Respiratory Therapy (RS_THR)

RS_THR 1000: Introduction to Respiratory Therapy
Introductory course to assist students acquiring information about the respiratory therapy profession. Students observe therapists in hospitals and participate in lectures on credentialing, program requirements, placement and future trends in the profession. Graded on A-F basis only.

Credit Hour: 1

RS_THR 3000: Fundamentals of Respiratory Care
Orientation to the profession. Focus on professional attributes of communication, teamwork, licensure and safety.

Credit Hour: 1
Prerequisites: acceptance into respiratory therapy major

RS_THR 3220: Equipment and Therapeutics
History, organization of respiratory therapy. Theory, application of gas laws. Equipment for invasive and non-invasive pulmonary assessment, therapeutic aerosol and humidity, gas delivery, airway management. Techniques for infection control, lung expansion, bronchial hygiene. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the Respiratory Therapy Program
Corequisites: RS_THR 3240

RS_THR 3240: Assessment and Therapeutics Lab
Evidence-based application of assessment techniques and therapeutic management of cardiopulmonary disorders. Course content includes equipment and skills associated with physical examination, blood gas analysis, chest imaging, oxygen and aerosolized pharmaceutical delivery, airway clearance therapy, lung expansion, and airway management. Emphasis placed on competency development for clinical application. Graded on S/U basis only.

Credit Hours: 3
Prerequisites or Corequisites: RS_THR 3220, RS_THR 3941
Prerequisites: Restricted to students admitted into the Respiratory Therapy Program

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RS_THR 3290: Cardiopulmonary Pharmacology
To provide the student with specific knowledge of the pharmacologic strategies in treating cardiopulmonary disorders. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: restricted to students in the respiratory therapy program

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RS_THR 3420: Principles of Mechanical Ventilation
Continuation of RS_THR 3220. Emphasis on the principles of mechanical ventilation, including physiologic and clinical application.

Credit Hours: 3
Prerequisites: RS_THR 3220, RS_THR 3941 and RS_THR 4040

RS_THR 3420W: Principles of Mechanical Ventilation - Writing Intensive
Continuation of RS_THR 3220. Emphasis on the principles of mechanical ventilation, including physiologic and clinical application.

Credit Hours: 3
Prerequisites: RS_THR 3220, RS_THR 3941 and RS_THR 4040

RS_THR 3440: Mechanical Ventilation Lab
Application of mechanical ventilation emphasizing acute care: pressure, volume, and oscillatory ventilation of adults. Pediatrics, and infants. Related graphical, laboratory,and hemodynamic analysis; therapeutic intervention. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: RS_THR 3220, RS_THR 3941, RS_THR 4040

RS_THR 3941: Clinical Practice I
To be taken concurrently with RS_THR 3220 for which it serves as an extension of the laboratory time and an opportunity for structured clinical experience exposures.

Credit Hours: 2

RS_THR 3942: Clinical Practice II
To be taken concurrently with RS_THR 3420, for which it serves as an extension of the laboratory time, and an opportunity for structured clinical experience exposures.

Credit Hours: 4

RS_THR 3943: Clinical Practice III
Continuation of supervised clinical experience from RS_THR 3942. Graded on A-F basis only.

Credit Hours: 2

RS_THR 4020: Perinatal/Neonatal Respiratory Care
Evaluation and management of perinatal/neonatal pulmonary, medical and surgical conditions which require respiratory care. Emphasis on resuscitation, pathophysiology, evaluation, blood gas and x-ray interpretation, treatment and mechanical ventilation.

Credit Hours: 3
Prerequisites: RS_THR 4040; Respiratory Therapy students only

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RS_THR 4040: Respiratory Pathophysiology
Clinical pulmonary disease, organized around the gross structural components of the lung, airways, alveoli and pulmonary vasculature. Impact of disease on normal structure function; clinical, roentgenographic, and physiologic manifestations are described.

Credit Hours: 5

RS_THR 4085: Problems in Respiratory Therapy
Independent work on special problems related to cardiopulmonary health. Course not offered for graduate credit. Some sections of the course may be graded on either A-F or S/U basis only.

Credit Hour: 1-99
Prerequisites: instructor's consent

RS_THR 4220: Community and Patient Education I
Design and implement materials for educational presentations for a given patient population. Graded on A-F basis only.

Credit Hour: 1

RS_THR 4240: Pulmonary Rehabilitation
Focus is on an interdisciplinary approach to pulmonary rehabilitation and home care of the adult cardiopulmonary patient. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: instructor's consent required

RS_THR 4420: Pediatric Respiratory Care
Evaluation and management of pulmonary, medical and surgical pediatric conditions requiring respiratory care. Emphasis on pediatric resuscitation, pathophysiology, treatment and prevention of respiratory conditions, mechanical ventilation, lab interpretation.

Credit Hours: 3

RS_THR 4440: Organization and Administration
(same as RA_SCI 4440, CDS 4440). Examines design and operation of allied health service departments and educational programs, including facilities, personnel procedures, record systems, ethics, medical-legal aspects, interdepartmental relations and curriculum development.

Credit Hours: 2

RS_THR 4460: Evidence-Based Medicine in Respiratory Care
This course is intended to facilitate the development of the student's ability to obtain and integrate patient assessment information and key findings and to formulate clinical decisions in respiratory therapy practice as well as use an evidence-based medicine approach to define respiratory clinical practice.

Credit Hours: 3

RS_THR 4460W: Evidence-Based Medicine in Respiratory Care - Writing Intensive
This course is intended to facilitate the development of the student's ability to obtain and integrate patient assessment information and key findings and to formulate clinical decisions in respiratory therapy practice as well as use an evidence-based medicine approach to define respiratory clinical practice.

Credit Hours: 3

RS_THR 4620: Pulmonary Function Technologies
This course will provide the student with a specific knowledge of the testing procedures and equipment for pulmonary function technology. The student will learn to interpret pulmonary function tests and perform quality assurance within the pulmonary function laboratory.

Credit Hours: 3
Prerequisites: restricted to Respiratory Therapy students only

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RS_THR 4640: Teaching Practicum
Structured and supervised experience identifying student characteristics, methods for teaching, improving assessment, current development and instructional design.

Credit Hours: 3

RS_THR 4660: Advanced Mechanical Ventilation Theory
Exploration of advanced disease management via specific disease processes as well as concepts and modes of mechanical ventilation. Emphasis will be placed on mode selection for various disease and how new modes of mechanical ventilation impact disease management.

Credit Hours: 3

RS_THR 4720: Advanced Pulmonary Function Technology
(cross-leveled with RS_THR 7720). This course will focus on the respiratory therapist's role in diagnostic testing. Topics include pulmonary function tests, exercise tests, and metabolic studies. In addition the course briefly addresses polysomnography, pulmonary rehabilitation, and home care. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Restricted to Respiratory Therapy students only

RS_THR 4820: Adult Critical Care
(cross-leveled with RS_THR 7820). This course will focus on the respiratory therapist's role in the adult critical care environment. Topics include airway management, mechanical ventilation, general adult critical care and functioning as a vital member of the critical care team.

Credit Hours: 3
Prerequisites: restricted to Respiratory Therapy students only

RS_THR 4860: Neonatal and Pediatric Critical Care
(cross-leveled with RS_THR 7860). This course will facilitate the evaluation and management of pulmonary, medical and surgical neonatal and pediatric conditions requiring respiratory care. There will be an emphasis on neonatal and pediatric resuscitation, pathophysiology, blood gas and x-ray interpretation, treatment and prevention of respiratory conditions, mechanical ventilation, and laboratory interpretation. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Respiratory therapy degree advancement students only

RS_THR 4930: Current Issues in Respiratory Care
(cross-leveled with RS_THR 7930). Identification and analysis of current issues in Respiratory Care with practice implications. Emphasis given to identification and evaluation of nontraditional information sources (e.g., social networking, internet). Graded on A-F basis only.

Credit Hours: 3

RS_THR 4940: Clinical Practice IV
Structured and supervised clinical experience and case conferences regarding bioterrorism response and emergency/disaster planning.

Credit Hours: 5

RS_THR 4973: Clinical Practice V
An extension of the supervised practicum begun in RS_THR 4940. Emphasis in adult critical care and special procedures including brochoscopies, cardiac catherization and chest tube placement.

Credit Hours: 4

RS_THR 4983: Clinical Practice VI
An extension of the supervised practicum begun in RS_THR 4940. Emphasis in perinatal and pediatric critical care including pediatric pulmonary function testing and airway management.

Credit Hours: 4

RS_THR 4993: Clincal Practice VII
An extension of the supervised practicum begun in RS_THR 4940. Emphasis in rehabilitation and home care, inservice education, and management. Students will participate in community service activities.

Credit Hours: 5

RS_THR 7720: Advanced Pulmonary Function Testing
(cross-leveled with RS_THR 4720). This course is for students who have demonstrated competence with basic pulmonary function testing (PFT) or are already working in a pulmonary function laboratory, and who wish to further their understanding of PFTs or aspire to challenge the NBRC pulmonary function credentialing examinations. The first few modules will review basic PFT concepts while also integrating updates to ATS and ERS standards and new PFT lab equipment and testing procedures. Course content will include all topics on the NBRC CPFT/ RPFT examination detailed content outline. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Students must be enrolled in the Respiratory Therapy Program or be a credentialed Respiratory Therapist
Recommended: Previous PFT experience

RS_THR 7820: Adult Critical Care
(cross-leveled with RS_THR 4820). This course will focus on the respiratory therapist's role as an advanced practitioner in the adult critical care environment. Topics include airway management, mechanical ventilation, general adult critical care and functioning as a vital member of the critical care team. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: This course is restricted to graduate level respiratory therapists

RS_THR 7860: Neonatal and Pediatric Critical Care
(cross-leveled with RS_THR 4860). This course will facilitate the evaluation and management of pulmonary, medical and surgical neonatal and pediatric conditions requiring respiratory care. There will be an emphasis on neonatal and pediatric resuscitation, pathophysiology, blood gas and x-ray interpretation, treatment and prevention of respiratory

conditions, mechanical ventilation, and laboratory interpretation. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Respiratory therapy graduate level students only

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RS_THR 7930: Current Issues in Respiratory Care
(cross-leveled with RS_THR 4930). Identification and analysis of current issues in Respiratory Care with practice implications. Emphasis given to identification and evaluation of nontraditional information sources (e.g., social networking, internet).

Credit Hours: 3
Prerequisites: CDS 4955 or HLTH_SCI 3900 or Instructor consent

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