

# HEALTH SCIENCE - RESP. THERP. (HSRT)

## HSRT 220 Resp Ther Clin Prac I (2 Credits)

**Lecture:** 0, **Lab:** 6

Respiratory Therapy Clinical Practicum (2) Introduction to basic procedures; equipment applications; therapeutic modalities for oxygen, humidity, aerosol therapy; methods in and indicators for respiratory therapeutics. Precedes clinical rotation. Six hours of laboratory per week. Corequisites: HSRT 230 and HSRT 231.

**Prerequisite(s):** (HSRT 230 (may be taken concurrently) and HSRT 231 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 222 Dev Prac In Clin Appl (2 Credits)

**Lecture:** 0, **Lab:** 12

Developmental Practicum in Clinical Applications (2) Skills enhancement of basic procedures and clinical development in patient respiratory care plan, CPR, mechanical ventilation, and patient assessment. Twelve hours of laboratory per week. Corequisite: HSRT 232.

**Prerequisite(s):** (HSRT 220 and HSRT 232 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Dept of Health Sciences

## HSRT 230 Intro Resp Therapy (3 Credits)

**Lecture:** 3, **Lab:** 0

Introduction to Respiratory Therapy (3) Introduction to respiratory care basic sciences applications, terminology, ventilatory mechanics, blood-gas analysis, and acid-base balance. Three hours of lecture per week. Corequisites: HSRT 220 and HSRT 231.

**Prerequisite(s):** (HSRT 220 (may be taken concurrently) and HSRT 231 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 231 Cardio-Pulmonary Systems (3 Credits)

**Lecture:** 3, **Lab:** 0

Cardiopulmonary Systems (3) Anatomical and physiological study of the cardiovascular and pulmonary systems; contrast of the normal versus dysfunctional cardiopulmonary system; relationship to and effect upon renal physiology. Three hours of lecture per week. Corequisites: HSRT 220 and HSRT 230.

**Prerequisite(s):** (HSRT 233 (may be taken concurrently) and HSRT 240 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 232 Intermediate Clin App (3 Credits)

**Lecture:** 4, **Lab:** 0

Intermediate Clinical Applications (4) Theoretical applications in patient assessment, administration, and evaluation of oxygen and aerosol. Intermittent breathing exercises; basic CPR training; and development in mechanical ventilation administration. Four hours of lecture per week. Prerequisites: HSRT 220, HSRT 230, and HSRT 231. Corequisite: HSRT 222.

**Prerequisite(s):** (HSRT 220 and HSRT 230 and HSRT 231) and HSRT 222 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Dept of Health Sciences

## HSRT 233 Initroductio to Respiratory Therapy (2 Credits)

**Lecture:** 2

Introduction the practice of Respiratory Therapy procedures, equipment applications; therapeutic modalities. 2 credit hours every week.

**Prerequisite(s):** (HSRT 231 (may be taken concurrently) and HSRT 240 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 234 Intermediate Clinical Applications (2 Credits)

**Lecture:** 2

Theoretical applications in patient assessment, administration, and evaluation of oxygen and aerosol. Intermittent breathing exercises; basic CPR training and development in mechanical ventilation administration. Two credit hours per week.

**Prerequisite(s):** (HSRT 242 (may be taken concurrently)) and (HSRT 231 and HSRT 233 and HSRT 240)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 240 Clinical Practicum I (5 Credits)

**Lab:** 5

Introduction to procedures, equipment applications; therapeutic modalities for oxygen, humidity, aerosol therapy; methods in and indications for respiratory therapeutics. 5 credit hours.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 242 Clinical Practicum II (4 Credits)

**Lab:** 4

Application to patient care of RT procedures, equipment applications; therapeutic modalities for oxygen, humidity, aerosol therapy; methods in and indications of respiratory. 4 credit hours per week.

**Prerequisite(s):** (HSRT 231 and HSRT 233 and HSRT 240) and (HSRT 234 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 301 Respiratory Care Seminar (1 Credits)

**Lecture:** 1

Review of contemporary therapeutic and patient care issues in respiratory care. 1 hours lecture per week.

**Prerequisite(s):** HSRT 233 and HSRT 240 and HSRT 242 and HSRT 234

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Adm and Adm Health Scienc

## HSRT 307 Resp Care Appl I (1 Credits)

**Lecture:** 1

Respiratory Care Applications I (1) Applications and analyses of clinical data for presentation by respiratory care practitioners. One hour of lecture per week. Prerequisite: Consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

## HSRT 308 Resp Care Appls II (1 Credits)

**Lecture:** 1

Respiratory Care Applications II (1) Continuation of HSRT 307 to include simulations and presentations. One hour of lecture per week. Prerequisite: Consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**HSRT 320 App Proc Equip Clin Prac III (2 Credits)****Lecture:** 0, **Lab:** 6

Applied Procedures and Equipment - Clinical Practicum III (2) Study of and clinical practice in applications of the operation, mechanical features, limitations of, and indications for various types of equipment used in respiratory care. Six hours of laboratory per week. Prerequisites: HSRT 222 and HSRT 232. Corequisites: HSRT 321, HSRT 330, and HSRT 331.

**Prerequisite(s):** (HSRT 222 and HSRT 220 and HSRT 230 and HSRT 231 and HSRT 232) and (HSRT 321 (may be taken concurrently) and HSRT 330 (may be taken concurrently) and HSRT 331 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 321 R T Clinical Prac IV (2 Credits)****Lecture:** 0, **Lab:** 6

Respiratory Therapy Clinical Practicum IV (2) Symptomatic presentations and pathophysiological manifestations; clinical experiences; case studies; and advanced respiratory patient care procedures at clinical sites. Six hours of laboratory per week. Corequisite: HSRT 331.

**Prerequisite(s):** (HSRT 220 and HSRT 222 and HSRT 230 and HSRT 231 and HSRT 232)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 322 R T Clin Prac V (2 Credits)****Lecture:** 0, **Lab:** 6

Respiratory Therapy Clinical Practicum V (2) Continuation of HSRT 321 with emphasis on advanced respiratory care practice and technology where invasive and specialized procedures are used. Six hours of laboratory per week. Corequisite: HSRT 332.

**Prerequisite(s):** (HSRT 220 and HSRT 222 and HSRT 230 and HSRT 231 and HSRT 232 and HSRT 320 and HSRT 321)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 323 R T Clin Prac VI (2 Credits)****Lecture:** 0, **Lab:** 6

Respiratory Therapy Clinical Practicum VI (2) Long-term, critical, intensive, surgical, and post-surgical assessment of respiratory care therapeutics presented. Advanced clinical experiences, procedures, and case studies obtained at clinical sites. Six hours of laboratory per week. Corequisite: HSRT 333.

**Prerequisite(s):** (HSRT 220 and HSRT 222 and HSRT 230 and HSRT 231 and HSRT 232 and HSRT 320 and HSRT 321)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 325 Ped Clin Pract (2 Credits)****Lecture:** 0, **Lab:** 12

Pediatric Clinical Practicum (2) Procedures and treatment modalities utilized in the clinical management of neonatal and pediatric patients. Twelve hours of laboratory per week. Corequisite: HSRT 340.

**Prerequisite(s):** HSRT 340 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 330 App Proc & Equip (3 Credits)****Lecture:** 3, **Lab:** 0

Applied Procedures and Equipment (3) Study of airway management, resuscitation, continuous assisted ventilation. Specific mechanics and applications of equipment/techniques utilized in corresponding clinical sites. Three hours of lecture per week. Corequisites: HSRT 320, HSRT 321, and HSRT 331.

**Prerequisite(s):** (HSRT 231 and HSRT 233 and HSRT 234 and HSRT 240 and HSRT 242) and (HSRT 331 (may be taken concurrently) and HSRT 334 (may be taken concurrently) and HSRT 340 (may be taken concurrently) and HSRT 360 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 331 Cardio-Pulmonary Systems (3 Credits)****Lecture:** 3, **Lab:** 0

Theoretical and Applied Respiratory Therapy (3) Study of the pathophysiology and clinical presentations manifested in pulmonary disease and dysfunction. Acid-base balance; radiological and pulmonary function testing; hemodynamics; and ECG presentations studied. Three hours of lecture per week. Corequisite: HSRT 321.

**Prerequisite(s):** (HSRT 231 and HSRT 233 and HSRT 234 and HSRT 240 and HSRT 242) and (HSRT 330 (may be taken concurrently) and HSRT 334 (may be taken concurrently) and HSRT 340 (may be taken concurrently) and HSRT 360 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 332 App Proc & Equip (3 Credits)****Lecture:** 3, **Lab:** 0

Applied Procedures and Equipment (3) Study of advanced, invasive, and specialized procedures applicable to the function of the cardiopulmonary and renal systems. Continuation and augmentation of HSRT 330. Three hours of lecture per week. Corequisite: HSRT 322.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 333 Cardio-Pulmon Diseases (3 Credits)****Lecture:** 3, **Lab:** 0

Cardiopulmonary Diseases (3) Advanced study of pathology, diagnosis, treatment, and assessment of pulmonary, circulatory, and renal dysfunction. Emphasis on identification of and treatment regimen for specific cardiopulmonary dysfunction. Three hours of lecture per week. Corequisite: HSRT 323.

**Prerequisite(s):** (HSRT 220 and HSRT 222 and HSRT 230 and HSRT 231 and HSRT 232 and HSRT 320 and HSRT 321 and HSRT 330 and HSRT 331)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci**HSRT 334 Resp Care Pharmacotherapy (3 Credits)****Lecture:** 3, **Lab:** 0

Respiratory Care Pharmacotherapy (3) Clinical aspects and physiologic effects of drugs administered by the respiratory care practitioner. Clinical activities involved in the preparation, delivery, and therapeutic evaluation of administered drugs. Three hours of lecture per week. Prerequisite: HSRT 230 or HSRT 231.

**Prerequisite(s):** (HSRT 220 and HSRT 222 and HSRT 230 and HSRT 231 and HSRT 232)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Prattice/Clinical Hlth Sci

**HSRT 340 Neo Ped Resp Care (3 Credits)****Lecture:** 3, **Lab:** 0

Neonatal and Pediatric Respiratory Care (3) Respiratory care of newborns, infants, and children; procedures in oxygen, aerosol, and ventilatory therapeutics; and review of anatomy/physiology, specific abnormalities, specialized procedures, and clinical presentations. Three hours of lecture per week. Corequisite: HSRT 325.

**Prerequisite(s):** (HSRT 220 and HSRT 222 and HSRT 230 and HSRT 231 and HSRT 232 and HSRT 320 and HSRT 321 and HSRT 330)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 360 Clinical Practicum III (6 Credits)****Lab:** 6

Clinical application of the operation, mechanical features, limitations of and indications of various equipments used in respiratory care. Six hours of laboratory per week.

**Prerequisite(s):** HSRT 330 and HSRT 334 and HSRT 340 and HSRT 331

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 361 Clinical Practicum IV (4 Credits)****Lab:** 4

Clinical practice an application of respiratory care principles and standards to the care of patients based on symptomatic presentation, pathophysiological manifestations, clinical experiences at clinical sites. 4 credit hours.

**Prerequisite(s):** HSRT 301 and HSRT 332 and HSRT 333

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 400 Data Analysis (3 Credits)****Lecture:** 3

Techniques for data discovery and extraction relevant to clinical studies and research application. Course focuses on exercises in the selection and employment of appropriate statistical methods required to complete experimental design. 3 hours week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 403 Advanced Practice Applications (3 Credits)****Lecture:** 3

Course engages students in emerging clinical and medicinal applications related to the respiratory care professional. Student select from skill development options in health specialization areas of project development. 3 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 407 Comprehensive Review Seminar (1 Credits)****Lecture:** 1

Application and Analysis of clinical data for presentation to respiratory care practitioners. 1 hour lecture per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 420 Comp Rest Care (2 Credits)****Lecture:** 2, **Lab:** 0

Comprehensive Respiratory Care (2) Comprehensive study of the respiratory care practice at both the technician and therapist levels based on NBRC job analysis survey results. Two hours of lecture per week.

**Prerequisite:** Consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 421 Education in Respiratory Care (2 Credits)****Lecture:** 2

Students are trained in educational methods for patients, family members, and allied health practitioners delivery methods, classroom design and technical applications, and experimental practice. Exercises in development of educational objectives, learning outcomes, design/implementation of evaluation instruments. 2 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 432 Healthcare Leadership (3 Credits)****Lecture:** 3

Study in building leadership competencies synchronizes clinical skills and technological acuity intersecting governing policies, science and medicine, population trends impacting global issues, hospital corporate governance, health inter-professional (interdisciplinary), leadership communication and perspective models. 3 hours of lecture per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 433 Pulmonary Rehabilitation (3 Credits)****Lecture:** 3

Study in medical, ethical and reimbursement application for pulmonary rehabilitation issues and impacting factors regarding home care, sleep diagnostic facilities, treatment, discharge planning and impacting legislative and accreditation regulations. 3 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 435 Ecg Tech (3 Credits)****Lecture:** 3, **Lab:** 4

Electrocardiographic Technology (3) ECG techniques, procedures, patterns, and interpretations; systematic methods for reading electrocardiograms. Three hours of lecture and four hours of laboratory per week. Prerequisite: Consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 436 Intro Respiratory Research (3 Credits)****Lecture:** 3

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 437 Current Issues Trends in Respiratory Therapy Care (3 Credits)****Lecture:** 3

Course examines evolving profession, impacting political, social and ethical trends that effect/potentially effect clinical interventions and provisions of the respiratory care practitioner. Students are engaged in independent study and group discussion on these issues. 3 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 438 Statistics in Respiratory Care (3 Credits)****Lecture:** 3

Students will study and utilize statistical software in employed for clinical investigations regarding diagnostic procedures, treatment outcomes, and other relevant respiratory and health related topics. Studies include central tendency and variability, probability, analysis of variance and data association and prediction. 3 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 439 Advanced Cardiopulmonary Life Support (3 Credits)**

**Lecture:** 3, **Lab:** 4

Clinical interventions for the urgent treatment of cardiac arrest, stroke, and other life-threatening medical emergencies, as well as the knowledge and skills to deploy those interventions. 3 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 440 Respiratory Therapy Management (4 Credits)**

**Lecture:** 3, **Lab:** 4

Respiratory Therapy Management I (4) Departmental management involving personnel, decision making, budgeting, evaluation of departmental effectiveness, and development of departmental policies. Three hours of lecture and four hours of laboratory per week.

Prerequisite: Consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 441 R T Mgmt II (4 Credits)**

**Lecture:** 3, **Lab:** 4

Respiratory Therapy Management II (4) Continuation of HSRT 440. Three hours of lecture and four hours of laboratory per week. Prerequisites:

HSRT 440 and consent of the Program Director.

**Prerequisite(s):** HSRT 440

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 444 Case Management in Respiratory Care (4 Credits)**

**Lecture:** 4

Training focused on education patients and families, training patients on self-management tools and transitioning patients from acute care to Outpatient management. Studies in patient education, home equipment needs, oxygen assessment, medication management and activities of daily living. 4 hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 453 Cardio-Pulmon Tech (5 Credits)**

**Lecture:** 3, **Lab:** 6

Cardiopulmonary Technology (5) Pulmonary function testing procedures and interpretation; study of equipment and standards used in pulmonary testing. Three hours of lecture and four hours of laboratory per week.

Prerequisite: Consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**HSRT 454 Crit Care & Internship (5 Credits)**

**Lecture:** 2, **Lab:** 6

Critical Care and Internship (5) Comprehensive study of advanced procedures, therapeutic modalities, decision making, and quality control for the practicing respiratory therapist. Two hours of lecture and six hours of laboratory per week. Prerequisites: Completion of all other professional HSRT courses and consent of the Program Director.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci