# **Paramedic Science (PARM)**

## **Courses**

## PARM 2211 Basic ECG Interpretation: 3 semester hours.

Introductory ECG course. Anatomy and physiology of the conduction system of the heart, the electrical system, electrocardiography, abnormal ECG patterns and distinguishing between life-threatening and non-life-threatening dysrhythmias. Introduction to dysrhythmia management. PREREQ: Acceptance into Paramedic program or permission of instructor. F

## PARM 2212 Paramedic Pharmacology: 3 semester hours.

Fundamental, drug-class oriented course that focuses on the pharmacodynamics and pharmacokinetics of drug therapy, drug calculations, and the pharmaceutical interventions of common EMS medications. Roles, responsibilities, and ethical considerations of drug administration. COREQ: PARM 2213, PARM 2213L, and PARM 2217L. F

#### PARM 2213 Paramedic Fundamentals: 2 semester hours.

Basic patient assessment concepts, review of basic airway management, and introduction to advanced airway management/ventilation, intravenous skills, and medication administration via enteral and and parenteral routes. COREQ: PARM 2212, PARM 2213L, and PARM 2217L. F

## PARM 2213L Paramedic Fundamentals Lab: 1 semester hour.

Focus on BLS and ALS airway management as well as intravenous cannulation, medication administration, and drug calculations. Graded S/U. COREQ: PARM 2212, PARM 2213, and PARM 2217L. F

## PARM 2214 Paramedic Pathophysiology: 3 semester hours.

Correlative approach to pathophysiology, applying both physical assessment skills and basic cellular understanding to the various disease entities and trauma processes encountered in emergency medicine. PREREQ: Acceptance into Paramedic program or permission of instructor. F

# PARM 2215 Introduction to Paramedic Medicine: 3 semester hours.

Interactive presentation and discussion of foundational aspects of EMS within the healthcare system. Includes ethics, medical-legal issues, roles and responsibilities of the paramedic, healthcare policy, and the role of research within EMS. PREREQ: Acceptance into Paramedic program. F

## PARM 2217L Paramedic Integration I Lab: 1 semester hour.

Designed to teach, integrate and complement content from concurrent Paramedic lecture courses as well as reinforce assessment and therapeutic communication techniques while reviewing and assessing skills learned from concurrent and prior EMS coursework. COREQ: PARM 2212, PARM 2213, and PARM 2213L. Graded S/U. F

## PARM 2221 Medical Emergencies: 3 semester hours.

Recognition, assessment, and treatment of medical diseases involving cardiac, respiratory, neurologic, endocrine, abdominal, hematologic, behavioral disorders, toxicology and renal systems. Includes ACLS. COREQ: PARM 221L. PREREQ: PARM 2211, PARM 2212, PARM 2213, PARM 2213L, and PARM 2215, and acceptance into Paramedic program or permission of instructor.

## PARM 2221L Medical Emergencies Lab: 1 semester hour.

Reinforces and integrates the recognition and treatment of medical diseases as taught in PARM 2221. Skill modalities include pharmacological intervention, ECG interpretation, basic and advanced airway interventions, patient assessment, patient management, and decision-making. Graded S/U. COREQ: PARM 2221. S

#### PARM 2222 Trauma Care: 2 semester hours.

A comprehensive approach to assessment, injury recognition, and management of the trauma patient. An introduction of trauma systems, injury prevention, kinematics and aeromedical use and integration. Includes PHTLS. PREREQ: PARM 2213, PARM 2213L, PARM 2214, and acceptance into Paramedic program or permission of instructor. S

## PARM 2223 Advanced Emergency Care: 2 semester hours.

Combined lecture/lab course focuses on the instruction and integration of skills associated with advanced airway management, renal dialysis, venous access, and pharmacological delivery systems. PREREQ: PARM 2213 and PARM 2213L and acceptance into Paramedic program or permission of instructor. S

## PARM 2224 Special Populations: 3 semester hours.

A comprehensive approach to obstetrics and gynecology, including the pediatric patient from birth to adolescence. Includes introduction to gerontology - to address issues such as lifespan development, cultural diversity, polypharmacy, pathological changes, and treatment variations associated with an aging population. Includes PALS. COREQ: PARM 2224L. PREREQ: Acceptance into Paramedic program or permission of instructor. S

#### PARM 2224L Special Populations Lab: 1 semester hour.

Reinforces and integrates the recognition and treatment of medical diseases as taught in PARM 2224. Skill modalities include pharmacological intervention, ECG interpretation, basic and advanced airway interventions, patient assessment, patient management, and decision-making. Graded S/U. COREQ: PARM 2224. S

## PARM 2225 Advanced ECG Interpretation: 2 semester hours.

An introductory 12-lead ECG interpretation course. Topics include intraventricular conduction delays, myocardial ischemia, injury and infarction, axis deviation, syndrome bundle branch blocks, ectopy, and advanced dysrhythmia interpretation. PREREQ: PARM 2211 or permission of instructor. S

## PARM 2229 Paramedic Clinical Practicum I: 1 semester hour.

Student rotations through various departments in hospitals, performing paramedic skills under the direct supervision of the clinical instructor and/or assigned clinical preceptors. Skills performed include all those learned in previous coursework. Graded S/U. PREREQ: Acceptance into Paramedic program or permission of instructor. S

### PARM 2231 Rescue Operations: 2 semester hours.

An introductory course to include: ambulance operations, rescue and extrication techniques, incident command and hazardous materials. The accompany laboratory portion may be taught in seminar format as necessary. PREREQ: Acceptance into Paramedic program or permission of instructor. Su

# PARM 2237L Paramedic Integration II Lab: 1 semester hour.

Designed to teach, integrate, and complement content from previous Paramedic lecture and laboratory courses. Previously-learned material is reviewed, reinforced, and evaluated as necessary to maintain competency. Graded S/U. PREREO: PARM 2217L, PARM 2221, PARM 2222, and PARM 2223, Su

# PARM 2239 Paramedic Clinical Practicum II: 3 semester hours.

Supports the didactic elements of the Paramedic course. Rotations at various clinical settings including ED, OR, ICU/CCU, Crisis Intervention/Psychiatry and EMS ride-alongs with EMS/fire agencies. In addition, students complete an ACLS Provider course. Other clinical site rotations may be added or substituted as determined by the program. Graded S/U. PREREQ: PARM 2229 and acceptance into Paramedic program or permission of instructor. Su

## PARM 2249 Paramedic Field Practicum II: 6 semester hours.

Capstone course for the student to apply/demonstrate the knowledge/skills learned in the program on an EMS unit. Student is under the direct supervision of an approved preceptor and is required to demonstrate competence as a team leader performing patient assessment skills and formulating a proper treatment plan for situations encountered. Mandatory benchmarks are required. Graded S/U. PREREQ: PARM 2231, PARM 2237L, and PARM 2239, and acceptance into Paramedic program or permission of instructor. F

#### PARM 2296 Independent Studies: 1-8 semester hours.

Addresses specific needs of individuals for the enhancement of knowledge and skills within the program area under the guidance of an instructor. May be repeated. Graded S/U or may be letter graded. PREREQ: Permission of instructor. D

## PARM 2298 Special Topics: 1-8 semester hours.

Addresses the specific needs of industry, enabling students to upgrade technical skills that are not included in the current program curriculum. May be repeated. Graded S/U or may be letter-graded. PREREQ: Permission of instructor. D