

# RESPIRATORY THERAPY (RT)

## RT 299 Respiratory Therapy Introduction (0)

An introduction and orientation to the traditional BSRT program. The course is designed to welcome the student to the program and give guidance on how to navigate the courses, specific program requirements, and outline next steps in starting the professional phase of the program. Grades: Pass/No credit.

## RT 301 Fundamentals of Respiratory Care I (3)

A study of respiratory care treatment modalities and equipment. Emphasis is placed on understanding application to patient situations, assessment of care, and principles of operation of equipment. Infection control issues will be included. Students will discuss the pathophysiology, health promotion and disease prevention aspects of each modality.

## RT 306 Patient Assessment (3)

A study of patient assessment skills and procedures used in the evaluation of the respiratory patient. Emphasis will be on patient care procedures, physical assessment, laboratory assessment, communication skills, and documentation. Professionalism, ethics and civic responsibilities of the respiratory therapist will be discussed.

## RT 310 Cardiopulmonary Anatomy and Physiology (3)

A study of the structure and function of the respiratory system. Physiology of the respiratory, cardiac, and renal systems will be discussed. Emphasis will be on how each control the body's acid-base status and the effects of respiratory therapeutic modalities on each system.

## RT 315 Respiratory Care Pharmacology (2)

A study of pharmacological agents used in the treatment of cardiopulmonary disease and critical care. Emphasis will be on drugs used to influence the respiratory, cardiovascular, nervous and renal systems.

## RT 320 Clinical I (1)

Practical application of respiratory care performed under supervision at clinical sites. This course serves as an introduction to the hospital environment. Proficiency evaluations of selected respiratory care procedures will be completed.

## RT 322 Respiratory Therapy Lab I (2)

Relevant laboratory practice/activities based on content covered in first semester courses in the upper division respiratory therapy program.

## RT 326 Fundamentals of Respiratory Care II (2)

This course is a continuation of RT 301. It is designed to continue the progression from basic respiratory care modalities to more advanced therapy and equipment. Emphasis will continue to be on understanding application to patient situations, assessment of care, and principles of operation of equipment.

## RT 330 Airway Management and Resuscitation (2)

A study of the selection, application, maintenance, and discontinuance of various artificial airways. Emphasis will be on intubation, extubation, tracheostomy care, and suctioning. The role of the respiratory therapist in a cardiopulmonary arrest will be covered in accordance with American Heart Association Advanced Cardiopulmonary Life Support (ACLS) guidelines. ACLS will be taught.

## RT 335 Pathology for Respiratory Care (3)

A study of the diseases affecting the respiratory system commonly encountered by practicing respiratory therapists. The pathophysiology, clinical signs and symptoms, diagnosis, management, and prognosis of acute and chronic pulmonary diseases will be discussed.

## RT 340 Research (WI) (3)

A study of clinical research methods and concepts related to respiratory care. Emphasis is on an overview of the research process and how to critically evaluate published and empirical research. (Writing Intensive Course)

## RT 345 Clinical II (2)

Practical application of respiratory care performed under supervision at clinical sites. Proficiency evaluations of selected respiratory care procedures will be completed including basic and advanced modalities. Students will prepare and present case studies relevant to this patient population.

## RT 347 Respiratory Therapy Lab II (2)

Laboratory practice/activities involving content covered in courses during the second semester of the upper division respiratory therapy program.

## RT 351 Ventilatory Support I (2)

A study of the basic physics, theory, and methods commonly used in mechanical ventilation. Emphasis will be on patient management and assessment. Invasive and non-invasive ventilation will be discussed, including advanced oxygen delivery systems.

## RT 356 Respiratory Critical Care Monitoring (3)

A study of advanced cardiopulmonary monitoring used in critical care. Emphasis will be on ventilator waveform analysis, capnography, and hemodynamic monitoring.

## RT 360 Clinical III (2)

Practical application of respiratory care performed under supervision at clinical sites. Proficiency evaluations of selected respiratory care procedures will be completed including advanced modalities and mechanical ventilation. Students will prepare and present case studies relevant to this patient population.

## RT 362 Respiratory Therapy Lab III (2)

Laboratory exercises/activities relevant to course content taught in the third semester of the respiratory therapy program.

## RT 365 Respiratory Therapy Junior Level Review (3)

This course is a directed study course for the students attempting to re-track in the respiratory therapy program at the junior level. The course will consist of competency testing to include material covered in the didactic, laboratory practice, and clinical experiences normally completed at this point in the program. Grades: Pass/Fail.

## RT 401 Ventilatory Support II (2)

This course is a continuation of RT 351. A study of advanced mechanical ventilation. Adult, pediatric, and neonatal ventilation will be discussed. Emphasis will be on patient management and assessment.

## RT 405 Neonatal and Pediatric Respiratory Care (3)

A study of respiratory therapy involving infants and children. Emphasis will be on patient management and assessment in basic and intensive care settings. Developmental anatomy and physiology, pharmacology, disease management and prevention, health promotion, oxygenation, and resuscitation will be discussed. PALS and NRP will be taught. Relevant lab exercises will be included.

**RT 411 Pulmonary Diagnostics (3)**

A study of diagnostic testing and measurements used in providing care for respiratory patients. Emphasis will be on pulmonary function testing, bronchoscopy, sleep studies, and other special procedures commonly encountered by the practicing respiratory therapist.

**RT 415 Clinical IV (WI) (3)**

Practical application of respiratory care performed under supervision at clinical sites. Proficiency evaluations of selected respiratory care procedures will be completed including advanced mechanical ventilation, special populations, and diagnostics. Students will prepare and present case studies relevant to this patient population. (Writing Intensive Course)

**RT 417 Respiratory Therapy Lab IV (2)**

Relevant laboratory exercises/activities related to the content covered in the courses required in the fourth semester of the respiratory therapy program.

**RT 420 Pulmonary Disease Management (3)**

A study of the respiratory therapist's role in pulmonary rehabilitation, home care, and patient education and motivation in preventative care. Reimbursement issues will be discussed. This course will also provide an overview of the growing need for quality palliative care. The scope of palliative care and current end-of-life issues will be introduced. Focus will be on the common pathology processes often seen in respiratory practice.

**RT 425 Respiratory Therapy Education (3)**

A study of general educational and instructional methods and techniques. Emphasis will be on patient education and health promotion. The student will learn how to write learning objectives, how to evaluate patient education, how to prepare and present a topic for an in-service presentation, and how to present a lecture in a classroom and in the laboratory environment.

**RT 430 Respiratory Therapy Leadership (2)**

A study of management of a respiratory therapy and cardiopulmonary department. Emphasis will be on regulatory agency and accreditation standards related to respiratory therapy, departmental budgeting, quality assurance, human resource issues, conflict resolution, and staff training.

**RT 435 Clinical V (4)**

Practical application of respiratory care performed under supervision at clinical sites. This course prepares students to perform as advanced-level respiratory therapists. Proficiency evaluations of selected respiratory care procedures will be completed. Emphasis will be on advanced mechanical ventilation in adults, pediatrics, and neonates; special procedure areas may be assigned.

**RT 439 Respiratory Therapy Senior Level Review (3)**

This course is a directed study course for students attempting to re-track in the respiratory therapy program at the senior level. The course will consist of competency testing to include material covered in the didactic, laboratory practice, and clinical experiences normally completed at this point in the program. Grades: Pass/Fail.

**RT 440 Advanced-Level Exam Review (3)**

This course is designed to assist students in preparing for the Therapist Multiple-Choice and Clinical Simulation Exams offered by the National Board for Respiratory Care (NBRC).

**RT 441 RRT-BSRT Bridge Introduction (0)**

An introduction and orientation to the RRT-BSRT Bridge Program. The course is designed to welcome the student to the program and give guidance on how to navigate the courses. Grades: Pass/No credit.

**RT 442 Advanced Ventilatory Support (4)**

A study of advanced mechanical ventilation. Adult, pediatric, and neonatal ventilation will be discussed. Emphasis will be on patient management and assessment. Invasive and non-invasive ventilation techniques will be included.

**RT 444 Critical Care Monitoring (3)**

A study of monitoring utilized in an intensive care unit. Emphasis will be on ventilator waveform analysis, capnography, pulse oximetry, and hemodynamic monitoring.

**RT 446 Research for Respiratory Therapists (WI) (3)**

A study of clinical research methods and concepts related to respiratory care. Emphasis is on an overview of the research process and how to critically evaluate published and empirical research. (Writing Intensive Course)

**RT 448 Advanced Practice Elective (2)**

The Advanced Practice Elective can be completed in the semester of the student's choice. Completion of the course requires the student to prepare an approved project related to, or complete the requirements for one of the following advanced practice credentials: Advanced Critical Care Specialist, Neonatal-Perinatal Specialist, Certified Asthma Education, Certified Pulmonary Function Technologist, Registered Pulmonary Function Technologist, Certified Sleep Disorder Specialist, Registered Sleep Disorder Specialist, or Certified Tobacco Treatment Specialist.

**RT 450 Healthcare Education for Respiratory Therapists (4)**

A study of the respiratory therapist's role in patient education and health promotion. General educational and instructional methods and techniques will be introduced. The student will learn how to write learning objectives, how to evaluate patient education, how to prepare and present a topic for an in-service presentation, and how to present a lecture in a classroom and in the laboratory environment.

**RT 452 Patient Care Management Strategies (3)**

A study of the current professional environment and the role of the respiratory therapist in patient care management. An introduction to the concept of evidence-based practice and discussion of how to incorporate evidence and best practices into professional work. Therapist-driven protocols, respiratory case managers, and care coordinators/navigators will be introduced.

**RT 454 Advanced Neonatal and Pediatric Care (3)**

A study of respiratory care involving infants and children. Emphasis will be on patient management and assessment in basic and intensive care settings. Developmental anatomy and physiology, pharmacology, disease management and prevention, health promotion, oxygenation, and resuscitation will be discussed.

**RT 456 Healthcare Leadership for Respiratory Therapists (4)**

A study of the management of a respiratory therapy and cardiopulmonary department. Emphasis will be on regulatory agency and accreditation standards related to respiratory therapy, departmental budgeting, quality assurance, human resource issues, conflict resolution, staff training, and customer service.

**RT 458 Special Procedures (3)**

A study of diagnostic testing commonly encountered by practicing respiratory therapists. Emphasis will be on pulmonary function studies. Other special procedures will be introduced.

**RT 460 Alternative Care Roles for Respiratory Therapists (3)**

A study of the respiratory therapist's role in pulmonary rehabilitation, long-term care, long-term acute care, home care and palliative care. Patient education and motivation in preventative care will be discussed. An overview of reimbursement issues will be included. The scope of palliative care and end-of-life issues will be discussed.