

HEALTH SCIENCE COURSE DESCRIPTIONS

ECV 1114 ELECTROCARDIOGRAPHY BASIC - This eight week 64 clock hour course is designed to provide the necessary information to correctly understand and perform the twelve lead EKG by didactic instruction (34 contact hours), laboratory (15 contact hours), and clinical practicum (15 contact hours). This course includes hospital and health clinic rotations. (4 sch: 2 lecture, 1 lab, 1 clinical).

EMT 1116 EMT BASIC - This one-semester course includes responsibilities of the EMT during each phase of an ambulance run, patient assessment, emergency medical conditions, appropriate emergency care, and appropriate procedures for transporting patient. (6 sch: 2 hr. lecture, 6 hr. lab, 3 hr. clinical).

NAV 1116 ADULT LONG-TERM CARE NURSE AIDE - This 90 clock hour course is designed to prepare the student to assist in providing care as a member of the health care team in a skilled nursing facility under the direction of health care providers through didactic instruction (42 clock hours), lab (28 clock hours) and clinical (20 clock hours). The components of this course include: Fundamentals of Long-Term Care Assisting; Long-Term Care concepts and Skills, Human Needs, and Special Care Procedures. (6 sch: 3 lecture, 2 lab, 1 clinical.)

EMS 1122 INTRODUCTION TO EMS SYSTEMS: This course introduces the student to the Emergency Medical Services (EMS) systems, roles, and responsibilities of the paramedic, well-being of the paramedic, illness and injury prevention, medical/legal issues, ethical issues, therapeutic communications, and life span development. This course was formerly taught as Fundamentals of Pre-hospital Care (EMT 1122). (2 sch: 1-hr lecture, 2-hr lab)

EMS 1314 AIRWAY, VENTILATION, OXYGENATION: Prepares paramedic students in managing a patient's airway using advanced life support techniques. Also provides instruction on troubleshooting and quickly identifying airway management problems; providing adequate respirations and oxygenation, and introduces the student to the importance of proper ventilation. (4 sch.)

EMS 1414 PATIENT ASSESSMENT: This course will teach comprehensive history taking and physical exam techniques. (4 sch: 1-hr lecture, 6-hr lab)

EMS 1513 PRACTICUM I: This course will introduce the paramedic students to clinical rotations in the hospital setting. Students will perform patient assessments to include a history and vital signs and limited medication administration with preceptor supervision. Each student must successfully perform a minimum of **10** intubations this semester whether they be live in a clinical setting, high-fidelity simulation or low-fidelity simulation. The student may have the opportunity to practice on cadaveric specimens when time and availability allows (3 sch.)

EMS 1614 PHARMACOLOGY: This course introduces the paramedic student to the many different types of medications both encountered and used by the paramedic on a day-to-day basis. The student is taken through how the medications alter cell function, and they are introduced to the biological ramifications of the use of multiple medications, and how these medications can either work together, or against each other when a patient takes them. The student is introduced to the many medications that are carried on an advanced life support ambulance, and how these medications are used based on specific patient conditions. The “ 6 Rights” of medication administration are addressed and the student will learn to employ this mode of accountability prior to giving any medication to any patient. (4 sch.)

EMS 1825 CARDIOLOGY: This class will teach a comprehensive approach to the care of patients with acute and complex cardiovascular compromise. This course was previously named Pre-hospital Cardiology (EMT 1825). (5 sch: 2-hr lecture, 6-hr lab)

EMS 2855 MEDICAL PATIENTS: This course will provide a detailed understanding of the anatomic structures, physiology, and pathophysiology encountered when providing care in medical emergencies involving pulmonary, allergy and anaphylaxis, gastroenterology, renal urology, and hematology. This course was previously called Pre-hospital Medical Care (EMT 2855). (5 sch: 2-hr lecture, 6-hr lab)

EMS 1525 PRACTICUM II: : This course will provide clinical and field training on the skills and knowledge obtained in classroom. This will be a supervised activity carried out in the clinical and field setting at approved site. This course was previously taught as EMS Clinical Internship II and now incorporates EMS Field Internship I (EMT 2552). (5 sch: 9-hr clinical, 6-hr field clinical)

EMS 2714 TRAUMA PATIENTS: This course will provide advanced instruction in the integration of pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for a suspected trauma patient. This course was previously called Pre-hospital Trauma (EMT 2714). (4 sch: 2-hr lecture, 4-hr lab)

EMS 2414 MATERNAL/CHILD PATIENTS: This course will provide a detailed understanding of the anatomic structures, physiology, and pathophysiology encountered when providing care in gynecological and obstetrical emergencies as well as pediatric emergencies. The course was previously divided into Pre-hospital OB/GYN (EMT 2412) and Pre-hospital Pediatrics (EMT 2423). (4 sch: 3-hr lecture, 2-hr lab)

EMS 2565 PRACTICUM III: This course will provide advanced clinical and field experiences in the skills and knowledge obtained in the classroom with an emphasis on leadership skills. These will be supervised activities carried out in the clinical and out-of-hospital field setting at approved sites with an approved preceptor. This course was previously called EMS Field Internship II (EMT 2564). (5 sch)

EMS 2912 EMS OPERATIONS: This course teaches the leadership skills necessary to manage complex situations including patient care, management of the hazardous and crime scene, supervision, mentoring, and leading other personnel. (2 sch: 1-hr lecture, 2-hr lab)

EMS 1422 SPECIAL PATIENT POPULATIONS: This course will provide a comprehensive overview of providing care for the patient with special needs. This course was previously taught as Special Considerations (EMT 1423). (2 sch: 1-hr lecture, 2-hr lab)

NUR 2013 NURSING TRANSITION FOR LPN/RN - This course is designed to facilitate the student's transition from practical nursing to the role of registered nurse. Content in this course is meant to supplement and augment content learned in a practical nurse program. Topics include Nursing Process, Therapeutic Communication, Role Transition, Pharmacology, Expanded Assessment Skills, Computer Skills Orientation and Dosage Calculation. Upon successful completion, the student will progress to the second year of the Associate Degree Nursing program. Pre-requisites: Completion of prerequisites for Associate Degree Nursing program. Credit: 3 credit hours (3 theory clock hours per week with 1 lab hour ratio of 1 to 3; 45 total theory clock hours and 45 total lab clock hours)

NUR 2124 MENTAL HEALTH NURSING – This course focuses on the application of the nursing process and development of therapeutic communication skills while implementing nursing interventions with clients experiencing a variety of mental health disorders. Clinical practice settings include acute and chronic in-patient settings with adolescent and adult clients. Hospitals and ambulatory care facilities serve as practice settings. Effective and therapeutic communication skills and clinical decision making are integrated. Pre-requisites: NUR 2013. Credit: 4 credit hours/3 theory and 1 clinical. (3 theory clock hours per week and 3 clinical clock hours per week with lab hour ratio 1 to 3; 45 total theory clock hours/ 45 total clinical clock hours).

NUR 2128 FAMILY HEALTH NURSING – This course focuses on prenatal, labor and delivery, post-partum, immediate delivery and evaluation of the mother, newborn and the impact of the family unit. This course also focuses on children from birth through adolescence (age 18) who may be experiencing an acute or chronic illness, born with a congenital defect/disease or experiencing a problem with normal development and maturation. Normal growth and development, physical assessment, nutrition, parenting skills and scheduled immunizations for well and ill children are addressed. In addition, the course includes specific medical-surgical health disorders covered across the life span. Medication administration, communication skills, and clinical reasoning are emphasized throughout the course. Pre-requisites: NUR 2013, NUR 2124. Credits: 8 credit hours/6 theory and 2 clinical. (6 theory clock hours per week and 6 clinical clock hours per

week with lab hour ratio 1 to 3; 90 total theory clock hours total/90 total clinical clock hours total

NUR 2227 MEDICAL-SURGICAL NURSING- This course emphasizes the nursing process to provide safe effective nursing care to the adult client in an acute care environment to include mastery of skills in system specific assessment, clinical decision making, communication, and technology. Clinical emphasis is placed on caring for adult clients with acute complex health care needs with a focus on medication administration, communication skills, and clinical reasoning. Prerequisites: NUR 2013, NUR 2124, NUR 2128. Credits: 7 credits hours/4 theory and 3 clinical (4 theory clock hours per week and 9 clinical clock hours per week with lab ratio 1 to 3: 60 total theory clock hours/135 total clinical clock hours).

NUR 2223 MANAGEMENT OF CLIENT CARE – This course is all inclusive of previously taught courses with emphasis on patient rights, employer responsibilities, legal/ethical implications of nursing practice, effective use of the nursing process, delegation, prioritizing care, clinical supervision and management styles. Prerequisites: NUR 2013, NUR 2124, NUR 2128. Co-Requisite NUR 2227. Credit: 3 credit hours (2 hours theory and 1 hour clinical – 45 clinical hours).

NUR 2232 NCLEX REVIEW - Computer based multiple choice testing is administered for reinforcement and to promote mastery of content. Students take an online NCLEX review course and complete a comprehensive content mastery program. Prerequisites: NUR 2013, NUR 2124, NUR 2128. Co-requisites: NUR 2227, NUR 2223. Credit: 2 credit hours. Offered in spring of year two.

PEV 1116 PHLEBOTOMY BASIC - This is a one semester 240 clock hour certificate course designed to prepare students to practice as a phlebotomist by a combination of didactic instruction (60 clock hours), laboratory (60 clock hours), and clinical practicum (120 clock hours). This course includes 4 sch of lecture, 4 sch of procedures and practices and 8 hours of clinical practicum. (6 sch: 4 lecture, 4 lab, 8 clinical)

PEV 1115 PHLEBOTOMY FAST TRACK- This course is an eight week course designed for students who have been working in the medical field with on the job training and desire a certificate of completion in Phlebotomy. This course is a total of 80 clock hours and is taught over 8 weeks to include 20 clock hours of lecture, 20 clock hours of lab and 40 clock hours of clinical. (5 sch: 1 lecture, 1 lab, 3 clinical)

PNV 1213--BODY STRUCTURE AND FUNCTION- This course is a study of body structure and function essential to safe and effective nursing care. Each system of the body is covered with applications to nursing. (3 semester credit hours, 3 hour lecture)

PNV 1443--NURSING FUNDAMENTALS AND CLINICAL- This course provides the student with the basic knowledge and skills necessary to care for individual in wellness and illness and is applicable across the life span, as well as demonstration and supervised practice of the fundamentals skills related to practical nursing. (13 sch: 6 hr. lecture, 10 hr. lab, 6 hr. clinical) (Total instructional hours for the courses: 90 hr. lecture, 150 hr. lab, 90 hr. clinical)

PNV 1524—IV THERAPY AND PHARMACOLOGY – This course provides the student with Principles of IV Therapy and pharmacology. Principles covered in the course include the

administration of medication, administration of IV fluids, and administration of IV medications included in the scope of practice for the practical nurse. The extended role of IV Therapy included in this course is in accordance with the Mississippi Nursing Practice Law and Administrative Code (4 sch: 3 hr. lecture, 2 hr. lab)

PNV 1682---ADULT HEALTH CONCEPTS AND CLINICAL- This course is designed to provide the student with the basic theory and clinical experiences needed to provide safe, effective care to the adult client experiencing, acute, chronic or life-threatening physical health conditions in all body systems and the knowledge to prepare for the role transition from student to practical nurse. (12 sch: 8 hr lecture, 4 hr clinical) (Total instructional hours for the course: 120 lecture, 180 clinical).

PNV 1728---SPECIALITY AREAS IN NURSING- This course provides the student with the basic knowledge and skills to promote and/ or provide safe and effective care for clients and families during antepartum, and postpartum periods as well as infancy through adolescence. It also provides the basic knowledge and skills to assist in the promotion of the emotional, mental, and social well-being of the client and family experiencing a mental health alteration. (8 sch: 7.33 hr. lecture, 2 hr. clinical) (Total instructional hours for the course: 110 hr. lecture, 30 clinical)

PNV 1914--- NURSING TRANSTION- This course prepares student for the role transition and the National Council Licensure Examination (NCLEX-PN). (4 sch: 3 hr. lecture, 3 hr. clinical)

PSG 1113 – POLYSOMNOGRAPHY PATHOPHYSIOLOGY. This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations form homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. (3 semester credit hours: 3 lecture hours)

PSG 11146 – INTRODUCTION TO POLYSOMNOGRAPHY. This course introduces the polysomnography profession. Topics include the history of the profession and role of the polysomnographic technologist, communication, time management, infection control, basic patient assessment, and medical gas therapy. Upon completion, students should be able to demonstrate competence in concepts through written and laboratory evaluations. (6 semester credit hours: 4 lecture hours, 4 lab hours)

PSG 1123–POLYSOM TECHNOLOGY. This course introduces the fundamental concepts of electricity and test equipment in the field of polysomnography. Topics include basic DC/AC principles (voltage, resistance, current, impedance), components (resistors, inductors, capacitors), power and operation of test equipment. (3 semester credit hours: 3 lecture hours)

PSG 2214 - PSG SCORING AND ANALYSIS. This course provides an immediate level of scoring and data analysis for polysomnographic testing. Students will learn the procedures necessary to generate and validate a report of the scoring of objectives and subjective data obtained in a polysomnographic study. (4sch. 4 hr. lecture)

PSG 2224 - POLYSOMNOGRAPHY CAPSTONE. This course is designed to apply the essential elements of polysomnography through the use of case students. Students develop an

analytical approach to problem solving. Review of curriculum, test taking skills, and prepare the student for the registry exam. (4 semester credit hours: 4 lecture hours)

PSG 2216–8 – CLINICAL APPLICATION I. This course provides practical application of theories covered in previous PSG courses. Emphasis is placed on polysomnography testing and procedures. Upon completion, students should be able to demonstrate competence through laboratory evaluation. (8 semester credit hours: 24 clinical hours)

PSG 2227 – CLINICAL APPLICATION II. This course provides practical application of theories covered in previous PSG courses. Emphasis is placed on polysomnography testing and procedures. Upon completion, students should be able to demonstrate competence through laboratory evaluation. (7 semester credit hours: 21 clinical hours)

PSG 2132 – PROFESSIONAL TRANSITION. This course builds on previous knowledge and skills applicable to the practice of professional polysomnography. This course provides an overview of professional concepts basic to the development of professionalism in polysomnography. Emphasis is placed on changes in the health care environment and the impact on the professional polysomnographer's role. Accountability and responsibility issues as they relate to professional polysomnography are discussed. The students will begin the development of a professional portfolio for use throughout the curriculum and in the professional practice settings. (2 semester credit hours: 2 lecture hours)

RCT 1214--RESPIRATORY CARE SCIENCE--Designed to introduce the student practitioner to fundamental elements important to the delivery of health care in a safe, efficient and professional manner. (4 semester credit hours: 3 lecture hours, 2 lab hours). Prerequisites: BIO 1514 and BIO 1524; program admission; or program director's approval.

RCT 1223--PATIENT ASSESSMENT AND PLANNING--This course is a fundamental approach to subjective and objective evaluation, assessment, and care plan formation for the individual needs of the patient. It is an introduction to cardiopulmonary diseases including etiology, pathophysiology, complications, occurrences, clinical manifestations, treatment, and prevention. (3 semester credit hours: 2 lecture hours, 2 lab hours).

RCT 1313--CARDIOPULMONARY ANATOMY AND PHYSIOLOGY--This course is a study of cardiopulmonary and renal physiology in relation to the practice of respiratory care. (3 semester credit hours: 3 lecture hours)

RCT 1322--PULMONARY FUNCTION TESTING--This course is an introduction to pulmonary function technique and testing equipment with patient data evaluation and recommendation based on pulmonary function results. (2 semester credit hours: 1 lecture hour, 2 lab hours) Prerequisites: RCT 1313, or instructor's approval

RCT 1416--RESPIRATORY CARE TECHNOLOGY I--This course is a study of respiratory treatment equipment design and operation related to non-critical acute care procedures. (6 semester credit hours:3 lecture hours, 6 lab hours)

RCT 1424--RESPIRATORY CARE TECHNOLOGY II - This course is a continuation of Respiratory Care Technology I. It is a study of the management of respiratory failure, including

mechanical ventilation, pulmonary rehabilitation, and home care. (4 semester credit hours: 3 lecture hours, 2 lab hours)

RCT 1516--CLINICAL PRACTICE I--Patient assessment, performance of respiratory care procedures, and care plan formation are practiced in the hospital environment. A procedural guide is utilized to evaluate student competencies and performance of respiratory care procedures. (6 semester credit hours: 18 clinical hours) Prerequisites: BIO 1514, BIO 1524, RCT 1214, RCT 1223, and RCT 1313

RCT 1524--CLINICAL PRACTICE II- This course is a continuation of Clinical Practice 1. Students rotate through various respiratory care subspecialty areas for evaluation of competency and performance of respiratory care procedures. (4 semester credit hours: 9 clinical hours).

RCT 1613--RESPIRATORY CARE PHARMACOLOGY--This course is designed to introduce the student to the pharmacology related to cardiopulmonary disorders. (3 semester credit hours: 3 lecture hours) Prerequisites: RCT 1214, RCT 1313, and RCT 1223

RCT 2333--CARDIOPULMONARY PATHOLOGY--This course is a study of the cardiopulmonary pathophysiology. It includes etiology, clinical manifestations, diagnostics, and treatment of various cardiopulmonary diseases. Case studies and/or clinical simulations will be utilized to enforce learning and evaluate progress. (3 semester credit hours: 3 lecture hours) Prerequisites: RCT 1313

RCT 2434--RESPIRATORY CARE TECHNOLOGY III--This course is an advanced study of respiratory care in the critical care setting. Topics include nonconventional modes of mechanical ventilation, hemodynamics, special procedures, and advanced cardiac life support. (4 semester credit hours: 3 lecture hours, 2 lab hours) Prerequisites: RCT 1523

RCT 2534--CLINICAL PRACTICE III-- This course is a continuation of Clinical Practice I and II. Students will rotate through various clinical areas for evaluation of competency, performance and/or observation of respiratory care procedures. (4 semester credit hours: 12 clinical hours) Prerequisites: RCT 1516 and RCT 1523

RCT 2546--CLINICAL PRACTICE IV--This a continuation of Clinical Practice III. Students rotate through respiratory care areas. A procedural guide is utilized to evaluate student competency and performance. (6 semester credit hours: 18 clinical hours) Prerequisites: RCT 1516, RCT 1523, and RCT 2534

RCT 2613--NEONATAL/PEDIATRICS MANAGEMENT--This course is a study of fetal development and the transition to extra uterine environment. It includes the most common cardiopulmonary disorders, neonatal and pediatric disease processes, and the modes of treatment. (3 semester credit hours: 3 lecture hours) Prerequisite: RCT 2434

RCT 2713--RESPIRATORY CARE SEMINAR--This course is designed to integrate the essential elements of respiratory care practice through the use of care plans, case studies, and clinical simulations in a laboratory environment. Students will develop an analytical approach to problem solving. Critical thinking is emphasized. (Delivery techniques may include traditional face-to face or online) 3 semester credit hours: 2 lecture hour, 2 lab hours) Prerequisites: RCT 1523