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, also known as respiratory therapists, work to evaluate, treat, and care for patients with breathing disorders.

**Career Opportunities**

There are more than 150,000 respiratory care practitioners in the United States. 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 Respiratory Care 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 required in BIOL 430, 431, 440; CISA 305, 315; CISC 300; PHYS 310 and PSYC 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.

**Requirements for Pre-enrollment to the Program**

1. Graduation from an accredited high school in the United States for successful completion of GED or CHSPE as defined by the current requirements of the State of California and National Board for Respiratory Care.
2. BIOL 430 with a grade of “C” or better
3. MATH 100 or equivalent college level algebra
4. Minimum cumulative college GPA of 2.0 (except degree major courses which require a “C” or better).
5. A current Curriculum Planning Summary Sheet

**Pre-enrollment Deadlines**

Applications to the program may be obtained at the Allied Health Building, Room 290 or online at www.arc.losrios.edu/edhealth/respcare.html, and are due in the Allied Health office no later that 4:00 p.m. on the third Friday in November.

**Selection Process**

1. Selection is based on a computerized random selection process from among the qualified applicants.
2. Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
3. The student accepted into the Respiratory Care program is required to have a physical examination, inoculations, drug screen, background check, and malpractice insurance.

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

Requirements for Degree Major 71-72 units

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 430</td>
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<tr>
<td>BIOL 431</td>
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<tr>
<td>BIOL 440</td>
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<td>CISA 315</td>
<td>2</td>
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<tr>
<td>CISC 300</td>
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<tr>
<td>ENGWR 300 or ESLW 340</td>
<td>3-4</td>
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<tr>
<td>MATH 100</td>
<td>3</td>
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<tr>
<td>PHYS 310</td>
<td>3</td>
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<tr>
<td>PSYC 300</td>
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Concentration Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>RC 110</td>
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<tr>
<td>RC 111</td>
<td>3</td>
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<td>RC 112</td>
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<td>RC 113</td>
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<td>RC 140</td>
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<td>RC 141</td>
<td>1</td>
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<tr>
<td>RC 142</td>
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General Education Graduation Requirements: In addition to completing the degree requirements, students must also complete the general education graduation requirements for an AA/AS degree. See ARC graduation requirements.

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

Formerly: RC 51A
Prerequisite: Acceptance into the Respiratory Care Program.
Corequisites: RC 111 and 112.
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.
Corequisites: RC 110 and 112; BIOL 431.
Hours: 54 hours LEC
The 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.
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.
Corequisites: RC 110, 111, and 112.
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.
Corequisites: RC 121, 122, 123.
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, and 113 with a grade of “C” or better.
Corequisites: RC 121, 122, 123.
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.
Corequisites: RC 120, 121, 123; and PHYS 310.
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.
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.

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.
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  1 Unit
Prerequisite: RC 120, 121, 122, and 123 with grades of "C" or better.
Corequisite: RC 130 and 132.
Hours: 54 hours LAB
This course provides in class laboratory practice in airway management, including intubation, suctioning and bronchoscopy to adult patients in critical care units. It further provides in class laboratory practice in non-invasive and invasive mechanical ventilatory support, including ventilator settings/adjustments, monitoring, adjusting ventilators to improve oxygenation and/or ventilation and discontinuance from ventilatory support on adult patients in critical care units.

RC 132  Clinical Application: Adult Critical Care Techniques/Special Procedures  6 Units
Prerequisite: RC 120, 121, 122, and 123 with grades of "C" or better.
Corequisite: RC 130 and 131.
Enrollment Limitation: Meet the health requirements of the Los Rios Community College District for Allied Health programs and certification in Advanced Cardiac Life Support (ACLS).
Hours: 324 hours LAB
This course provides clinical practice in the application of medical gas, humidity/aerosol, hyperinflation and bronchial hygiene therapies, airway management and non-invasive and invasive mechanical ventilatory support as applied to neonatal and pediatric patients in specialized critical care units. It further provides practice in the application of pulmonary rehabilitation techniques, cardiopulmonary stress testing, sleep studies and respiratory care techniques in the home setting. Field trips are required.

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.
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.