Program	Fall Semester, Year 1			Spring Semester		
	EMS 151	**EMS 155**	**EMS 161**	**EMS 162**	**EMS 163**	**EMS 164**
Demonstrate an understanding of human anatomy and physiology, and the underlying pathophysiology of various medical and traumatic conditions.		Integrates comprehensive knowledge of pathophysiology of the 12 major organ systems.	Recognize signs and symptoms of airway compromise, respiratory distress and respiratory failure	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.	Describe the pathophysiology of specific respiratory disorders, endocrine disorders, allergic reactions, anaphylaxis, and infections.	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.	Demonstrate the steps of assessing the respiratory system			
		Explain how hormones, enzymes, proteins, pathogens, and electrolytes affect the major organ systems and how they function with in the human body.	Integrates comprehensive knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of ensuing a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.			Describe the pulmonary and systemic circulations
		Explain the basis of infectious, immunologic, inflammatory, ischemic, metabolic, nutritional, genetic, congenital, neoplastic, traumatic, physical iatrogenic, and idiopathic classification of diseases.				Explain the functions of conductance, resistance, exchange, and capacitance vessels.

Provide appropriate patient care with respect for diverse cultures, values and beliefs.	Describe the relationship between ethics and morals, laws, culture, and religion.			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.	Describe the significance of the prevalence of cardiovascular disease into eh US and Canada.
Integrate comprehensive knowledge of pre-hospital pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.		Define tonicity and compare isotonic, hypotonic, and hyper tonic solutions and the uses in the field.	Describe the characteristics of drugs used to affect the pulmonary system		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 the cardio vascular system
			Describe the pharmacology of agents commonly used in medication-assisted intubation.			
Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression.	Use scene size-up and primary assessment findings to make decisions about the priorities of patient care and transport.					
	Adapt the scene size-up, primary assessment, patient history, secondary assessment to appropriately treat responsive and unresponsive patients.					

Integrates 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	Integrate chief complaint, history, physical exam, and diagnostic tests using the diagnostic approach in order to formulate a treatment plan for the patient.		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		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.	Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet the needs of cardiac patients
Given a variety of scenarios conduct assessments and use critical thinking to manage scenes, determine proper patient care, and evaluate changing conditions.	Describe different methods of critical thinking, as related to paramedic assessment and diagnosis.		Given a variety of scenarios of patients requiring airway management, including patients with a difficult airway, intervene to establish an effective airway and ventilation.		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.	Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with cardiac and vascular disorders.
	Given a variety of scenarios , recognize potential threats to safety and wellness of the providers, patients, and bystanders.					
Apply local, state, and federal law and protocols to	Explain the laws, rules, regulations, policies, procedures, protocols, and standing orders of the paramedic's organization so care can be rendered in an ethical manner.			Identify the legal and ethical concerns of medication administration in the United States.		Demonstrate applied knowledge of Maryland State Drug Protocols for dysrhythmias and cardiovascular complaints

law and protocols to prehospital practice.	Describe the types of consent that is legally required prior to providing EMS care. Identify and understand the protections against claims of malpractice/negligence.			Explain the legal regulations that apply to mediations, 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 safe technique in orotracheal and nasotracheal intubation, placement of supraglottic devices, needle and surgical cricothyrotomy, and use of various intubation adjuncts such as the Glideslope and bougie. Compare the ventilation techniques used for an adult patient to those used for pediatric patients, and describe special considerations in airway management and ventilation for the pediatric patient.	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 paraenteral routes.	Given a variety of scenarios, develop treatment plans for patients with respiratory disorders, endocrine disorders, allergic reactions, anaphylaxis, and infections.	Perform ECG Monitoring and Rhythm Strip Analysis for most common dysrhythmias. Obtain a 12-Lead ECG and identify STEMI patients
Demonstrate consistent positive behavioral characteristics (Affective Domain).	Describe the characteristics of professionalism in the role of paramedic Give examples of behaviors that demonstrate the expected professional attitudes and attributes of paramedics.					

Demonstrate collaborative skills, including communication, documentation and teamwork in the field of paramedicine.	Discuss the importance of accurate documentation, radio communication, and verbal reporting. Discuss the differences in documentation for special situations such as refusals of care and mass-casualty incidents.		Accurately and completely document relevant information about assessment and management of the airway, ventilation, and oxygenation in patient care reports.	State the necessary components of a verbal, written, or standing mediation order.		Describe and demonstrate the roles of BLS and ALS providers in the management of patients in cardiac arrest.
Demonstrate effective use of equipment and resources.	Describe the purpose, indications, procedure, normal findings, and limitations of the patient monitoring technology devices.		Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and techniques for the use of the advanced airway devices and techniques.	Identify reliable reference material for drug information.		Demonstrate the use of a cardiac monitor to obtain a 3 lead and 12 lead EKG strip
				Explain the six rights of medication administration		
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	Describe the requirements set for paramedics to practice pre-hospital medicine Discuss the role and responsibilities of paramedics.			Explain the paramedic's roles and responsibilities with respect to administering medications.		Describe the role of the Paramedic in the treatment and management of patients with cardiac disorders

personnel, patients and the community.						
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.	Adapt the scene size-up, primary assessment, patient history, secondary assessment to appropriately treat major and minor trauma patients.					
Sit for the NREMT-P Examinations.						

	Summer Semester		Fall Semester, Year 2			Spring Semest	
EMS 181	**EMS 182**	**EMS 201**	**EMS 210**	**EMS 211**	**EMS 281**	**EMS 220**	**EMS 221**
		Explain the pathophysiology of shock		Identify key differences in pediatric anatomy and physiology			
		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.	Describe the pathophysiology of specific neurological, environmental, genitourinary, obstetrical and gynecological, and behavioral emergencies.	Identify the key differences in geriatric anatomy and physiology			
		Describe the differences in anatomy, physiology, pathophysiology, assessment, and management of adult, pediatric, geriatric, pregnant, bariatric patients		Describe the differences in anatomy, physiology, pathophysiology, assessment, and management of adult, pediatric, geriatric, pregnant, bariatric patients			

Utilize the appropriate rules of conduct concerning communication and interpersonal relationships.	Demonstrate the proper technique for assessing patients of different ethnicities while considering cultural beliefs.	Explain different cultural and religious beliefs regarding treatment and transport of injured patients.	Demonstrate the proper technique for assessing patients of different ethnicities while considering cultural beliefs.	Explain different cultural and religious rituals and practices of a family that do not conform with current medical practices.	Assess patients of different ethnicities while considering cultural beliefs.		
		Describe indications, contraindications, advantages, disadvantages, precautions, and procedures for various pharmacological interventions for traumatic injuries.	Describe the characteristics of drugs used to affect the specific neurological, environmental, genitourinary, obstetrical and gynecological, and behavioral emergencies.	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..
		Evaluate various trauma scenes for on-going dangers to providers, patients, and the public.					

Observe assessments of all patients	Perform appropriate assessments and care for intensive care patients.	Identify common injury patterns based on assessing mechanism of injury.	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 specific neurological, environmental, genitourinary, obstetrical and gynecological, and behavioral emergencies.	Identify components of the pediatric assessment triangle.	Perform pediatric and behavioral assessments		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
Obtain 10 successful IV cannulations				Integrates comprehensive knowledge of life span development			
		Given a variety of scenarios, develop management plans for patients with various traumatic injuries.	Identify key components of physical exam, history, and diagnostic tests used to arrive at a differential diagnosis for altered patients.	Differentiate between various causes of stridor in the pediatric patient.		Describe the various forms of weapons of mass destruction and the injury patterns and illness associated with their use.	
						Describe safety concerns, equipment and resources needed for different rescue scenes and environments.	
						Given a variety of hazardous material scenarios, demonstrate safe and effective patient care	
		Utilize the Maryland Trauma Tree to categorize trauma patients.				Describe the roles of standards, trends, and administrative rules and regulation on the design of ambulances and equipment they carry.	

						Discuss limitations, concerns, and controversies about the use of air medical transport.	
Demonstrate competent placement of intravenous catheters, intubation tubes, and other devices, as trained in the paramedic program classroom.		Demonstrate lifesaving interventions, including airway management, ensuring adequate oxygenation, ventilation, controlling external hemorrhage, providing appropriate fluid resuscitation, and performing pleural decompression.					
	Demonstrate positive patient interaction during encounters.				Demonstrate positive patient and team interaction.		

Accurately document patient encounters through the use of physical or electronic documentation systems.	Demonstrate basic paramedic assessment and treatment skills in the field environment.				Document patient interaction, including patient complaint, signs/symptoms, physical exam, history, diagnostic treatment, and treatment. Work as part of a team in evaluating and treating patients in the hospital and prehospital environments.	Discuss the roles of various personnel within each of the five major areas of NIMS or incident command system (ICS)	
	Utilize appropriate medication therapy in treating patients.					Describe the various specialized equipment carried by other Special Function companies.	
Explain the role of key hospital personnel and departments in continuing the care begun by paramedics.			Describe the role of the Paramedic in the treatment and management of patients with specific neurological, environmental, genitourinary,			Describe the role of the tactical EMS. Describe how the Paramedic can preserve crime scene evidence while rendering emergency care.	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.

						Describe the special challenges and considerations of rural EMS and patient care decisions	
				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.
							Demonstrate mastery of cumulative paramedic knowledge.
							Competently perform all psychomotor skills as laid out in the NREMT skills tests

er

EMS 282

Assess patients of different ethnicities while considering cultural beliefs.

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.

Demonstrate positive patient and team interaction.

Document patient interaction, including patient complaint, signs/symptoms, physical exam, history, diagnostic treatment, and treatment. Work as part of a team in evaluating and treating patients in the hospital and prehospital environments.
Perform all paramedic skills as a team and ALS Leader in the clinical setting and during field internship