

RESPIRATORY CARE (RSPC)

RSPC A185 **3 Units (54 lecture hours)**
Respiratory Anatomy and Physiology
Grading Mode: Standard Letter
Transfer Credit: CSU

Anatomy and physiology of the cardiopulmonary system with emphasis on function & clinical assessment by respiratory therapists. Includes pulmonary and cardiac anatomy, pulmonary ventilatory mechanics, pulmonary blood flow, oxygenation transport, hypoxemia and hypoxia, carbon dioxide transport, acid-base balance and regulation of respiration.

RSPC A190 **3 Units (36 lecture hours; 54 lab hours)**
Basic Respiratory Care Equipment
Co-requisite(s): RSPC A185 and RSPC A195.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Theories of equipment operation, procedures, and use for treatment of cardiopulmonary disease, including the use of humidity and aerosol, oxygen, infection control, hyperinflation techniques, basic ventilatory measurement, respirators, chest physiotherapy, and equipment related to compressed gases. Emphasis is placed on clinical application of equipment & techniques.

RSPC A191 **1.5 Units (81 lab hours)**
Clinical Lab 1
Prerequisite(s): RSPC A190.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Beginning clinical practice of procedures presented in Respiratory Care A190. Includes hospital and respiratory therapy department orientation, patient chart evaluation, use of compressed gases, medical gas therapy, humidity and aerosol therapy, drug administration, aseptic technique and adherence to infection control procedures and isolation precautions, incentive spirometry, airway clearance and lung expansion therapies, and patient assessment. Offered on a pass-no pass basis only.

RSPC A192 **2.5 Units (144 lab hours)**
Clinical Lab 2
Prerequisite(s): RSPC A190 and RSPC A191.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Continued applications of procedures and concepts of basic clinical therapy presented in the first year of the respiratory care program. Application and skills evaluations in advanced administration of aerosol therapy, pharmacological agents, airway clearance, medical gases, arterial blood gas sampling, and patient assessment. Offered on a pass-no pass basis only.

RSPC A195 **1 Unit (18 lecture hours)**
Respiratory Pharmacology
Co-requisite(s): RSPC A185 and RSPC A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A study of the drugs used to treat respiratory pathologies and their administration. Includes bronchodilators, steroids, mucokinetics, antibiotics, and respiratory stimulants and depressants.

RSPC A196 **0.5 Units (9 lecture hours)**
Introduction to Mechanical Ventilation
Co-requisite(s): RSPC A192.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the foundational elements of mechanical ventilation. Includes initiation, modalities, physiologic assessment and patient weaning in addition to the basic clinical preparation and legal documentation necessary in the care of patients requiring ventilatory support.

RSPC A212 **1 Unit (18 lecture hours; 9 lab hours)**
Topics in Neonates

Prerequisite(s): Students need to be graduates of the OCC Respiratory Care Program or both a licensed Respiratory Care Practitioners by the Respiratory Care Board of California and Registered Respiratory Therapists by the National Board for Respiratory Care (NBRC); Students must possess their NRP and PALS AHA life support certifications.

Grading Mode: Pass/No Pass
 This course will help prepare the student for employment in the neonatal intensive care unit. Offered on a pass-no pass basis only. This course may also be offered online. Not applicable to AA or AS degree.

RSPC A222 **1 Unit (72 lab hours)**
Advanced Clinical Practice in Neonates
Prerequisite(s): RSPC A212.

Grading Mode: Pass/No Pass
 Clinical experience in an affiliated neonatal intensive care unit under the supervision of licensed respiratory care practitioners and health care personnel. Emphasis on independent respiratory management and decision making when caring for the neonatal patient population. Professional growth and advanced skills are expected. Offered on a pass-no pass basis only. Not applicable to AA or AS degree.

RSPC A255 **1 Unit (18 lecture hours)**
Home Care and Rehabilitation
Prerequisite(s): RSPC A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Techniques and operation of respiratory home care and pulmonary rehabilitation. Includes special equipment set-up, patient and family education, patient evaluation, and care of the ventilator dependent patient at home. Also includes regulations of home care and third party reimbursement.

RSPC A260 **2 Units (36 lecture hours; 18 lab hours)**
Arterial Blood Gases, Theory and Practice
Prerequisite(s): RSPC A185.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Interpretation of arterial blood gases, arterial puncture technique, blood gas analysis. Interpretation of fluid and electrolyte imbalances, renal physiology on acid base control. Phlebotomy theory.

RSPC A265 **3 Units (54 lecture hours)**
Pulmonary Pathology
Prerequisite(s): RSPC A185.

Grading Mode: Standard Letter
Transfer Credit: CSU.

The study of cardiopulmonary disease processes with emphasis on pathophysiology, manifestations, and treatment. Relates each disease state to evaluation, testing, and treatment.

RSPC A270 **3 Units (36 lecture hours; 54 lab hours)**
Ventilators and Respiratory Management
Prerequisite(s): RSPC A260.

Co-requisite(s): RSPC A276.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Principles and techniques in the management of patients requiring ventilatory support. Includes mechanical descriptions of ventilators in common use (including laboratory demonstrations and hands on practice), as well as patient assessment for need for ventilatory support along with assessment for changes in ventilatory support techniques.

RSPC A275 **3 Units (54 lecture hours; 18 lab hours)**
Respiratory Care Procedures
Prerequisite(s): RSPC A185.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Respiratory care procedures, including physical assessment of the chest, chest x-ray assessment, airway management, bronchoscopy, chest tube drainage, electrocardiogram performance and interpretation, and ALS procedures.

RSPC A276 **4.5 Units (243 lab hours)**
Clinical Lab 3
Prerequisite(s): RSPC A192.

Co-requisite(s): RSPC A270 and RSPC A265.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical application of procedures & concepts from RSPC A260, RSPC A270 and RSPC A275, continuing experience in the skills from RSPC A191 and RSPC A192. Includes ABG puncture & analysis, airway management, artificial airways, bronchial hygiene, bronchoscopy, ventilatory management, patient assessment, monitoring, & other therapeutic measures related to patient treatment. Offered on a pass-no pass basis only.

RSPC A278 **1 Unit (18 lecture hours; 18 lab hours)**
Pulmonary Case Assessment
Prerequisite(s): RSPC A276.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Assessment of critical pulmonary patients with emphasis on assessment techniques, critical care procedures, and management techniques as applied to case studies. Includes use of both actual and simulated patient scenarios using information gathering and decision making by the Respiratory Care Practitioner.

RSPC A279 **0.5 Units (9 lecture hours)**
Physician Series 1
Co-requisite(s): RSPC A276.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Physician presentations on current topics in pulmonary medicine emphasizing patient assessment and treatment. Discussion with physicians about individual clinical problems.

RSPC A280 **2 Units (36 lecture hours)**
Advanced Monitoring, Procedures and Therapies in Critical Care
Prerequisite(s): RSPC A270.

Co-requisite(s): RSPC A286.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Theory, use, and application of medical techniques used to monitor cardiopulmonary status. Advanced procedures and therapies used in the diagnosis and treatment of the critically ill cardiopulmonary patient. Includes capnography, transcutaneous assessment and hemodynamic monitoring.

RSPC A285 **1 Unit (18 lecture hours; 18 lab hours)**
Pulmonary Function Testing
Prerequisite(s): RSPC A265.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Theory and application of pulmonary function testing by mechanical and electronic devices.

RSPC A286 **4 Units (240 lab hours)**
Clinical Lab 4
Prerequisite(s): RSPC A276.

Co-requisite(s): RSPC A280 and RSPC A290.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical application of respiratory therapy primarily in critical care areas. Includes airway management, patient assessment, ventilator mechanics and management, and monitoring of the critically ill patient. Offered on a pass-no pass basis only.

RSPC A287 **2.5 Units (144 lab hours)**
Clinical Internship
Co-requisite(s): RSPC A286.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Advanced clinical utilization of knowledge and skills in critical care or specialty areas. Cumulative application of assessment, diagnostic, therapeutic, and judgmental skills acquired within the Respiratory Care Program. Offered on a pass-no pass basis only.

RSPC A290 **2 Units (28 lecture hours; 28 lab hours)**
Neonatal Intensive Care
Prerequisite(s): RSPC A270 and RSPC A275.

Co-requisite(s): RSPC A286.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Theory and practice of neonatal intensive respiratory care with emphasis on the role of the R.C.P. Includes fetal anatomy and physiology, delivery and assessment, resuscitation, neonatal pathologies, respiratory care diagnostic and therapeutic procedures, and techniques for mechanical ventilation. Provider approved C.B.R.N, CEP #12655 for 56 hours.

RSPC A296 **1 Unit (18 lecture hours)**
Respiratory Care Board Review
Co-requisite(s): RSPC A278.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Comprehensive categorical review of diagnostic and therapeutic modalities in Respiratory Care to prepare for national certification, national registry, and state licensing board examinations.