies and chest physiotherapy.

RC 123 Fundamental Respiratory Care Techniques 2 Units

Formerly: RC 52L

Prerequisite: RC 110, 111, 112, and 113 with grade of "C" or better.

Corequisite: RC 120, 121, 122.

Course Not Transferable UC or CSU

Hours: 108 hours LAB

This course consists of laboratory introduction of skills and procedures as well as supervised clinical experience, with emphasis on the application of theories and techniques related to fundamental respiratory care procedures. Focus is on the application of skills learned in previous respiratory care courses while developing new skills related to medical gas, humidity, aerosol medication administration, hyperinflation therapies and chest physiotherapy.

allow for the application of clinical skills and exposure to clinical situations. Focus is on the application of skills learned in previous respiratory care courses while developing new skills in relation to neonatal/pediatric respiratory care, including basic and advanced techniques as well as transport of mechanically ventilated newborns and children, cardiopulmonary rehabilitation, home care, and long term ventilator care.

RC 130 Theory II - Adult Critical Care Techniques/ Special Procedures 3 Units

Formerly: RC 53A

Prerequisite: RC 120, 121, 122 with a grade of "C" or better.

Corequisite: RC 131.

Course Not Transferable UC or CSU

Hours: 54 hours LEC

This course presents the principles of airway management, mechanical ventilatory support of the adult, hemodynamic monitoring, metabolic assessment, hyperbaric oxygen therapy and the transport of the mechanically ventilated adult. It presents advanced cardiopulmonary life support techniques.

RC 131 Techniques II- Adult Critical Care Techniques/Special Procedures 7 Units

Formerly: RC 53B

Prerequisite: RC 120, 121, and 122 with a grade of "C" or better.

Corequisite: RC 130.

Course Not Transferable UC or CSU

Hours: 378 hours LAB

This course provides laboratory introduction of skills and procedures as well as supervised clinical experience in hospitals and other healthcare facilities to allow for the application of clinical skills and exposure to clinical situations. Focus is on the application of skills learned in previous respiratory care courses while developing new skills relating to airway management, mechanical ventilatory support of the adult, hemodynamic monitoring, metabolic assessment, hyperbaric oxygen therapy and the transport of the mechanically ventilated adult.

RC 140 Theory III - Respiratory Care in Specialty Areas 3 Units

Formerly: RC 54A

Prerequisite: RC 130, 131 with a grade of "C" or better; current certification of advanced cardiopulmonary life support.

Corequisite: RC 141

Course Not Transferable UC or CSU

Hours: 54 hours LEC

This course presents the principles of neonatal/pediatric respiratory care, including basic and advanced techniques as well as transport of mechanically ventilated newborns and children. It also presents the principles underlying cardiopulmonary rehabilitation, including patient assessment, stress testing, reconditioning techniques, psychosocial aspects specific to the home setting and long term ventilator care.

RC 141 Techniques III - Neonatal/Pediatric and Cardiopulmonary Rehabilitation Tec 7 Units

Formerly: RC 54B

Prerequisite: RC 130, 131 with a grade of "C" or better.

Corequisite: RC 140; Pediatric Advanced Life Support.

Course Not Transferable UC or CSU

Hours: 378 hours LAB

This course provides laboratory introduction of skills and procedures as well as supervised clinical experience in hospitals and other healthcare facilities to