

RESPIRATORY CARE (RESC)

RESC 1500 Introduction to Online Learning in Health Professions 3 s.h.

Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU's Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student's first 30 hours at YSU. Listed also as PHLT 1500 and AHLT 1500.

Prereq.: PHLT, AHLT or RESC major.

RESC 1503 Respiratory Procedures 1 3 s.h.

Appropriate use of selected respiratory care procedures. Three hours lecture to be taken concurrently with 1503L.

RESC 1503L Respiratory Procedures 1 Lab 1 s.h.

Appropriate use of selected respiratory care procedures. Three hours lab to be taken concurrently with 1503L.

RESC 1520 Respiratory Care Assessment 1 2 s.h.

Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lecture to be taken concurrently with RESC 1520L.

Prereq.: RESC 1531.

RESC 1520L Respiratory Assessment 1 Lab 1 s.h.

Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lab. Must be taken concurrently with RESC 1520.

RESC 1529 Respiratory Care Orientation 2 s.h.

Scope of profession including key organizations, role within health-care system and career options. Includes applied anatomy and physiology of respiratory system and basic assessment and therapeutic procedures. Hospital experiences included. One hour lecture and two hours lab.

RESC 1530 Foundations of Respiratory Care 3 s.h.

Review of the professional scope of practice for a respiratory therapist including key organizational roles within the profession. Basic application of scientific gas laws and theories will be examined along with basic description and function of oxygen delivery equipment related to respiratory care. Includes applied anatomy and physiology of the respiratory system and basic patient assessment.. 3 hour lecture.

Prereq.: Acceptance into the respiratory care program or by a special permission from the program director.

RESC 1531 Respiratory Care Essentials 2 s.h.

Application of basic scientific principles to the respiratory-care profession. Includes coverage of basic equipment, assessment techniques, and therapeutic procedures. Two hours lecture. Must be taken concurrently with RESC 1531L.

RESC 1531L Respiratory Care Essentials Lab 1 s.h.

Application of basic scientific principles to the respiratory-care profession. Includes coverage of basic equipment, assessment techniques, and therapeutic procedures. Two hours lab. Must be taken concurrently with RESC 1531.

RESC 2620 Respiratory Assessment 2 2 s.h.

Advanced techniques in the assessment of cardiopulmonary disorders. Two hours lecture to be taken concurrently with 2620L.

RESC 2620L Respiratory Assessment 2 Lab 1 s.h.

Advanced techniques in the assessment of cardiopulmonary disorders, Two hours lab to be taken concurrently with RESC 2620.

RESC 2621 Cardiopulmonary Disease 3 s.h.

Comprehensive overview of cardiopulmonary disorders encountered by respiratory therapists. Includes applications to clinical protocols and evidence based practices.

Prereq.: RESC 2620.

RESC 2699 Clinical Practice 1 1 s.h.

Orientation to hospital and department policies, including exposure to and practice with basic respiratory care procedures. Five hours a week in clinics.

Prereq.: RESC 2621.

RESC 3706 Respiratory Procedures 2 2 s.h.

Airway management techniques and other critical care procedures. Two hours lecture to be taken concurrently with Resc 3706L.

Prereq.: acceptance into the respiratory care program.

RESC 3706L Respiratory Procedures 2 Lab 1 s.h.

Airway management techniques and other critical care procedures. Three hours lab.

Prereq.: Acceptance into the respiratory therapy program.

Coreq.: RESC 3706.

RESC 3708 Respiratory Clinical Specialties 3 s.h.

Fundamentals of hemo-dynamic monitoring, management of burn patients, and assessment of neuro-trauma. Three hours lecture.

Prereq.: RESC 3706.

RESC 3708L Respiratory Clinical Specialties Lab 1 s.h.

Fundamentals of hemodynamic monitoring, management of burn patients, and assessment of neuro trauma. Three hours lab to be taken concurrently with RESC 3708.

Prereq.: Acceptance into the respiratory care program and completion of RESC 3706.

RESC 3709 Neonatal/Pediatric Respiratory Care 3 s.h.

Respiratory care applications in neonatal/pediatric settings. Three hours lecture to be taken concurrently with RESC 3709L.

Prereq.: Acceptance into the Respiratory Care Program.

RESC 3709L Neonatal/Pediatric Respiratory Care Lab 1 s.h.

Respiratory care applications in neonatal/pediatric settings. Three hours lab to be taken concurrently with RESC 3709.

Prereq.: Acceptance into the Respiratory Care program.

RESC 3710 Respiratory Care Pharmacology 3 s.h.

This course will review the therapeutic effects, side effects, indications and contraindications along with dosages, drug delivery routes as well as standard and modified delivery absorption methods of pulmonary related pharmacological agents and medications for aspects of pulmonary related medicine.

Prereq.: CHEM 1510/L.

RESC 3720 Mechanical Ventilation 1 2 s.h.

Basic theory and application of mechanical ventilation in critical care areas. Two hours lecture to be taken concurrently with RESC 3720L.

Prereq.: Acceptance into the respiratory care program.

RESC 3720L Mechanical Ventilation 1 Lab 1 s.h.

Basic theory and application of mechanical ventilation in critical care areas. Three hours lab to be taken concurrently with RESC 3720.

Prereq.: Acceptance into the Respiratory Care Program.

RESC 3725 Mechanical Ventilation 2 2 s.h.

Advanced theory and application of mechanical ventilation. Includes home care ventilators. Two hours lecture to be taken concurrently with RESC 3720L.

Prereq.: RESC 3720.

RESC 3725L Mechanical Ventilation 2 Lab 1 s.h.

Advanced theory and application of mechanical ventilation. Includes home care ventilators. Three hours lab to be taken concurrently with RESC 3725.

Prereq.: RESC 3720.

RESC 3731 Respiratory Care Management 3 s.h.

A study of the basic managerial process, organizational concepts, budgeting, quantitative planning, decision-making, and issues of control as they relate to the manager of a hospital-based respiratory care department.

Prereq.: RESC 3725.

RESC 3740 Clinical Practice 2 3 s.h.

Application of basic and advanced respiratory care modalities in the clinical hospital setting.

Prereq.: RESC 2699.

RESC 3740L Clinical Practice 2 Lab 2 s.h.

Application of basic and advanced respiratory care modalities. Three hour lab to be taken concurrently with RESC 3740.

Prereq.: RESC 2699.

RESC 3741 Clinical Practice 3 3 s.h.

Application of basic and advanced respiratory care modalities for pediatric and adult patients. Twenty hours a week.

Prereq.: RESC 3740.

RESC 3750 Pulmonary Rehabilitation 2 s.h.

Demonstration of the multidisciplinary nature of a pulmonary rehabilitation program. The role of the respiratory care practitioner in preventive care activities.

Prereq.: RESC 3706.

RESC 3765 Advanced Respiratory Care Diagnostics 3 s.h.

The study of the fundamentals of advanced respiratory care diagnostics. Three hour lecture.

Prereq.: RESC 3708 or permission of instructor.

RESC 4801 Special Topics in Respiratory Care 1-3 s.h.

Focused research of a special problem/issue related to respiratory care. The topic of interest allows the student to participate in focused investigation of aspects of administration, clinical specialization, or research. May be repeated up to a total of 3 s.h.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 4810 Advanced Neonatal and Pediatric Case Management 3 s.h.

This course is designed to strengthen the student's knowledge of Neonatal/Pediatric disorders by incorporating evidence-based practices into case management. Current protocols will also be discussed.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 4831 Pulmonary Case Management 3 s.h.

Pathology as it relates to care of patients with pulmonary-related disorders.

Prereq.: RESC 3725.

RESC 4835 Clinical Practice 4 3 s.h.

Application of advanced respiratory modalities and diagnostics for pediatric and adult patients. Capstone course for RC program. Fifteen hours a week.

Prereq.: RESC 3741.

RESC 4838 Respiratory Seminar 1 1 s.h.

Review of current aspects of clinical respiratory care. A content analysis of the updated NBRC Entry-Level exam will be included.

Prereq.: RESC 3741.

RESC 4842 Respiratory Seminar 2 1 s.h.

Review of current aspects of clinical respiratory care. A content analysis of the updated NBRC Advanced Practitioner exam will be included.

Prereq.: RESC 4838.

RESC 4846 Sleep Diagnostics 1 3 s.h.

Scientific theory and clinical techniques needed to perform polysomnography. Three hours lecture.

Prereq.: Respiratory therapy major or by special permit.

RESC 4848 Sleep Diagnostics 2 3 s.h.

Scientific theory and clinical techniques needed to perform polysomnography. Three hours lecture.

Prereq.: Respiratory major and by special permit and prior completion of RESC 4846.

RESC 4860 Advanced Management of the Ventilator Patient 3 s.h.

Course will present current classifications, evidence-based research and application of mechanical ventilator concepts in critical care areas. Technical capabilities of modes will be described along with optimal settings. Current protocols in RC will also be discussed.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 4862 Professional Pathways for Respiratory Care Practitioners 3 s.h.

This course will explore select professional pathways available to the RCP. The foundations and role of the RCP are examined in four key areas: the sleep center, home care, PFT lab and HBO centers. The RCP will be introduced to the standards of care and practical application for each area.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 4867 Fundamentals of Leader Development 3 s.h.

This course will form the necessary core of self-awareness in relation to leader development. Through introducing concepts and examples of leadership and awareness of how one leads as an expression of self, RCPs will enhance leadership awareness and personal expression within their discipline.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of the instructor.

RESC 4870 Advanced Cardiopulmonary Case Management 3 s.h.

This course is designed to strengthen the student's knowledge of C-P disorders by incorporating evidence-based practices into C-P case management. The student will learn to apply these strategies in acute care, transitional and long-term care settings. Current protocols will also be discussed.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 4872 Technology Applications for RCPs 3 s.h.

Exploration of technology applications for education, presentations, communications and management. Creation of digital media such as audio and/or video files, e-portfolios and web-based application of various technologies will be required. Application of technology to education or management will be evaluated through completions of a technology-enhanced project.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 5820 The Respiratory Care Profession 3 s.h.

Study of origins, current role, and future directions of respiratory care profession within the framework of the current health care environment. Examination of professional resources is also included.

Prereq.: Active membership in American Association for Respiratory Care and acceptance in MRC program.

RESC 5860 Technology Applications for Health and Human Services 3 s.h.

Exploration of technology applications for education, presentations, communications and management in Health and Human Service disciplines. Creation of digital media such as audio and/or video files, spreadsheet macros, e-portfolios and Web-based applications of various technologies will be required. Application of technology to education, supervision or management will be evaluated through completion of a technology-enhanced project.

Prereq.: Acceptance in MRC program or permission from program director if outside of the respiratory care program.

RESC 5880 Advanced Management of the Ventilator Patient 3 s.h.

Course will present current classifications, evidence-based research and application of mechanical ventilator concepts in critical care areas. Technical capabilities of modes will be described along with optimal settings. Current protocols in RC will also be discussed.

Prereq.: Acceptance in the BSRC, BSRC degree advancement/completion program or Master of respiratory care program, junior standing, or permission of program director.

RESC 6900 The Respiratory Care Profession 3 s.h.

Study of origins, current role, and future directions of respiratory care profession within the framework of the current health care environment. Examination of professional resources is also included.

Prereq.: Active membership in American Association for Respiratory Care and acceptance in MRC program.

RESC 6906 Respiratory Care Seminar 3 s.h.

Development of a literature review on select current topics culminating in preparation of a scholarly paper consistent with Respiratory Care Journal Conference format and an accompanying PowerPoint presentation.

Prereq.: Acceptance in MRC program.

RESC 6908 Leadership Development in Respiratory Care 3 s.h.

Using an evidenced-based perspective, the course will examine nature of leadership in health care organizations with an emphasis on self-understanding and learning to achieve both a theoretical and practical understanding of leadership. Health care managers need to be able to create, foster and manage organizations in which people thrive and perform at their best to achieve organizational excellence.

Prereq.: Acceptance in MRC program.

RESC 6910 Competency Assessment in Respiratory Care 3 s.h.

Reviews how clinically-related competencies in respiratory care are measured including available tools. Evaluation of procedures performed by multiple health care practitioners including issues at state/national levels. Importance of assessing cultural competence also included.

Prereq.: Acceptance in MRC program.

RESC 6915 Education and Accreditation in Respiratory Care 3 s.h.

Comparison of institutional as well as programmatic accreditation requirements. Prepare students with up-to-date tools/approaches to address major educational accreditation concerns in hospital as well as in post-secondary settings. Students will also compare and contrast the role of accreditation in today's health care environment.

Prereq.: Acceptance in MRC program.

RESC 6920 Technology Applications for Health and Human Services 3 s.h.

Exploration of technology applications for education, presentations, communications and management in Health and Human Service disciplines. Creation of digital media such as audio and/or video files, spreadsheet macros, e-portfolios and Web-based applications of various technologies will be required. Application of technology to education, supervision or management will be evaluated through completion of a technology-enhanced project.

Prereq.: Acceptance in MRC program.

RESC 6922 Special Topics in Respiratory Care 1-3 s.h.

Special topics for a focused study on problems, issues, or concerns that relate to respiratory care leadership.

Prereq.: Acceptance in MRC program.

RESC 6926 Advanced Mechanical Ventilation 3 s.h.

Develops the practitioner's knowledge of advanced ventilatory theory. The technological aspects and clinical application of dual control modes of ventilation, closed loop and ventilator feedback technology will be discussed. The clinical application of unconventional methods of ventilatory support such as ECMO and carbon dioxide removal, transtracheal gas insufflation and HFV will also be presented.

Prereq.: Acceptance in MRC program.

RESC 6930 Managing Respiratory Services 3 s.h.

Presents a comprehensive approach to the delivery of respiratory services across the continuum of care. Management practices in traditional or acute care settings and nontraditional home care, outpatient rehabilitation facilities, sleep laboratories and long-term care institutions will be compared and contrasted. Compliance with national/state accreditation standards will also be presented.

Prereq.: Acceptance in MRC program.

RESC 6943 Advanced Monitoring and Therapeutics 3 s.h.

The course is designed to analyze technical features and clinical application of 'state of the art' invasive and noninvasive monitoring devices. Specialty therapeutic procedures such as the administration of specialized medical gases and medications will also be explored. The essential elements key to successful integration of new and/or complicated therapeutic modalities and equipment into clinical practice will be highlighted.

Prereq.: Acceptance in MRC program.

RESC 6950 Respiratory Care Research 3 s.h.

Provides rationale behind evidence-based medicine and presents key elements of scientific research for one study, lab investigation or clinical trial. Course will culminate in creation of abstract to be submitted for publication in Respiratory Care journal.

Prereq.: Acceptance in MRC program.