

	Fall Semester			Spring Semester			
PROGRAM	EMS 165	EMS 155	EMS 180	EMS 166	EMS 205	EMS 283	EMS 284
Demonstrate an understanding of human anatomy and physiology, and the underlying pathophysiology of various medical and traumatic conditions.	Explain the importance of pharmacokinetics, absorption, biotransformation, elimination, half-life, accumulation, and pharmacodynamics in terms of the effects of a given drug on the body.	Integrates comprehensive knowledge of pathophysiology of the 12 major organ systems.	Integrates comprehensive knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of ensuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.	Describe the pathophysiology of specific disorders in the following areas: respiratory , endocrine , allergic reactions, anaphylaxis, infections, neurological, environmental, genitourinary, OBGYN, and behavioral.	Apply concepts of anatomy and physiology of the circulatory system to explain the disruption of homeostasis that occurs in relation to hemorrhage, as well as the body's compensatory mechanisms for attempting to maintain homeostasis.		
	Relate the anatomy and physiology of cardiovascular disease system to cardiac rhythm generation and to the pathophysiology and assessment of patients with cardiac disorders.	Describe the relationship between homeostasis and health.					
		Explain how hormones, enzymes, proteins, pathogens, and electrolytes affect the major organ systems and how they function with in the human body.				Describe the differences in anatomy, physiology, pathophysiology, assessment, and management of adult, pediatric, geriatric, pregnant, bariatric patients	
		Explain the basis of infectious, immunologic, inflammatory, ischemic, metabolic, nutritional, genetic, congenital, neoplastic, traumatic, physical iatrogenic, and idiopathic classification of diseases.			Describe the differences in anatomy, physiology, pathophysiology, assessment, and management of adult, pediatric, geriatric, pregnant, bariatric patients		
Provide appropriate patient care with respect for diverse cultures, values and beliefs.	Explain the importance of obtaining a good medication history from patients including prescription medications, OTC, vitamins, herbal medications, and folk remedies and other cultural medicines.			Demonstrate the proper technique for assessing patients of different ethnicities while considering cultural beliefs.			Assess patients of different ethnicities while considering cultural beliefs.

Integrate comprehensive knowledge of pre-hospital pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.	Describe the characteristics of drugs used to affect the cardio vascular system	Define tonicity and compare isotonic, hypotonic, and hypertonic solutions and the uses in the field.		Describe the characteristics of drugs used to affect the respiratory disorders, endocrine disorders, allergic reactions, anaphylaxis, and infections	Describe the characteristics of drugs used to affect pediatrics and geriatrics	Demonstrates comprehensive knowledge of pre-hospital pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient..	
		Describe the pharmacology of agents commonly used in medication-assisted intubation.			Describe indications, contraindications, advantages, disadvantages, precautions, and procedures for various pharmacological interventions for traumatic injuries.		
Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression..				Describe the dangers of blood borne diseases, and strategies for prevention in the prehospital environment.	Evaluate various trauma scenes for on-going dangers to providers, patients, and the public.		
Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.	Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet the needs of cardiac patients			Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet the needs of patients with complaints and presentations related to pulmonary, endocrine, allergy, and infection disorders.		Demonstrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint	Perform a cumulative amount of 20 pediatric assessments, 40 adult assessments, 10 trauma assessments, 6 AMS patients, 1 cardiac arrest patient, and 40 Team Leads.
			Integrate patient assessment findings, patient history, and knowledge of anatomy, physiology, pathophysiology, and basic and advanced life support interventions to recognize and manage patients with pulmonary disorders		Integrates comprehensive knowledge of life span development		
Given a variety of scenarios conduct assessments and use critical thinking to manage	Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with cardiac and vascular disorders.			Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with pulmonary, endocrine, allergy, and infection disorders.	Given a variety of scenarios, develop management plans for patients with various traumatic injuries.		

scenes, determine proper patient care, and evaluate changing conditions.			Given a variety of scenarios of patients requiring airway management, including patients with a difficult airway, intervene to establish an effective airway and ventilation.				
Apply local, state, and federal law and protocols to prehospital practice.	Demonstrate applied knowledge of Maryland State Drug Protocols for dysrhythmias and cardiovascular complaints					Utilize the Maryland Trauma Tree to categorize trauma patients.	
	Explain the legal regulations that apply to medications, including the schedule of controlled medications.						
	Explain how key drug legislation applies to the paramedic's role in administering drugs.						
Competently perform all paramedic skills .	Demonstrate the safe administration of medications allowed in your scope of practice under the supervision of a lab instructor or clinical preceptor, including medications administered by percutaneous, pulmonary, enteral, and parenteral routes.		Demonstrate safe technique in orotracheal and nasotracheal intubation, placement of supraglottic devices, needle and surgical cricothyrotomy, and use of various intubation adjuncts such as the Glidescope and bougie.	Given a variety of scenarios, develop treatment plans for patients with respiratory disorders, endocrine disorders, allergic reactions, anaphylaxis, and infections.		Competently perform all psychomotor skills as laid out in the NREMT skills tests	Demonstrate positive patient and team interaction.
Demonstrate consistent positive behavioral characteristics (Affective Domain).							Document patient interaction, including patient complaint, signs/symptoms, physical exam, history, diagnostic treatment, and treatment.
Demonstrate collaborative skills, including communication,						Demonstrate mastery of cumulative paramedic knowledge.	Work as part of a team in evaluating and treating patients in the hospital and prehospital environments.

documentation and teamwork in the field of paramedicine.							
Demonstrate effective use of equipment and resources.			Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and techniques for the use of the advanced airway devices and techniques.				
Integrate comprehensive knowledge of the EMS systems, the safety and wellbeing of the paramedic, and medical-legal and ethical issues, which is intended to improve the health of the EMS personnel, patients and the community.	Explain the paramedic's roles and responsibilities with respect to administering medications.					Demonstrates comprehensive knowledge of the EMS systems, the safety and wellbeing of the paramedic, and medical-legal and ethical issues, which is intended to improve the health of the EMS personnel, patients and the community.	Perform all paramedic skills as a team and ALS Leader in the clinical setting and during field internship
Integrate assessment findings with the principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment /disposition plan for an acutely injured patient.					Describe special considerations in pediatric, geriatric, and other special populations regarding traumatic injury.	Demonstrates assessment findings with the principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment /disposition plan for an acutely injured patient.	
Sit for the NREMT-P Examinations.							