

Associate of Science Degree in Respiratory Therapy: Program Progression

Course progression through the RT program is as shown below. Students must complete courses sequentially; failing a core (RCP) or on-ground general education course* or taking a leave of absence will necessitate a retake of that course, impede progression to the next term, and may delay the student's original graduation date. Days and times are scheduled based on faculty and clinical site availability and may vary.

Term 1: 21 Units/360 Hours/15 Weeks					
Course	Units	Modality		Hours	Weeks
MTH 121	3	Online		45	5-week module
MTH 122	3	Online		45	
BIO 24	4	On Ground		75	15-week RT term
RCP 100	7	On Ground		120	
RCP 110	4	On Ground		75	
Break (1 week)					
Term 2: 19 Units/360 Hours/15 Weeks					
Course	Units	Days	Time	Hours	Weeks
ENG 121	3	Online		45	5-week module
ENG 122	3	Online		45	
CHE 3A	4	On Ground		75	15-week RT term
RCP 120	1	On Ground		45	
RCP 130	4	On Ground		75	
RCP 140	4	On Ground		75	
Break (1 week)					
Term 3: 17 Units/465 Hours/15 Weeks					
Course	Units	Days	Time	Hours	Weeks
PHIL 1C	3	Online		45	5-week module
BIO 31	4	On Ground		75	15-week RT term
RCP 150	5	On Ground		120	
RCP 210	5	Clinical/Extern		225	
Break (1 week)					
Term 4: 18 Units/480 Hours/15 Weeks					
Course	Units	Days	Time	Hours	Weeks
PSY 1	3	Online		45	5-week module
RCP 160	3	On Ground		60	15-week RT term
RCP 170	7	On Ground		150	
		On Ground			
RCP 220	5	Clinical/Extern		225	
Break (1 week)					
Term 5: 20 Units/510 Hours/15 Weeks					
Course	Units	Days	Time	Hours	Weeks
SOC 1	3	Online		45	5-week module
RCP 180	5	On Ground		90	15-week RT term
RCP 190	7	On Ground		150	
RCP 230	5	Clinical/Extern		225	

*Failure of a general education course taught solely online does not impede course progression. The course must be repeated and successfully completed to graduate from the program.

Associate of Science Degree in Respiratory Therapy: Course Descriptions

CORE COURSES: ON-GROUND

BIO 24: Human Anatomy and Physiology

4.0 units – 75 hours

This course provides students in health majors with an introduction to the structure and function of the major organs, essential structures, and physiological principles of the human body with emphasis on primary organ systems. Integration of multi-organ functions and relevant terminology will be included.

A grade of C or higher is required to pass this course.

BIO 31: Microbiology

4.0 units – 75 hours

An introduction to microbiology covering the fundamental aspects of taxonomy, morphology, classification, genetics and reproduction, physiology, nutrition and growth, control, host-parasite relationships, and immunology. Bacteria, fungi, protozoa, viruses and the roles and importance in the biological world will be covered. Basic techniques for culturing, staining, counting, and identifying microorganisms are emphasized in the laboratory. **A grade of C or higher is required to pass this course.**

CHE 3A: Introduction to General Chemistry

4.0 units – 75 hours

This course focuses on composition of matter and physical and chemical changes; fundamental laws and principles; atomic and molecular structure; acid-base chemistry, redox, equilibria, qualitative and quantitative techniques and theory. **A grade of C or higher is required to pass this course.**

RCP 100: Introduction to Respiratory Care

7.0 units – 120 hours

This course provides an introduction to the physical world to students in health majors and practices encountered within health care environments. Topics will include classroom theory and laboratory exploration of physical dynamics as they relate to health professions, with an emphasis in respiratory care, as well as, advanced directives, patient bill of rights, bioterrorism preparedness and management. Procedures and practices related to common settings will be explored. **A grade of C or higher is required to pass this course.**

RCP 110: Pharmacology

4.0 units – 75 hours

This course will study the drugs administered to treat pulmonary disease. It will also include other classifications of drugs that have an effect on cardiopulmonary status. Areas will include drug calculations, indications, classification, proper

dosage, modes of administration, the physiological actions of pharmacokinetics, pharmacodynamics, and pharmacogenetics, side effects, precautions, hazards, therapeutic effects and patient monitoring. **A grade of C or higher is required to pass this course.**

RCP 120: Clinical Laboratory Practice

1.0 unit – 45 hours

This course will prepare the student for their clinical rotations with preparatory requirements, certifications, orientations, introduction to ClinicalTrac clinical management system, safety procedures, and clinical seminars. **A grade of C or higher is required to pass this course.**

RCP 130: Fundamentals of Respiratory Care

4.0 units – 75 hours

This course provides an introduction to the physical world to students in health majors and practices encountered within health care environments. Topics will include classroom theory and laboratory exploration of physical dynamics as they relate to health professions, with an emphasis in respiratory care, as well as, advanced directives, patient bill of rights, bioterrorism preparedness and management. Procedures and practices related to common settings will be explored. **A grade of C or higher is required to pass this course.**

RCP 140: Respiratory Care Pathophysiology

4.0 units – 75 hours

The focus of this course is on the cardiopulmonary systems and the application of protocol-based clinical Respiratory Therapy treatment to deliver disease-specific patient care. Respiratory pathophysiology, assessment techniques and indices, basic pharmacology as it applies to the treatment and prevention of pulmonary disease, humidity and aerosol modalities as they apply to the treatment of pulmonary disease, electrophysiology, and correlation of acid-base and arterial blood gas interpretation are among the topics emphasized. **A grade of C or higher is required to pass this course.**

RCP 150: Ventilatory Principles of Respiratory Care

5.0 units – 120 hours

The focus of this course is management of the airway and mechanical ventilation. Topics include endotracheal intubation, resuscitation devices, invasive and non-invasive ventilation, and initiation, monitoring, managing,

and discontinuation of mechanical ventilation. Students will apply hemodynamics to positive pressure ventilation. **A grade of C or higher is required to pass this course.**

**RCP 160: Critical Care Principles of Respiratory Care
3.0 units – 60 hours**

The focus of this course is management of the airway and mechanical ventilation. Topics include endotracheal intubation, advanced airway management, resuscitation devices, invasive and non-invasive ventilation, tracheostomy care, and initiation, monitoring, managing, and discontinuation of mechanical ventilation. Students will apply hemodynamics to positive pressure ventilation. **A grade of C or higher is required to pass this course.**

**RCP 170: Neonatal and Pediatric Respiratory Care
7.0 units – 150 hours**

The focus of this course is special applications in respiratory care, and neonatal and pediatric respiratory care. Topics include neonatal and pediatric anatomy, physiology, and pathology. Specialized diagnostics and certifications also occur during this course. **A grade of C or higher is required to pass this course.**

**RT 180: Specialized Respiratory Care
5.0 units – 90 hours**

The focus of this course is advanced pulmonary function testing and critical care with emphasis on hemodynamic monitoring. Topics include advanced physical, radiological, and clinical laboratory assessment along with invasively monitored cardiac assessment and special procedures. Routine and specialized pulmonary function tests are also covered. **A grade of C or higher is required to pass this course.**

**RCP 190: Advanced Respiratory Care
7.0 units – 150 hours**

The focus of this course is alternate work sites and job readiness for successful employment in Respiratory Care. Topics include land/air patient transport, disaster management, patient and family education and health management, case management, home care, long term care, pulmonary rehabilitation, and sleep studies. Job readiness along with licensure and credentialing examination preparation also occurs in this course. **A grade of C or higher is required to pass this course.**

**RCP 210: Clinical Practice – Rotation 1
5.0 units – 225 hours**

Students will participate in clinical rotations in acute and sub-acute respiratory therapy conducted at local hospitals and medical centers. The student will be assessed on supervised clinical practice and completion of clinical assignments and performance objectives. **A grade of C or higher is required to pass this course.**

**RCP 220: Clinical Practice – Rotation 2
5.0 units – 225 hours**

Students will participate in clinical rotations in adult intensive care, emergency care, and pediatric floor care conducted at local hospitals and medical centers. The student will be assessed on supervised clinical practice and completion of clinical assignments and performance objectives. **A grade of C or higher is required to pass this course.**

**RCP 230: Clinical Practice – Rotation 3
5.0 units – 225 hours**

Students will participate in advanced rotations in adult, pediatric, and neonatal critical care conducted at local hospitals and medical centers. Specialized clinical experiences, as available, in respiratory home care, asthma education, pulmonary function testing, sleep studies, land/air patient transport, intra-hospital patient transport, disaster management, medical emergency team (MET) and pulmonary rehabilitation. The student will be assessed on supervised clinical practice and completion of clinical assignments and performance objectives. **A grade of C or higher is required to pass this course.**

**GENERAL EDUCATION COURSES:
ONLINE**

**ENG 121: Composition and Reading – Part A
3.0 units/45 hours**

This is the first in a two-part, college-level English course. In this course, students will learn the foundation of critical reading and writing in a variety of rhetorical modes. Students will read various essays and literature, and apply critical analysis to their own writing. Students will practice all aspects of the writing process, and by the end of Part B, they will meet a goal of writing a minimum of 6000 words through a variety of assignments.

**ENG 122: Composition and Reading – Part B
3.0 units – 45 hours**

This is the second part of our college-level English course. By building on the skills learned in Part A, students will continue to critically read and write in a variety of rhetorical modes. Students will read various essays and literature, and apply critical analysis to their own writing. In this course they will build information literacy skills through research, and describe the connection between effective communication and professionalism. Students will complete their goal of writing a minimum of 6000 words.

MTH 121: College Algebra – Part A**3.0 units – 45 hours**

This course integrates technology with mathematics through the use of online learning resources, and covers the fundamentals and terminology of algebra. Topics include real numbers, order of operations, single and multiple step linear equations and inequalities, use of formulas, algebraic expressions, polynomials, systems of equations, and graphing of linear equations. Students will utilize the metric and U.S. standard systems. The fundamentals and real-world formulaic terminology will be provided. This course offers applications that allow students to relate to and to apply concepts to their field of study.

MTH 122: College Algebra – Part B**3.0 units – 45 hours**

This course integrates technology with mathematics through the use of online learning resources. Topics include use of formulas, algebraic expressions, polynomials, exponential and logarithmic expressions, and quadratic equations. Students will utilize rational and radical expressions and conics functions. This course offers applications that allow students to relate to and to apply concepts to their field of study.

PHIL 1C: Ethics**3.0 units – 45 hours**

This course provides an introduction to the ethical problems and issues in modern society. Students will discuss current events related to ethical issues and participate in group discussions.

PSY 1: General Psychology**3.0 units/45 hours**

This course covers the study of human behavior, moral development, and psychological theory as it applies to the individual, group, and community. Behavioral disorders and treatment, social perceptions, emotions and motivation, social influence, and group processes are topics included in this course.

SOC 1: Introduction to Sociology**3.0 units – 45 hours**

This course is a survey of social structure, theory, and its implications for individuals in a dynamic view of the environment. Cultures, family, organizations, groups, ethnic and political influences, and politics are the topics covered.