Advanced Emergency Medical Technician /Paramedic Bridge
Emergency Medical Technology
Mississippi Curriculum Framework

CIP 51.0904 – (Emergency Medical Technology/Technician EMT Paramedic)

2025

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The Office of Curriculum and Instruction (OCI) was founded in 2013 under the Division of Workforce, Career, and Technical Education at the Mississippi Community College Board (MCCB). The office is funded through a partnership with The Mississippi Department of Education (MDE), who serves as Mississippi's fiscal agent for state and federal Career and Technical Education (CTE) Funds. The OCI is tasked with developing statewide CTE curriculum, programming, and professional development designed to meet the local and statewide economic demand.

For information, please contact curriculum@mccb.edu

Contents

ADOPTION OF NATIONAL CERTIFICATION STANDARDS

National Emergency Medical Services Education Standards

The **National EMS Education Standards** represent another step toward realizing the vision of the *1996 EMS Agenda for the Future*, as articulated in the *2000 EMS Education Agenda for the Future: A Systems Approach*.

The National EMS Education Standards outline the minimal terminal objectives for entry-level EMS personnel to achieve within the parameters outlined in the National EMS Scope of Practice Model. Although educational programs must adhere to the Standards, its format will allow diverse implementation methods to meet local needsand evolving educational practices. The less prescriptive format of the Standards will also allow for ongoing revision of content consistent with scientific evidence and community standards of care.

In implementing the Standards, EMS instructors and educational programs will have the freedom to develop their own curricula or use any of the wide variety of publishers' lesson plans and instructional resources that are available at each licensure level. Consistent with the EMS Education Agenda, EMS accreditation authorities will usethe Standards as the framework for evaluation of program curricula.

The National EMS Education Standards are not a stand-alone document. EMS education programs will incorporateeach element of the education system proposed in the Education Agenda. These elements include:

- National EMS Core Content
- National EMS Scope of Practice
- National EMS Education Standards
- National EMS Certification
- National EMS Program Accreditation

This integrated system is essential to achieving the goals of program efficiency, consistency of instructional quality,and student competence as outlined in the Education Agenda.

For more information related to the National EMS Education Standards, please visit www.ems.gov.

National Registry of Emergency Medical Technicians- Emergency Medical Technicians Exam

For more information related to the National Registry of Emergency Medical Technicians-Paramedic Exam, pleasevisit www.nremt.org.

National Registry of Emergency Medical Technicians- Paramedic Exam

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Mississippi Bureau of Emergency Medical Services

This framework is in compliance with the Mississippi EMS Laws, Rules and RegulationsEmergency Medical Services.

For more information related to the Mississippi Bureau of Emergency Medical Services, please visit www.msdh.ms.gov.

ARTICULATION

There are no state-wide articulation agreements for this program.

TECHNICAL SKILLS ASSESSMENT

Colleges should report the following for students who complete the program with a career certificate, technical certificate, or an Associate of Applied Science Degrees for technical skills attainment. To use the approved Alternate Assessment for the following programs of study, colleges should provide a Letter of Notification to the Director of Career Technical Education at the MS Community College Board. Please see the following link for further instructions: http://www.mccb.edu/wkfEdu/CTDefault.aspx.

CIP Code	**Program of Study**
51.0904	Emergency Medical Services Technician EMT/Paramedic Bridge
Level	**Standard Assessment**
Accelerated Career Pathway	
Level	**Standard Assessment**
Career	
Level	**Standard Assessment**
Technical/AAS	National Emergency Medical Services Education Standards

Research Abstract

In the Fall of 2021, the Office of Curriculum and Instruction (OCI) hosted a meeting with industry members for the Emergency Medical Technician/ Paramedic Bridges. Several meeting took place to gather information as it relates to the new program. Industry advisory team members from the college involved with this program were asked to give input related to changes to be made to the curriculum framework.

Revision History:

2021 Mississippi Community College Board

2024 Mississippi Community College Board

PROGRAM DESCRIPTION

Advanced Emergency Medical Technician

This course is designed to prepare the student to function competently as an Advanced Emergency Medical Technician as described in the National EMS Scope of Practice Model. The primary focus of EMS providers at this level takes the skill and knowledge set of the EMT and adds new skills and treatment modalities for critical and emergent patients who access the emergency medical system. The Advanced Emergency Medical Technician functions as part of a comprehensive EMS system and functions under medical oversight to provide emergency care at a higher level than EMT level providers but less than that provided by a Paramedic level provider.

SUGGESTED COURSE SEQUENCE

Technical Certificate (Option 1)

				SCH Breakdown			Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Clinical	Total Contact Hours	Certification Name
EMS 1222	Prehospital Fundamental Concepts	2	1	2	0	45	National Emergency Medical Services Education Standards
EMS 1231	Prehospital Operation and Incident Management	1	1	0	0	15	
EMS 1262	Prehospital Pharmacology	2	1	2	0	45	
EMS 1362	Prehospital Respiratory Management	2	1	2	0	45	
EMS 1373	Prehospital Medical Management	3	2	2	0	60	
EMS 1384	Prehospital Trauma Management	4	3	2	0	75	
EMS 1533	Prehospital Practicum I	3	0	0	9	135	
EMS 1543	Prehospital Paramedic Pharmacology	3	2	2	0	60	
EMS 1552	Prehospital Paramedic Respiratory Management	2	1	2	0	45	
EMS 2764	Prehospital Paramedic Cardiology Management	4	2	4	0	90	
EMS 2773	Prehospital Paramedic Medical Management	3	2	2	0	60	
EMS 2784	Prehospital Practicum II	4	0	0	12	180	
EMS 2863	Prehospital Paramedic Maternal, Child, and Special Populations Management	3	2	2	0	60	
EMS 2873	Prehospital Practicum III	3	0	0	9	135	
EMS 2883	Prehospital Paramedic Care Capstone	3	1	4	0	75	
EMS 2893	Prehospital Paramedic Practicum Capstone	3	0	0	9	135	
	TOTAL	**45**	**285**	**390**	**585**	**1260**	

Trauma and Operations and Medical Emergencies include all cognitive and psychomotor domains for the AEMT and Paramedic

Technical Certificate (Option 2 includes Paramedic Bridge)

				SCH Breakdown			Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Clinical	Total Contact Hours	Certification Name
EMS 1593	Paramedic Bridge	3	3	0	0	45	National Emergency Medical Services Education Standards
EMS 1543	Prehospital Paramedic Pharmacology	3	2	2	0	60	
EMS 1552	Prehospital Paramedic Respiratory Management	2	1	2	0	45	
EMS 2764	Prehospital Paramedic Cardiology Management	4	2	4	0	90	
EMS 2773	Prehospital Paramedic Medical Management	3	2	2	0	60	
EMS 2784	Prehospital Practicum II	4	0	0	12	180	
EMS 2863	Prehospital Paramedic Maternal, Child, and Special Populations Management	3	2	2	0	60	
EMS 2873	Prehospital Practicum III	3	0	0	9	135	
EMS 2883	Prehospital Paramedic Care Capstone	3	1	4	0	75	
EMS 2893	Prehospital Paramedic Practicum Capstone	3	0	0	9	135	
	* Students would need experiential learning or credit by examination to complete the advance course sequence in Paramedic Bridge Program	17					
	TOTAL	**48**	**195**	**240**	**450**	**885**	

Trauma and Operations and Medical Emergencies include all cognitive and psychomotor domains for the AEMT and Paramedic

*Please check with your local community college on local experiential learning or credit by exam policies.

General Education Core Courses

To receive the Associate of Applied Science degree, a student must complete all of the required coursework found in the Career Certificate option, Technical certificate option, and a minimum of 15 semester hours of General Education core. The courses in the General Education Core may be spaced out over the entire length of the program so that students complete some academic and Career Technical courses each semester or provided primarily within the last semester. Each community college will specify the actual courses that are required to meet the General Education Core Requirements for the Associate of Applied Science degree at their college. The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Section 9 Standard 3 of the *Principles of Accreditation: Foundations for Quality Enhancement*[1] describes the general education core.

Section 9 Standard 3:

3. The institution requires the successful completion of a general education component at the undergraduate level that

   a) is based on a coherent rationale.

   b) is a substantial component of each undergraduate degree program. For degree completion in associate programs, the component constitutes a minimum of 15 semester hours of the equivalent; for baccalaureate programs, a minimum of 30 semester hours or the equivalent.

   c) ensures breadth of knowledge. These credit hours include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural science/mathematics. These courses do not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession.

General Education Courses

			SCH Breakdown			Contact Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Contact Hours	Lecture	Lab	Certification Name
	Humanities/Fine Arts	3						
	Social/Behavioral Sciences	3						
	Math/Science	3						
	Academic electives	6						
	TOTAL	**15**						

[1] Southern Association of Colleges and Schools Commission on Colleges. (2017). *The Principles of Accreditation: Foundations for Quality Enhancement*. Retrieved from http://www.sacscoc.org/2017ProposedPrinc/Proposed%20Principles%20Adopted%20by%20BOT.pdf

EMT/PARAMEDIC BRIDGE TECHNOLOGY COURSES

Course Number and Name: EMS 1222 Prehospital Fundamental Concepts

Description: This course includes a comprehensive review of the knowledge base and skills for the prehospital provider. The lecture component expands previous knowledge of foundational principles of EMS to the level of the advanced clinician. This course also seeks to establish best-practice models in concepts such as documentation, research, and personal well-being. A laboratory experience is included in this course to provide a more robust learning experience in topics such as medical, legal, and ethical issues

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
2	1	2	45

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Integrates anatomical and medical terminology/abbreviations and key terms into the written and oral communication with colleagues and other health care professionals as it relates to fundamentals of EMS. (AP1)
2. Integrates knowledge of EMS systems, the safety/well-being of the provider, and medical-legal aspects, which is intended to improve the health of EMS Personnel, patients, and the community. (P1)
3. Applies knowledge of principles of public health, EMS research, and epidemiology, which includes public health emergencies, health promotion, and illness/injury prevention. (PH1)

Terminal Competencies

Explain the purposes and goals of the patient care report in the EMS.
Explain the importance of spelling, terminology use, abbreviations, and acronyms.
Discuss the importance of accurate documentation of times and radio communications.
Given a series of patient care reports, identify the elements of good documentation.
Given a variety of patient care scenarios, write effective patient care narratives using a standard format.
Discuss the differences in documentation in situations such as refusals of care and MCIs.
Predict the consequences of inappropriate documentation.
Define key terms related to the EMS profession.
Define key terms related to EMS systems.
Define key terms related to the roles of the EMS provider.
Define key terms related to medical and legal aspects of prehospital care.
Define key terms related to EMS research.
Define key terms related to public health.
Define key terms related to oral, written, and therapeutic communication.
Describe the benefit of effective EMS system communication to patient care.
Discuss anticipated future trends in EMS system communication.

Identify with whom and what information you communicate in the course of an EMS response.
Explain how the basic communication model applies to EMS communications.
Describe factors that contribute to effective verbal communications.
Follow standard reporting procedures and format when communicating in the EMS system.
Identify the uses of written communication in EMS, particularly those of the patient care report.
Explain the purpose of the National EMS Information System (NEMSIS).
Depict the sequence of communications in an EMS response.
Identify challenges and barriers to effective EMS system communication.
Describe the responsibilities of EMS dispatchers.
Describe effective communication skills with dispatch, medical direction, and hospital staff.
Explain how communication and technology can contribute to improved situational awareness.
Describe typical equipment, frequencies, and the advantages of EMS communications.
Discuss the regulation of public safety communications.
Explain the importance of the ability to communicate effortlessly between multiple agencies.
Define key terms related to workforce safety/wellness.
Discuss the benefits and drawbacks of electronic PCR's as compared to PCR written reports.
Compare and contrast the nationally recognized levels of EMS providers in the United States.
Describe the requirements that must be met for EMS professionals.
Discuss the traditional and emerging roles of the EMS provider.
List the health care settings providers may practice in with an expanded scope of practice.
Describe the out-of-hospital and in-hospital components of EMS systems.
Given various scenarios, explain how EMS systems work to respond to out of hospital calls.
Link key events in the history of EMS to the development of the modern EMS system.
Describe each component of EMS systems according to the Statewide EMS Technical Program.
Discuss the vision and documents that are guiding EMS into the future.
Discuss the problems identified for EMS in the document "EMS: At the Crossroads"
Give Examples of various approaches to and configurations of EMS systems in the U.S.
Explain the role of EMS in the chain of survival from cardiac arrest.
Describe the purposes of the national documents guiding EMS education and practice.
Discuss typical components of local and state-level EMS systems.
Explain the purpose and responsibilities of physician medical directors.
Give examples of on-line medical direction and off-line medical oversight.
Describe the purposes of the NREMT and the several professional organizations in EMS.
Recognize professional journals related to the practice of EMS.
Describe the intent of the KKK-A-1822 Federal Specifications for Ambulances.
Describe the purpose of categorizing receiving hospitals facilities by their capabilities.
Explain the purpose and components of an effective continuous quality improvement system.
Describe how you can contribute to greater patient safety in emergency medical services.
Discuss each of the primary responsibilities of the EMS provider.
Give examples of additional responsibilities in the prehospital setting.
Integrate expected characteristics of professionalism into all facets of your practice.
Give examples of behaviors that demonstrate professional attitudes and attributes.

Advocate for high standards of professionalism in EMS.
Describe the legal, ethical, and moral obligations of the prehospital provider.
Describe the four primary sources of law.
Differentiate between civil law and criminal law.
Explain the concept of tort law as it applies to EMS practice.
Outline the events that occur in a civil lawsuit.
Identify and discuss common legal regulations that pertain to the practice of EMS providers.
Given a scenario, determine whether the elements for a claim of negligence are present.
Describe the providers' protection against a claim of negligence.
Discuss the legal areas of practice that is considered to be a high-risk.
Take measures to protect patient's confidentiality and privacy and comply with HIPPA.
Avoid written or spoken statements that could lead to a claim of defamation.
Given a variety of scenarios, select the type of patient consent that applies.
Given a variety of scenarios, manage withdrawal of consent and refusal of consent situations.
Given a variety of scenarios, manage problematic patients.
Maintain professional boundaries.
Discuss how to avoid abandonment, assault, battery, false imprisonment, and excessive force.
Discuss advance directives, organ donation, and withholding or terminating resuscitation.
Take appropriate actions to avoid destroying evidence at potential crime scenes.
Describe the relationship between ethics, morals, laws, and religion.
Compare and contrast different approaches to ethical decision making.
Identify codes of ethics that serve to guide health care professionals, including EMS providers.
Explain the fundamental principles of ethics.
Given a variety of scenarios, recognize ethical dilemmas.
Given a scenario, defend your answer based on ethical EMS principles of decisions.
Given a variety of scenarios, recognize potential threats to safety and wellness.
Explain the importance of preventing EMS workforce injuries and illness.
Describe the role and elements of basic physical fitness in EMS workplace safety and wellness.
Explain the consequences of addictions and unhealthy habits.
Discuss work habits that minimize the risk of back injuries.
Identify professional and compassionate expectations.
Discuss various patient, family, and EMS provider responses to death and dying.
Explain the pathophysiology of stress, including types of stressors and the phases of stress.
Describe effective stress management strategies.
Discuss the effects of shift work on the body and the ability to function effectively.
Describe the principles of psychological first aid.
Given a scenario, discuss steps to protect your safety and the safety of others.
Explain the relationship between EMS research and EMS practice.
Distinguish the difference between anecdotal and causative conclusions.
Describe each of the steps of the scientific method.
Compare and contrast different types of research paradigms.
Give examples of various experimental designs.

Describe different types of studies and their general levels of validity.
Given a published research article, discuss its validity.
Given a research proposal, identify the ethical considerations for human subjects.
Discuss the proper use of various descriptive and inferential statistics in research.
Describe the purpose and intended content of each section of a research paper.
Describe how to perform a literature search.
Given a variety of research papers, debate the merits of the study.
Describe the role of published research reports in changing EMS practice.
Discuss the roles and responsibilities of EMS providers who participate in research studies.
Identify EMS roles that are within the domain of public health.
Describe the components that must be in place for EMS and public health to work together.
Discuss ways in which public health efforts have improved the quality of life.
Recognize the three categories of public health law.
Explain the basic concepts of epidemiology.
Give examples of how EMS providers can be involved in injury prevention.
Describe the roles of EMS organizations and EMS providers in the prevention of EMS injury.
Identify areas of need for prevention programs in the community.

Course Number and Name: EMS 1231 Prehospital Operation and Incident Management

Description: This course expands knowledge of operational roles and responsibilities of the advanced prehospital provider. This course is lecture only and is designed to ensure the safety of personnel, patient, and public safety.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
1	1	0	15

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Understands anatomical and medical terminology/abbreviations and key terms into patient care as it relates to EMS Operations. (MT1)
2. Integrates knowledge of operational roles and responsibilities to ensure patient, public, and personal safety. (OPT1)

Terminal Competencies

Identify the types of ambulance design according to the General Services Administration specs.
Describe the roles of the CAAS and the ACS Committee on Trauma.
Describe the role and responsibilities of the provider in checking the ambulance.
Identify components of typical ambulance checklists.
Describe considerations in ambulance deployment and staffing configurations.
Discuss the significance of ambulance collisions.
Identify strategies for reducing the risk of ambulance collisions and associated death and injury.
Implement safety measures related to driving, parking, and loading the ambulance.
Describe the use of helicopters and fixed wing aircraft in the care of ill or injured patients.
Describe the evolution of air medical transport over time to how air medical exists today.
Describe the characteristics and capabilities of fixed-wing and rotor-wing aircraft
Discuss limitations, concerns, and controversies about the use of air medical transport.
Discuss the staffing and crew configurations of air medical transport craft.
Given a scenario, discuss how to ensure effective and safe air operations.
Given a scenario, discuss information sharing between air medical and ground crews.
Anticipate situations that can result in low-impact, high-impact, and disaster-related MCIs.
Describe the origins and purposes of incident command or incident management systems.
Describe the components of the National Incident Management System (NIMS).
Describe NIMS as a uniformed, yet flexible system.
Describe the purpose of a mutual aid coordination center (MACC).
Describe the function of each of the major areas of NIMS or incident command system (ICS).
Describe the roles of various personnel within each of the five functional areas of NIMS/ICS.
Apply a system of triage to MCIs.
Discuss various functions expected of EMS in the triage, treatment, and transport of an MCI.

Describe special considerations in the response and operating procedures in disasters.
Anticipate common problems that occur in MCIs and disasters.
Describe the importance of preplanning, drills, and critiques with regard to MCI response
Describe the role of disaster mental health services.
Describe the concept of rescue awareness training.
Describe the protective equipment needed by rescue personnel.
Describe equipment and measures used to protect patients in rescue situations.
Describe considerations in safety procedures in the approach to rescue situations.
Describe the goals and tasks of each of the seven phases of a rescue situation.
Describe the principles and practices related to surface water rescues.
Describe special considerations and hazards for moving water rescues.
Describe the principles and practices related to hazardous atmosphere rescues.
Describe the principles and practices related to highway operations and vehicle rescues.
Describe the principles and practices related to hazardous terrain rescues.
Describe considerations for extended care of patients in rescue situations.
Describe the demographics of violence.
Recognize indications that you may encounter violence on a call.
Describe actions to take when protecting your safety when you are advised of on-scene danger.
Discuss how to avoid danger when responding to calls on the roadside or highway.
Take steps to avoid the types of dangers you may encounter.
Describe particular safety concerns related to responding to clandestine drug laboratories
Implement the tactical options common to ensuring your safety when situations involving police.
Describe the advantages and limitations of using body armor.
Describe the role of tactical EMS.
Given a scenario, identify how to interact with LEOs with crime scene awareness.
Describe the demographics, health status, and health access issues of rural populations.
Describe the special problems faced by rural EMS systems.
Suggest solutions to solving special problems faced by rural EMS systems.
Given a scenario, integrate the special challenges of rural EMS into patient care decision making.
Recognize the particular hazards and considerations involved in agricultural emergencies.
Anticipate injuries associated with various recreational activities.
Describe the distribution of hazardous materials throughout the country.
Discuss importance of toxicological, MCI, and terrorism in response to hazardous materials.
Describe the need for specialized training at various levels to effectively manage hazards
Describe the providers' role at hazardous material incidents.
Recognize situations that may involve a hazardous material release.
Identify given a scenario, resources that can help determine information about the substance.
Describe the various control zones established at a hazardous material release site.
Discuss how to protect yourself, your crew, and others from exposure to a hazardous material
Describe the levels of hazardous materials protective equipment available.
Describe approaches to decontaminating patients exposed to a variety of hazardous materials.

Given a variety of hazardous material scenarios, discuss safe and effective patient care.
Discuss how EMS personnel monitor and rehab those responding to hazardous materials
Identify likely targets of terrorist attacks.
Identify information that can indicate a potential terrorist attack when responding to calls.
Describe characteristics of explosive, incendiary, nuclear, chemical, and biological weapons.
Be aware of the likelihood of secondary explosions when responding to reports of an explosion.
Predict injury patterns and patient problems associated with explosions.
Describe the precautions in responding to a nuclear incident.
Describe the specific treatment for chemical agent exposures.
Describe the keys to recognizing a biological terrorist attack.
Describe actions to be taken for protection when responding to a biological terrorist attack.

Course Number and Name: EMS 1262 Prehospital Pharmacology

Description: The Pharmacology I course contains topics related to the principles of pharmacologic interventions, including an overview of medication research and classifications. The laboratory component includes the theory related to intravenous/intraosseous access, medication administration, and injections.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
2	1	2	45

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Understands anatomical and medical terminology/abbreviations as it relates to pharmacology. (MT1)
2. Applies knowledge of medications that may be administered to a patient during an emergency and chronic/maintenance medications the patient may be taking. (PHM1)

Terminal Competencies

Define key terms in basic pharmacology
Define key terms in IV/IO access
Define key terms in routes of medication administration
Apply the six rights of medication administration when administering patient medications.
Identify the boundaries of your scope of practice pertaining to medication administration.
Identify situations you should communicate with medical direction regarding drug administration.
Select the appropriate standard precautions for all medication administration situations.
Discuss principles of medical asepsis in the administration of medications.
Accurately document the pertinent details of administering medication to a patient.
Identify the precautions, risks, equipment, and advantages for each route of med administration.
Discuss how to safely administer medications by all routes, within your scope of practice.
Identify how to prepare medications for administration.
Describe the indications, procedure, equipment, and risks associated with IV access.
Describe the characteristics of intravenous fluids, including colloids, crystalloids.
Given a variety of scenarios, select an appropriate IV fluid, infusion set, catheter, and infusion rate.
Recognize complications of intravenous infusion.
Change an intravenous solution bag or bottle.
Discuss placement of a heparin or saline lock.
Discuss venous blood sampling procedures.
Discontinue a peripheral intravenous infusion.
Discuss how to initiate an intraosseous infusion in adult and pediatric patient.
Troubleshoot an intraosseous infusion.
Recognize complications of an intraosseous infusion.
Identify indications and contraindications for intraosseous infusion.
Explain the chemical, generic, brand, and official names of drugs.

Give examples of drugs from each of the four main sources of drugs.
Identify reliable reference materials for drug information.
Describe each of the components of a drug profile.
Explain how key drug legislation applies to the paramedic's role in administering drugs.
Discuss the processes of drug research and bringing a drug to market.
Explain the roles and responsibilities with respect to administering medications
Discuss special considerations in administering drugs to special populations
Explain key principles of pharmacokinetics.
Describe each of the routes of drug administration.
Describe the various forms of drugs.
Describe considerations in drug storage.
Explain key principles of pharmacodynamics.
Describe common unintended adverse effects of drug administration.
Anticipate how various factors, such as age, body mass, and others, can alter drug responses.
Describe various types of drug interactions.

Course Number and Name: EMS 1362 Prehospital Respiratory Management

Description: This course integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate ventilation, and respiration for patients of all ages experiencing a variety of respiratory conditions. The course includes a lab component which integrates airway topics into the use of airway and ventilation adjuncts, including supraglottic airways.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
2	1	2	45

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Understands knowledge of the medical terminology, anatomy, physiology, and pathophysiology to patient care as it relates to airway and respiratory care. (MT1)
2. Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression in regards to airway and respiratory care. (Assessment1)
3. Applies knowledge of upper/lower airway anatomy, physiology, and pathophysiology to patient assessment to assure a patient airway, adequate ventilation, and respiration for patients of all ages. (Air1)
4. Applies pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with a range of cardiovascular emergencies, excluding ECG analysis. (Med1)

Terminal Competencies

Define key terms in airway management and respiratory care.
Discuss differences in pediatric anatomy that relates to managing an infant's airway.
Describe the etiologies and pathophysiology of the upper airway and inadequate ventilation.
Describe the functions of the upper and lower airway.
Explain the physiology of respiration and ventilation.
Recognize the anatomical structures of the upper and lower airway.
Explain the importance of nonlinear assessment and management of airway and breathing.
Describe the legal liability associated with inappropriate assessment and management of airway.
Identify respiratory problems through patient respiratory monitoring.
Identify the importance of recognizing and managing problems with airway and breathing.
Recognize the signs and symptoms of upper airway obstruction and inadequate ventilation.
Discuss the indications and contraindications for basic airway interventions.
Describe techniques used to employ basic airway management interventions.
Differentiate between adequate and inadequate breathing in a patient.
Recognize the need for artificial ventilation in a patient.
List and describe techniques for the various types of artificial or mechanical ventilation.

Discuss necessary modifications for providing artificial ventilation of a patient.
List the indications, advantages/disadvantages, and equipment for supraglottic airways.
Differentiate between those patients needing oxygen therapy and those who do not.
Discuss the management of upper airway obstruction and inadequate ventilation.
Recognize the need for artificial ventilation of a patient.

Course Number and Name: EMS 1373 Prehospital Medical Management

Description: This course consists of the theory, anatomy, physiology, pathophysiology associated with various medical diseases from a body-systems approach. The lab experience includes theoretical concepts developed during lecture to incorporate advanced level skills.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	2	2	60

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Apply knowledge of the medical terminology, anatomy, physiology, and pathophysiology to patient care as it relates to medical emergencies. (MT1)
2. Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression in regards to medical emergencies (Med1)

Terminal Competencies

Define key terms in endocrinology and hematology.
Relate A&P to the pathophysiology of patients with endocrine disorders.
Relate A&P to the pathophysiology of patients with hematologic disorders.
Define key terms in immunology.
Relate A&P to the pathophysiology of patients with allergies and anaphylaxis.
Define key terms in neurology.
Relate A&P to the pathophysiology of patients with neurologic disorders.
Define key terms in psychiatric emergencies.
Describe safety considerations when responding to calls for behavioral emergencies.
Describe the biological, psychosocial, and sociocultural influences on psychiatric disorders.
Define key terms in gastrointestinal and urology.
Relate A&P to the pathophysiology of patients with GI emergencies.
Relate A&P to the pathophysiology of patients with urologic and renal disorders.
Define key terms in toxicology.
Describe the epidemiology of toxicologic disorders and substance abuse.
Relate diseases of the EENT to changes in normal anatomy and physiology.
Adapt the phases of assessment to meet the needs of a patient with a EENT disorder
Adapt the phases of assessment to meet the needs of a patient with an endocrine disorder.
Adapt the phases of assessment to meet the needs of a patient with a hematological disorder.
Adapt the phases of assessment to meet the needs of a patient with an immunological emergency.
Adapt the phases of assessment to meet the needs of a patient with an infectious disease.
Adapt the phases of assessment to meet the needs of a patient with a neurological emergency.
Adapt the phases of assessment to meet the needs of a patient with a psychiatric disorder.
Explain the importance of mental status examinations in patients with psychiatric disorders.
Adapt the phases of assessment to meet the needs of a patient with a GI emergency.
Adapt the phases of assessment to meet the needs of a patient with a renal emergency.

Define key terms in cardiology
Relate the A&P of the cardiovascular system to pathophysiology of cardiac disorders.
Describe the significance of the prevalence of cardiovascular disease in the United States.
Describe risk factors for cardiovascular disease.
List causes of chest pain.
Describe the pathophysiology of specific cardiac and vascular disorders commonly encountered.
Discuss the steps of assessing patients with cardiac complaints and presentations.
Describe ethical issues in resuscitation.
Describe CPR Physiology

Course Number and Name: EMS 1384 Prehospital Trauma Management

Description: This course consists of the theory, anatomy, physiology, pathophysiology associated with various traumatic injuries from a body-systems approach. The lab experience includes theoretical concepts developed during lecture to incorporate advanced level skills.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	2	2	75

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Apply knowledge of the medical terminology, anatomy, physiology, and pathophysiology to patient care as it relates to traumatic emergencies (MT1)
2. Integrates scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression in regards to traumatic emergencies. (Assessment1)
3. Integrates knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient with traumatic emergencies. (TRM1)

Terminal Competencies

Define key terms in chest trauma.
Describe the anatomy and physiology of the abdominal cavity and its contents.
Describe changes in anatomy and physiology associated with pregnancy.
Describe the pathophysiology of abdominal injuries.
Describe the pathophysiology of muscular, joint, and bone injuries.
Describe the anatomy and physiology of the thorax and the structures within it.
Describe the pathophysiology of blunt and penetrating thoracic trauma.
Describe the pathophysiology, assessment, and management of common thoracic injuries.
Define key terms in environmental emergencies.
Describe the pathophysiology of heat-related illnesses.
Describe the pathophysiology of cold-related disorders.
Describe the pathophysiology of drowning.
Describe the pathophysiology of diving emergencies, including the application of gas laws.
Describe the pathophysiology of high altitude illness.
Define key terms in head, face, neck, and spinal trauma.
Describe the epidemiology of injuries to the head, face, neck, and spinal column.
Describe the anatomy and physiology of the head, face, neck and spinal column.
Anticipate specific types of injuries to the head, face, neck, and spinal column based on MOI.
Discuss the pathophysiology of injuries to the head, face, neck, and spinal column.
Describe the anatomy and physiology of the musculoskeletal system.
Discuss the effects of aging on the musculoskeletal system.
Define key terms in nervous system trauma.
Describe the anatomy and physiology of the nervous system.
Explain the pathophysiology of direct (focal and diffuse) and indirect brain injuries.

Define key terms in orthopedic trauma.
Define key terms in shock and bleeding.
Apply physiological concepts of the circulatory system in maintaining homeostasis
Define key terms in soft-tissue trauma.
Describe the anatomy and physiology of the skin and associated soft tissues.
Describe the pathophysiology of open and closed soft-tissue injuries.
Describe the anatomy and physiology of the skin.
Describe the pathophysiology and complications common burn mechanisms.
Describe the differences in A&P, pathophysiology, and management of pediatric trauma patients.
Describe the differences in A&P, pathophysiology, and management of pregnant trauma patients.
Describe the differences in A&P, pathophysiology, and management of bariatric trauma patients.
Describe the differences in A&P, pathophysiology, and management of geriatric trauma patients
Define key terms in trauma systems.
Describe the epidemiology of trauma
Apply the five-step public health model to injury prevention.
Describe the capabilities of the various levels of designated trauma centers.
Given scenario, categorization patients as critical, unstable, potentially unstable, or stable.
Discuss the role of time to definitive care in the outcomes of trauma patients.
Apply trauma triage criteria to identify patients who should be transported to a trauma center.
Describe the purposes of data collection in injury prevention, the trauma registry, and quality
Apply the laws of inertia and energy conservation to the kinetics of blunt impact.
the concepts of force and kinetic energy exchange to the potential for injury.
Associate the application of energy with the biomechanical forces produced to predict injuries.
Describe the events that occur in motor vehicle impacts.
Describe the effects of use of restraints and safety mechanisms on injuries in MVCs.
Describe the association between vehicle damage and injury potential.
Describe injury patterns associated with various types of vehicle impacts.
Given a variety of scenarios, conduct a vehicle collision analysis.
Modify a collision analysis to account for the characteristics of motorcycle and off-road MVCs.
Describe the considerations in assessing a patient who has fallen.
Describe the mechanisms of blast injury, blast-injury patterns, and blast-injury considerations.
Describe the considerations in assessing a patient injured during a sporting event.
Describe the considerations for assessing crush injuries.
Identify mechanisms with a potential for producing compartment syndrome.
Apply the laws of inertia and energy conservation to the kinetics of penetrating trauma.
Apply the concepts of force and kinetic energy exchange to the potential for injury.
Apply principles of ballistics to the prediction of injury patterns.
Apply the characteristics of specific weapon types to the prediction of injury patterns.
Discuss the application of low, medium, and high-velocity penetrating mechanisms.
Describe the forces and characteristics associated with entrance and exit wounds.
Describe special concerns for EMS provider safety that are associated with penetrating trauma.
For a penetrating trauma scenario, gain information that can help predict injury patterns.

Describe medical/legal concerns specific to penetrating trauma situations.
Describe special considerations in management of impaled objects.
Given a variety of scenarios, discuss assessment of patients with abdominal injuries.
Given a variety of scenarios, develop a management plan for patients with abdominal injuries.
Given a scenario, discuss the assessment and management of patients with thoracic injuries.
Identify factors that place patients at particular risk for environmental emergencies.
Describe the homeostasis of body temperature with regard to thermoregulation.
Discuss measures to prevent heat-related and cold-related disorders.
Discuss ways to prevent high altitude illness.
Describe the importance of recognizing, preventing, and treating hypothermia in trauma patients.
Discuss assessment of patients with head, face, neck, and spinal column injuries.
Given a variety of scenarios, develop management plans for patients with traumatic injuries.
List criteria that can be used as part of a spinal clearance protocol.
Recognize the signs and symptoms of traumatic brain injury.
Discuss the assessment of patients suspected of having central nervous system injuries.
Relate assessment findings to the potential for particular central nervous system injuries.
Describe considerations in preventing orthopedic injuries.
Given a variety of scenarios, demonstrate the assessment of musculoskeletal injuries.
Describe the characteristics and concerns associated with bleeding.
Describe the process of hemostasis and factors that can affect it.
Given a variety of scenarios, identify internal hemorrhage.
Given a variety of scenarios involving hemorrhage, develop appropriate management plans.
Identify patients whose burns are considered critical.
Recognize the need for immediate lifesaving interventions in injured patients.
Discuss the assessment of burn injuries and determining burn depth and BSA.
Discuss the patient assessment of a variety of soft-tissue injuries.
Recognize indications that burns may have resulted from abuse.
Describe special considerations in pediatric, geriatric, and sports-related orthopedic injuries.
Relate patients' signs and symptoms to the progression of traumatic brain injury.
Discuss differences between pediatric and adult spinal injuries.
Describe the management for injury patterns such as impaled, crush, amputations, cavity trauma.
Given a scenario, discuss the assessment and management of patients with thoracic injuries.
Given a variety of scenarios, assess and manage patients with heat-related illnesses.
Given a variety of scenarios, assess and manage patients with cold-related disorders.
Given a variety of scenarios, assess and manage patients who have drowned.
Given a scenario, assess and manage patients with various diving injuries.
Given a variety of scenarios, assess and manage patients with high altitude illnesses.
Describe techniques of managing patients with injuries to the head, face, neck, and spine.
Given a scenario, develop a treatment plan for injuries to the head, face, neck, and spinal column.
Identify proper techniques of manually stabilizing and immobilizing the spine.
Describe the goals for B/P, BPM, ETCO2, SpO2, and BGL levels in patients with CNS trauma.
Given a scenario, implement proper management of patients with CNS trauma.

Adhere to the general principles of musculoskeletal injury management.
Given a variety of musculoskeletal injury, select and apply an appropriate splinting device.
Describe considerations in managing fractures, joint injuries, and injuries of muscles.
Describe the special considerations in management of common bone fractures.
Describe the special considerations in management of common joint injuries.
Discuss considerations in pain management in the care of musculoskeletal injuries.
Describe the key actions and decisions in each phase of trauma assessment.
Given a variety of scenarios, select appropriate bandaging materials and techniques.
Describe considerations in transporting or treat and release patients with soft-tissue injuries.
Anticipate and take measures to minimize systemic complications of burns.
Given a scenario, discuss management of patients with various burns.
Describe considerations for patients with musculoskeletal injuries who refuse transport.
Describe the importance of an organized system of trauma care to reducing trauma morbidity.
Describe the potential impact of full engagement of EMS in injury prevention initiatives.

Course Number and Name: EMS 1543 Prehospital Paramedic Pharmacology

Description: The Prehospital Paramedic Pharmacology course contains topics related to the medication administration for acutely ill or injured patients and chronic care medications. The laboratory component includes the application of pharmacological principles to patient conditions, including infusion calculations.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	2	2	60

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Applies anatomical and medical terminology/abbreviations as it relates to pharmacology. (MT1)
2. Integrates knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient. (CBJ 1)

Terminal Competencies

Describe the characteristics of drugs used to affect the central nervous system.
Describe the characteristics of drugs used to affect the autonomic nervous system.
Describe the characteristics of drugs used to affect the cardiovascular system.
Describe the characteristics of drugs used to affect the respiratory system.
Describe the characteristics of drugs used to affect the gastrointestinal and renal systems.
Describe the characteristics of drugs used to affect the endocrine system.
Describe the characteristics of drugs used to affect the eyes, ears, and other sensory organs.
Describe the characteristics of drugs used to affect the skin.
Describe the characteristics of drugs used to affect the reproductive organs.
Describe the characteristics of drugs used to treat cancer, infection, inflammation, and toxins.
Describe the characteristics of drugs used to supplement the diet.

Course Number and Name: EMS 1552 Prehospital Paramedic Respiratory Management

Description: This course builds upon already established knowledge of complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate ventilation, and respiration for patients of all ages experiencing a variety of respiratory conditions with a focus on advanced-level interventions. The course includes a lab component which integrates airway topics into the use of airway and ventilation adjuncts, including endotracheal and other advanced airway procedures.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
2	1	2	45

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Integrates knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan the goal of assuring a patent airway, adequate mechanical ventilation, respiration, and respiratory disorder care for patients of all ages. (Air2)

Terminal Competencies

Define key terms in airway management and respiratory care.
Discuss differences in pediatric anatomy that relates to managing all pediatric airways.
Describe the etiologies and pathophysiology of the upper airway and inadequate ventilation.
Describe the functions of the upper and lower airway.
Explain the physiology of respiration and ventilation.
Recognize the anatomical structures of the upper and lower airway.
Explain the importance of nonlinear assessment and management of airway and breathing.
Describe the legal liability associated with inappropriate assessment and management of airway.
Identify respiratory problems through patient respiratory monitoring.
Identify the importance of recognizing and managing problems with airway and breathing.
Recognize the signs and symptoms of upper airway obstruction and inadequate ventilation.
Discuss the indications and contraindications for basic airway interventions.
Describe techniques used to employ basic airway management interventions.
Differentiate between adequate and inadequate breathing in a patient.
Recognize the need for artificial ventilation in a patient.
List and describe techniques for the various types of artificial or mechanical ventilation.
Discuss necessary modifications for providing artificial ventilation of a patient.
List the indications, advantages/disadvantages, and equipment for advanced airways.
Differentiate between those patients needing oxygen therapy and those who do not.
Discuss the management of upper airway obstruction and inadequate ventilation.
Recognize the need for artificial ventilation of a patient.

Course Number and Name: EMS 2764 Prehospital Paramedic Cardiology Management

Description: This course consists of the theory, anatomy, physiology, pathophysiology associated with cardiac dysrhythmia management. The lab experience includes ACLS concepts with intensive skill practices.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
4	2	4	90

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Integrates knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of managing complex cardiovascular emergencies to patients of all ages. (CARD1)

Terminal Competencies

Describe the purpose and process of electrocardiographic monitoring.
Relate the waves and intervals of an ECG tracing to the electrical events in the heart.
Describe the significance of changes in ECG tracings from expected normal findings.
Explain general mechanisms of cardiac dysrhythmias.
Use a systematic analysis to identify specific ECG dysrhythmias.
Identify potential causes of cardiac dysrhythmias.
Describe the clinical significance of specific cardiac dysrhythmias.
Describe the treatments generally indicated for specific cardiac dysrhythmias.
Given a scenario, adapt the assessment to meet the needs of a patient with a cardiac or vascular disorder.
Use a process of clinical reasoning to guide the management of a patient with a cardiac disorder.
Describe the therapeutic roles of ALS interventions in the management of patients with cardiac disorders.
Discuss the steps in BLS and ALS interventions used in the management of cardiac arrest.
Describe the roles of diagnostic procedures in the evaluation of MI's, including 12-lead's and lab tests.
Describe the roles of reperfusion and pharmacological therapies in the management of MI's.
Describe post-resuscitation care of cardiac arrest patients with return of spontaneous circulation.
Describe considerations in withholding resuscitation and terminating resuscitative efforts in the field.
Apply a process of clinical reasoning to evaluate patients for specific cardiac and vascular disorders.
Given a variety of scenarios, develop treatment plans for patients with cardiac disorders.
Describe the process and purpose of acquiring 12-lead ECG interpretation.
Use a 12-lead ECG to identify cardiac conduction disorders and chamber enlargement.
Describe the use of 15- and 18-lead ECGs

Course Number and Name: EMS 2773 Prehospital Paramedic Medical Management

Description: This course builds upon the previously lectured theory, anatomy, physiology, pathophysiology associated with various medical diseases from a body-systems approach. An increased focused is applied to paramedic-level interventions in acute/chronic care patients. The lab experience includes theoretical concepts developed during lecture to incorporate advanced level skills for various medical conditions.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	2	2	60

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a treatment/disposition plan for a patient with a medical complaint. (MED 2)

Terminal Competencies

Identify patients with risk factors for gastrointestinal emergencies.
Use a process of clinical reasoning to guide the management process for patients with GI disorders.
Given a variety of scenarios, develop treatment plans for patients with gastrointestinal disorders.
Recognize medications used to decrease the risk of thrombosis.
Given a scenario, develop treatment plans for patients with diseases of the eyes, ears, nose, and throat.
Adapt the assessment meet the needs of patients' diseases of the eyes, ears, nose, and throat.
Use a process of clinical reasoning to guide the management for patients with endocrine disorders.
Given a variety of scenarios, develop treatment plans for patients with endocrine disorders.
Describe the role of heredity in the risk for hematologic disorders.
Relate the A&P of the hematologic system to the pathophysiology of patients with hematologic disorders.
Adapt the assessment to meet the needs of patients with symptomatology related to hematology.
Use a process of clinical reasoning to guide the management for patients with hematologic disorders.
Describe the pathophysiology of specific hematologic problems common to the prehospital environment.
Given a variety of scenarios, develop treatment plans for patients with hematologic disorders.
Use a process of clinical reasoning to guide the management for an immunological emergency.
Given a variety of scenarios, develop treatment plans for patients with allergies and anaphylaxis.
Describe the phases of the infectious process.
Explain public health principles related to infectious diseases.
Describe the roles of local, state, and federal agencies involved in infectious disease surveillance.
Differentiate between bacteria, viruses, prions, fungi, protozoa, and parasites.
Describe the interactions of the agent, host, and environment as determining factors in transmission.
Describe the body's defenses against disease.
Explain the principles of infection control in prehospital care, including rights under the Ryan White Act.
Identify patients with risk factors for infectious disease.

Use a process of clinical reasoning to guide the management process for patients with infectious disease.
Describe the pathophysiology of infectious diseases of immediate concern to EMS providers.
Describe the actions to take if you are exposed to an infectious disease.
Given a variety of scenarios, develop treatment plans for patients with suspected infectious disease.
Describe EMS providers' roles in patient education and preventing disease transmission.
Relate normal A&P to the pathophysiology of patients with nontraumatic musculoskeletal disorders.
Adapt the assessment to meet the needs of patients with nontraumatic musculoskeletal disorders.
Use a process of clinical reasoning manage patients with nontraumatic musculoskeletal disorders.
Describe the pathophysiology of nontraumatic musculoskeletal disorders.
Given a variety of scenarios, develop treatment plans for nontraumatic musculoskeletal disorders.
Use a process of clinical reasoning to determine the process for patients with neuro disorders.
Describe common causes of altered mental status.
Describe the pathophysiology of specific neuro presentations common to the prehospital environment.
Apply prehospital stroke scoring systems in the assessment of patients with suspected stroke.
Given a variety of scenarios, develop treatment plans for patients with neurologic disorders.
Explain the importance of mental status examinations in patients with psychiatric and behavioral disorders.
Use clinical reasoning to guide the management for patients with psychiatric and behavioral disorders.
Describe the assessment and treatment to psychiatric disorders common in the prehospital environment.
Describe the epidemiology, including risk factors, of suicide.
Explain the characteristics and management of excited delirium syndrome.
Describe special considerations in the assessment and management of TASERed patients.
Describe the procedures common to EMS use of physical and chemical restraints for violent patients.
Given a variety of scenarios, develop treatment plans for patients with psychiatric and behavioral disorders.
Describe the roles of diabetes and gender in the risk for urinary system disorders.
Use a process of clinical reasoning to guide the management for patients with urologic and renal disorders.
Describe the pathophysiology of specific urologic and renal problems.
Describe the pathophysiology of specific gastrointestinal problem.
Given a variety of scenarios, develop treatment plans for patients with urologic and renal disorders.
Explain the pathophysiology and develop a field impression and treatment of sepsis/systemic inflammatory response syndrome (SIRS).
Describe special considerations for psychiatric and behavioral disorders in geriatric and pediatric groups.
Describe the role of poison control centers in surveillance and management of toxicologic emergencies.
Describe the routes by which toxins can enter the body.
Explain the general principles of assessment and management of toxicologic emergencies.
Explain principles of management for poisons that gain access through each of the routes of entry.
Explain the pathophysiology, assessment, and management for common prehospital toxins and toxidromes.
Given a variety of scenarios, develop treatment plans for patients with toxicological disorders.

Course Number and Name: EMS 2863 Prehospital Paramedic Maternal, Child, and Special Populations Management

Description: This course consists of the theory, anatomy, physiology, pathophysiology, and treatments associated with conditions of gynecology, obstetrics, neonatal, pediatric, and other lifespan issues. The lab component allows the student to practice skill-heavy lecture topics, including field delivery and resuscitation.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	2	2	60

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Apply knowledge of the medical terminology, anatomy, physiology, and pathophysiology to patient care as it relates to patients in special populations. (MT 1)
2. Integrates scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression in regards to patients in special populations. (Assessment 1)
3. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a treatment/disposition plan for a patient with a special need. (SPP 1)

Terminal Competencies

Anticipate psychosocial challenges in the elderly population.
Identify government and community resources for the elderly.
Anticipate the interactions between aging and multiple disease processes in elderly patients.
Explain the special considerations as they pertain to drug related toxicology in the elderly.
Describe considerations for the elderly regarding mobility and falls, communication difficulties.
Relate the pathophysiology of geriatric problems to the priorities of assessment and management.
Communicate patient information orally and in writing when transferring care of the geriatric patient.
Relate the A&P of the female reproductive system to the management of patients with GYN disorders.
Relate the pathophysiology of various gynecologic disorders to priorities of assessment and management.
Describe the psychological/physiological development changes during the life span.
Relate the A&P of the neonate to the assessment and management of patients one month of age or below.
Relate the A&P of pregnancy and fetal development of patients with obstetric presentations.
Relate the pathophysiology of specific obstetric disorders to the priorities of patient management.
Relate the pathophysiology of neonatal problems to the priorities of assessment and management.
Describe the roles of paramedics in pediatric illness and injury prevention of ill and injured children.
Relate the developmental, anatomic, and physiologic differences of children to the assessment.
Explain the importance of discussing resources available to patients in suspected partner abuse situations.
Explain the ethical and legal obligations to report suspected abuse and neglect.
Describe special considerations in interacting with victims of sexual assault.
Describe the epidemiology of hate crimes.
Discuss the epidemiology and demographics of sensory/mental challenges seen in special populations.

Describe factors that have contributed to the increase in home health care.
Anticipate the psychosocial concerns of patients receiving home health care and of their family members.
Adapt the assessment to meet the needs of patients' symptomatology related to sexual assault.
Discuss concern for the psychosocial needs of patients with gynecologic emergencies and sexual assault.
Discuss the considerations for evidence preservation when a patient who has been sexually assaulted.
Observe special considerations in documentation of calls involving sexual assault.
Use a process of clinical reasoning to guide the management for normal and distressed neonatal patients.
Recognize specific prehospital emergencies common to neonatal patients.
Communicate relevant information orally and in writing when transferring care of the neonatal patient.
Use a process of clinical reasoning to guide the management for patients with specific OB presentations.
Perform the steps of caring for the mother and newborn in complicated/uncomplicated newborn delivery.
Recognize abnormal deliveries that cannot be managed in the prehospital setting.
Communicate relevant information about obstetric patients orally and in writing when transferring care.
Formulate a plan for becoming and remaining proficient in assessing and managing pediatric patients.
Adapt equipment and techniques of assessment and management to meet the needs of pediatric patients.
Recognize indications of abuse or neglect of a pediatric patient.
Describe the importance of performing a general health assessment when caring for elderly patients.
Adapt the assessment to meet the needs of patients with findings related to common geriatric emergencies.
Anticipate common medical problems in the elderly.
Describe considerations in the elderly that necessitate a high suspicion for environmental emergencies.
Describe considerations in the elderly that necessitate a high index of suspicion for psychiatric problems.
Describe considerations in the elderly that increase the risk of injuries and impair the response to injuries.
Adapt equipment and techniques of management to meet the needs of geriatric patients.
Recognize indications of abuse or neglect of a geriatric patient.
Adapt the assessment to meet the needs of patients symptomatology related to gynecologic disorders.
Use a process of clinical reasoning to assess and manage patients with gynecologic emergencies.
Adapt the assessment to meet the needs of normal and distressed neonatal patients.
Discuss concern for the psychosocial needs of the parents of normal and distressed neonates.
Adapt the assessment to meet the needs of patients with symptomatology related to obstetric conditions.
Discuss concern for the psychosocial needs of patients with obstetric conditions.
Identify indications of imminent obstetric delivery.
Adapt the assessment to meet the needs of patients with abnormal findings common to pediatric patients.
Recognize specific problems in pediatric patients often encountered in the prehospital environment.
Relate the pathophysiology of pediatric problems to the priorities of assessment and management.
Describe the epidemiology and demographics of abuse, assault, and neglect.
Describe the characteristics of abusers, the abused, and neglected patients to include elder and child abuse.
Adapt the approach to history and assessment to interact effectively with abused or neglected patients.
Identify patterns of injuries and behavior suspicious for abuse and neglect.
Recognize the effects of date rape drugs.
Identify appropriate documentation for suspected abuse, neglect, hate crimes, and sexual assault.
Anticipate the special needs and concerns of patients with financial challenges.
Relate the epidemiology of patients receiving home health care to paramedics' knowledge needs.

Recognize home health care patients with signs and symptoms of infection and sepsis.
Adapt techniques of assessment to the special situations of patients receiving home health care.
Consider the existence of a DNR/DNAR or other advanced directives with home health care patients.
Discuss the need to troubleshooting medical equipment for patients with chronic care.
Adapt the assessment to meet the needs of patients symptomatology related to sexual assault.
Discuss concern for the psychosocial needs of patients with gynecologic emergencies and sexual assault.
Discuss the considerations for evidence preservation when a patient who has been sexually assaulted.
Observe special considerations in documentation of calls involving sexual assault.

Course Number and Name: EMS 2883 Prehospital Paramedic Care Capstone

Description: This course serves as the capstone experience at the conclusion of paramedic didactic material. It will provide the student with a final review of topics and the opportunity to integrate their cognitive knowledge and psychomotor skills through cumulative practical skill evaluations and a comprehensive final examination.

Hour Breakdown:

Semester Credit Hours	Lecture	Clinical	Contact Hours
3	0	9	135

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a treatment/disposition plan for a variety of medical and traumatic emergencies across all ages and special considerations. (MED2, TRA2)

Terminal Competencies

Given a scenario, develop treatment plans for patients with a variety of medical illnesses.
Given a scenario, develop treatment plans for patients with a variety of traumatic injuries.
Given a scenario, develop treatment plans for patients with special needs.
Given a scenario, develop treatment plans for patients with an OB emergency.
Given a scenario, develop treatment plans for patients with a cardiovascular emergency.
Given a scenario, develop treatment plans for patients with an airway emergency.
Given a scenario, develop treatment plans for patients requiring acute pharmacological interventions.

Course Number and Name: EMS 1533 Prehospital Practicum I

Description: Using supervised rotations in a definitive care setting, the students will apply the concepts developed in the didactic and laboratory courses to live patients. This will include, but not be limited to rotations in the emergency department, ICU, operating room, respiratory therapy, pediatrics, and the field.

Hour Breakdown:

Semester Credit Hours	Lecture	Clinical	Contact Hours
3	0	9	135

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the EMT level in the clinical and field setting. (CBJ 1)
2. Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the Advanced Life Support (ALS) level in the clinical and field setting. (CBJ 2)
3. Demonstrate professional behavior including, but not limited to, integrity, empathy, self-motivation, appearance, self-confidence, communications, time-management, teamwork, respect, patient advocacy, and life-long learning. (CBJ 3)

Terminal Competencies

Insert oral and nasal basic airway adjuncts.
Perform comprehensive patient assessment.
Use bag-valve-mask.
Apply CPAP.
Perform head position techniques such as head-tilt chin-lift and jaw-thrust.
Preform ventilation using mouth-to barriers (mask, mouth, nose, stoma).
Manually dislodge airway obstructions.
Apply oxygen therapy (humidifier, nasal cannula, non-rebreather, simple face, venturi).
Apply pulse oximetry.
Perform upper airway suctioning.
Perform CPR (with or without mechanical devices).
Use automated defibrillation.
Provide hemorrhage control (direct pressure, tourniquet, wound packing).
Apply manual splinting devices.
Perform spinal immobilization (C-collar, long/short spine board, KED, CID).
Apply traction splint.
Use mechanical patient restraints.
Perform emergency moves for endangered patients.
Administer nebulized/aerosolized medications.
Administer inhaled medications.
Use intramuscular auto-injector.

Administer sublingual/mucosal medications.
Administer oral medications.
Assist in childbirth delivery (normal and abnormal).
Measure vital signs (B/P, blood glucose, pulse, respiration)
Manage airway and ventilation in patients with stomas.
Telemetric monitoring devices and the transmission of clinical data.
Report and document assessment findings and interventions performed.
Perform supraglottic airway management.
Monitor end-tidal Co2 and interpret waveform capnography.
Acquire and transmit 12 lead ECG.
Administer intramuscular/subcutaneous injections.
Perform peripheral intravenous catherization.
Begin IV fluid infusions (non-medication).
Insert intraosseous access.
Administer limited medications (nitroglycerine, glucagon, D50, beta-agonist, opiate antagonist).
Demonstrates professional behavior.
Communicate therapeutically with all members of the healthcare team.
Serve as entry-level clinician and team-member/leader while gaining experience
Initiates interventions based on assessment findings and evaluates their effectiveness.
Ensures the safety other rescuer, other public safety personnel, civilians, and the patient.

Course Number and Name: EMS 2784 Prehospital Practicum II

Description: As a continuation of Practicum I, this course uses supervised rotations in definitive care settings to continually develop assessment, treatment, and affective skills. The student will transition to primarily field experiences upon achieving competencies in the hospital settings.

Hour Breakdown:

Semester Credit Hours	Lecture	Clinical	Contact Hours
4	0	12	180

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the EMT level in the clinical and field setting. (CBJ 1)
2. Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the Advanced EMT level in the clinical and field setting. (CBJ 2)
3. Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the Paramedic level in the clinical and field setting. (CBJ 3)
4. Advocates for professional behavior including, but not limited to, integrity, empathy, self-motivation, appearance, self-confidence, communications, time-management, teamwork, **respect, patient advocacy, and life-long learning.** **(CBJ 4)**

Terminal Competencies

Perform comprehensive patient assessment.
Insert oral and nasal basic airway adjuncts.
Use bag-valve-mask.
Apply CPAP.
Perform head position techniques such as head-tilt chin-lift and jaw-thrust.
Preform ventilation using mouth-to barriers (mask, mouth, nose, stoma).
Manually dislodge airway obstructions.
Apply oxygen therapy (humidifier, nasal cannula, non-rebreather, simple face, venturi).
Apply pulse oximetry.
Perform upper airway suctioning.
Perform CPR (with or without mechanical devices).
Use automated defibrillation.
Provide hemorrhage control (direct pressure, tourniquet, wound packing).
Telemetric monitoring devices and the transmission of clinical data.
Apply manual splinting devices.
Perform spinal immobilization (C-collar, long/short spine board, KED, CID).
Apply traction splint.
Use mechanical patient restraints.

Perform emergency moves for endangered patients.
Administer nebulized/aerosolized medications.
Administer inhaled medications.
Use intramuscular auto-injector.
Administer sublingual/mucosal medications.
Administer oral medications.
Assist in childbirth delivery (normal and abnormal).
Measure vital signs (B/P, blood glucose, pulse, respiration)
Report and document assessment findings and interventions performed.
Perform supraglottic airway management.
Monitor end-tidal Co2 and interpret waveform capnography.
Acquire and transmit 12 lead ECG.
Administer intramuscular/subcutaneous injections.
Perform peripheral intravenous catherization.
Begin IV fluid infusions (non-medication).
Insert intraosseous access.
Administer limited medications (nitroglycerine, glucagon, D50, beta-agonist, opiate antagonist).
Perform needle decompression of chest.
Assist in chest tube placement.
Monitor and manage chest tubes.
Perform cricothyrotomy.
Insert gastric decompression devices (NG/OB tube).
Perform endotracheal intubation.
Dislodge airway obstructions by direct laryngoscopy.
Use high flow nasal cannula devices.
Provide tracheobronchial suctioning of intubated patient.
Interpret 12 lead ECG.
Perform electrical cardioversion.
Perform manual defibrillation.
Perform transcutaneous pacing.
Monitor and provide maintenance for transvenous cardiac pacing.
Administer medications as approved by National and Mississippi standards.
Administer intradermal injections.
Administer nasogastric medications.
Administer rectal medications.
Administer topical/transdermal medications.
Administer immunizations.
Maintain an infusion of blood or blood products.
Administer thrombolytics.
Access indwelling catheters and implanted central IV ports.
Monitor central lines.
Provide maintenance of medicated IV fluids.

Perform blood chemistry analysis.
Use hands-free eye irrigation methods.
Perform venous blood sampling.
Demonstrates exemplarily professional behavior.
Communicate therapeutically with all members of the healthcare team.
Serve as entry-level clinician and team-member/leader while gaining experience
Performs interventions as part of a treatment plan intended to improve overall health of patient.
Ensures the safety other rescuer, other public safety personnel, civilians, and the patient.

Course Number and Name: EMS 2873 Prehospital Practicum III

Description: Building upon Practicum I & II, the student will, under the supervision of an approved program preceptor, integrate concepts developed in the didactic, laboratory, and clinical settings to the care of patients in the field setting.

Hour Breakdown:

Semester Credit Hours	Lecture	Clinical	Contact Hours
3	0	9	135

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the Paramedic level and below in the field setting. (CBJ 1)
2. Is a role model of exemplary professional behavior including, but not limited to, integrity, empathy, self-motivation, appearance, self-confidence, communications, time-management, teamwork, respect, patient advocacy, and life-long learning. (CBJ 2)

Terminal Competencies

Insert oral and nasal basic airway adjuncts.
Use bag-valve-mask.
Apply CPAP.
Perform head position techniques such as head-tilt chin-lift and jaw-thrust.
Preform ventilation using mouth-to barriers (mask, mouth, nose, stoma).
Manually dislodge airway obstructions.
Apply oxygen therapy (humidifier, nasal cannula, non-rebreather, simple face, venturi).
Apply pulse oximetry.
Perform upper airway suctioning.
Perform CPR (with or without mechanical devices).
Use automated defibrillation.
Provide hemorrhage control (direct pressure, tourniquet, wound packing).
Telemetric monitoring devices and the transmission of clinical data.
Apply manual splinting devices.
Perform spinal immobilization (C-collar, long/short spine board, KED, CID).
Apply traction splint.
Use mechanical patient restraints.
Perform emergency moves for endangered patients.
Administer nebulized/aerosolized medications.
Administer inhaled medications.
Use intramuscular auto-injector.
Administer sublingual/mucosal medications.
Administer oral medications.
Assist in childbirth delivery (normal and abnormal).
Measure vital signs (B/P, blood glucose, pulse, respiration)

Perform comprehensive patient assessment.
Perform supraglottic airway management.
Monitor end-tidal Co2 and interpret waveform capnography.
Acquire and transmit 12 lead ECG.
Administer intramuscular/subcutaneous injections.
Perform peripheral intravenous catherization.
Begin IV fluid infusions (non-medication).
Insert intraosseous access.
Administer limited medications (nitroglycerine, glucagon, D50, beta-agonist, opiate antagonist).
Perform needle decompression of chest.
Assist in chest tube placement.
Monitor and manage chest tubes.
Perform cricothyrotomy.
Insert gastric decompression devices (NG/OB tube).
Perform endotracheal intubation.
Dislodge airway obstructions by direct laryngoscopy.
Use high flow nasal cannula devices.
Provide tracheobronchial suctioning of intubated patient.
Interpret 12 lead ECG.
Perform electrical cardioversion.
Perform manual defibrillation.
Perform transcutaneous pacing.
Monitor and provide maintenance for transvenous cardiac pacing.
Administer medications as approved by National and Mississippi standards.
Administer intradermal injections.
Administer nasogastric medications.
Administer rectal medications.
Administer topical/transdermal medications.
Administer immunizations.
Maintain an infusion of blood or blood products.
Administer thrombolytics.
Access indwelling catheters and implanted central IV ports.
Monitor central lines.
Provide maintenance of medicated IV fluids.
Perform blood chemistry analysis.
Use hands-free eye irrigation methods.
Perform venous blood sampling.
Report and document assessment findings and interventions performed. Advocates for professional behavior.
Communicate therapeutically with all members of the healthcare team.
Serve as entry-level clinician and team-member/leader while gaining experience
Performs interventions as part of a treatment plan intended to improve overall health of patient.

Ensures the safety other rescuer, other public safety personnel, civilians, and the patient.

Course Number and Name: EMS 2893 Prehospital Paramedic Practicum Capstone

Description: A final internship which builds upon Practicum I, II & III, the student will, under the supervision of an approved program preceptor, integrate concepts developed in the didactic, laboratory, and clinical settings to the care of patients in the field setting with a focus on team leadership.

Hour Breakdown:

Semester Credit Hours	Lecture	Clinical	Contact Hours
3	1	4	75

Prerequisite: Instructor approved

Student Learning Outcomes:

1. As a team leader, the student will safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model and Mississippi Scope of Practice for the Paramedic level and below in the field setting. (CBJ 1)
2. As a team leader, the student is a role model of exemplary professional behavior including, but not limited to, integrity, empathy, self-motivation, appearance, self-confidence, communications, time-management, teamwork, respect, patient advocacy, and life-long learning. (CBJ 2)

Terminal Competencies

Insert oral and nasal basic airway adjuncts.
Use bag-valve-mask.
Apply CPAP.
Perform head position techniques such as head-tilt chin-lift and jaw-thrust.
Preform ventilation using mouth-to barriers (mask, mouth, nose, stoma).
Manually dislodge airway obstructions.
Apply oxygen therapy (humidifier, nasal cannula, non-rebreather, simple face, venturi).
Apply pulse oximetry.
Perform upper airway suctioning.
Perform CPR (with or without mechanical devices).
Use automated defibrillation.
Provide hemorrhage control (direct pressure, tourniquet, wound packing).
Telemetric monitoring devices and the transmission of clinical data.
Apply manual splinting devices.
Perform spinal immobilization (C-collar, long/short spine board, KED, CID).
Apply traction splint.
Use mechanical patient restraints.
Perform emergency moves for endangered patients.
Administer nebulized/aerosolized medications.
Administer inhaled medications.

Use intramuscular auto-injector.
Administer sublingual/mucosal medications.
Administer oral medications.
Assist in childbirth delivery (normal and abnormal).
Measure vital signs (B/P, blood glucose, pulse, respiration)
Perform comprehensive patient assessment.
Perform supraglottic airway management.
Monitor end-tidal Co2 and interpret waveform capnography.
Acquire and transmit 12 lead ECG.
Administer intramuscular/subcutaneous injections.
Perform peripheral intravenous catherization.
Begin IV fluid infusions (non-medication).
Insert intraosseous access.
Administer limited medications (nitroglycerine, glucagon, D50, beta-agonist, opiate antagonist).
Perform needle decompression of chest.
Assist in chest tube placement.
Monitor and manage chest tubes.
Perform cricothyrotomy.
Insert gastric decompression devices (NG/OB tube).
Perform endotracheal intubation.
Dislodge airway obstructions by direct laryngoscopy.
Use high flow nasal cannula devices.
Provide tracheobronchial suctioning of intubated patient.
Interpret 12 lead ECG.
Perform electrical cardioversion.
Perform manual defibrillation.
Perform transcutaneous pacing.
Monitor and provide maintenance for transvenous cardiac pacing.
Administer medications as approved by National and Mississippi standards.
Administer intradermal injections.
Administer nasogastric medications.
Administer rectal medications.
Administer topical/transdermal medications.
Administer immunizations.
Maintain an infusion of blood or blood products.
Administer thrombolytics.
Access indwelling catheters and implanted central IV ports.
Monitor central lines.
Provide maintenance of medicated IV fluids.
Perform blood chemistry analysis.
Use hands-free eye irrigation methods.
Perform venous blood sampling.

Report and document assessment findings and interventions performed.
Advocates for professional behavior.
Communicate therapeutically with all members of the healthcare team.
Serve as entry-level clinician and team-member/leader while gaining experience
Performs interventions as part of a treatment plan intended to improve overall health of patient.
Ensures the safety other rescuer, other public safety personnel, civilians, and the patient.

Course Number and Name: EMS 1593 Paramedic Bridge

Description: This course is a comprehensive review of the knowledge base and skills for the Advanced EMT wishing to enter into further paramedic training who did not participate in the previous AEMT/Paramedic courses. It includes lecture/lab on a range of topics pertaining to pathophysiology, medical, and trauma emergencies for patients of all ages.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Applies comprehensive knowledge of the pathophysiology of respiration and perfusion to the patient assessment and management. (PATH1)

2. Integrates knowledge of operational roles and responsibilities to ensure patient, public, and personal safety. (PREP1)

3. Understands knowledge of the medical terminology, anatomy, physiology, and pathophysiology to patient care as it relates to traumatic emergencies. (MT1)

4. Integrates scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression in regards to traumatic emergencies. (ASSESSMENT1)

5. Integrates knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient with traumatic emergencies. (TRM1)

6. Integrates anatomical and medical terminology/abbreviations and key terms into the written and oral communication with colleagues and other health care professionals as it relates to fundamentals of EMS. (MT1)

7. Integrates knowledge of EMS systems, the safety/well-being of the provider, and medical-legal aspects which is intended to improve the health of EMS Personnel, patients, and the community (PREP1)

8. Applies knowledge of principles of public health, EMS research, and epidemiology, which includes public health emergencies, health promotion, and illness/injury prevention. (PH1)

Terminal Competencies

Describe the different cellular responses to stress, cell injury, and cell death
Describe the basic structure and function of epithelial, connective, muscle,
Describe the process of neoplasia, including factors associated with cancer
Discuss the risk factors and basic pathophysiology of common disorders seen by the provider
Describe the physiology of perfusion, hypoperfusion, and compensatory mechanisms
Explain the hierarchical structure of the body from cells to the biosphere
Differentiate among cardiogenic, hypovolemic, neurogenic, anaphylactic, and septic shock
Describe the nature and roles of carbohydrates, proteins, nucleic acids, lipids, and water in the body
Explain acid–base production, mechanisms to manage acid, and common acid–base imbalances
Explain the basic structure and function of a typical human cell and the components of a cell
Define key terms related to fundamentals of EMS.
Define key terms related to airway management and respiratory care.
Define key terms related to the anatomy, physiology, and pathophysiology of traumatic injuries.
Define key terms related to the anatomy, physiology, and pathophysiology of medical emergencies.
Discuss how the scene size-up integrates into the overall context of an emergency call
Identify the individual components that compose the scene size-up
Define Standard Precautions and discuss how they integrate into the scene size-up
Define scene safety and discuss how it integrates into the scene size-up
Discuss how resources determination and the number of patients integrate into the scene size-up
Define mechanism of injury/nature of illness and discuss how these integrate into the scene size-up
Discuss how to establish patient priorities as it relates to the primary assessment findings
Discuss how the primary assessment integrates into the overall context of an emergency call
Identify the individual components that comprise the primary assessment
Discuss the forming of a general impression and integrate this into the primary assessment
Identify the clinical need to stabilize the cervical spine during the primary assessment
Discuss how to assess baseline mental status and integrate this into the primary assessment
Discuss how to assess and manage the airway as it integrates into the primary assessment
Discuss how to assess and manage breathing as it integrates into the primary assessment
Discuss how to assess and manage circulation as it integrates into the primary assessment
Discuss the indications and contraindications for basic airway interventions.
Describe techniques used to employ basic airway management interventions.
Differentiate between adequate and inadequate breathing in a patient.
Recognize the need for artificial ventilation in a patient.
List and describe techniques for the various types of artificial or mechanical ventilation.
Discuss necessary modifications for providing artificial ventilation of a patient.
List the indications, advantages/disadvantages, and equipment for supraglottic airways.
Differentiate between those patients needing oxygen therapy and those who do not.
Discuss the management of upper airway obstruction and inadequate ventilation.
Recognize the need for artificial ventilation of a patient.

Describe the management for injury patterns such as impaled, crush, amputations, cavity trauma.
Given a scenario, discuss the assessment and management of patients with thoracic injuries.
Given a variety of scenarios, assess and manage patients with heat-related illnesses.
Given a variety of scenarios, assess and manage patients with cold-related disorders.
Given a variety of scenarios, assess and manage patients who have drowned.
Given a scenario, assess and manage patients with various diving injuries.
Given a variety of scenarios, assess and manage patients with high altitude illnesses.
Describe techniques of managing patients with injuries to the head, face, neck, and spine.
Given a scenario, develop a treatment plan for injuries to the head, face, neck, and spinal column.
Identify proper techniques of manually stabilizing and immobilizing the spine.
Describe the goals for B/P, BPM, ETCO2, SpO2, and BGL levels in patients with CNS trauma.
Given a scenario, implement proper management of patients with CNS trauma.
Adhere to the general principles of musculoskeletal injury management.
Given a variety of musculoskeletal injury, select and apply an appropriate splinting device.
Describe considerations in managing fractures, joint injuries, and injuries of muscles.
Describe the special considerations in management of common bone fractures.
Describe the special considerations in management of common joint injuries.
Discuss considerations in pain management in the care of musculoskeletal injuries.
Describe the key actions and decisions in each phase of trauma assessment.
Given a variety of scenarios, select appropriate bandaging materials and techniques.
Describe considerations in transporting or treat and release patients with soft-tissue injuries.
Anticipate and take measures to minimize systemic complications of burns.
Given a scenario, discuss management of patients with various burns.
Describe considerations for patients with musculoskeletal injuries who refuse transport.
Describe the importance of an organized system of trauma care to reducing trauma morbidity.
Describe the potential impact of full engagement of EMS in injury prevention initiatives.
Relate patients' signs and symptoms to the progression of traumatic brain injury.
Discuss differences between pediatric and adult spinal injuries.

Appendix A RECOMMENDED TOOLS AND EQUIPMENT

Capitalized Items

1. Anatomical Manikin w/removable organs (1 per program)
2. ACLS Training Manikin w/remote and recorder (1 per program)
3. Chair, stair (1 per program)
4. Cot, ambulance (1 per program)
5. Defibrillator, automated external, educational (1 per program)
6. ECG monitor, defibrillator, portable w/pacing, educational (1 per program)
7. Generator, arrhythmia (1 per program)
8. Heart model, external/internal (1 per program)
9. Intubation manikin, adult (1 per program)
10. Manikin, full body, CPR (1 per program)
11. Manikin, obstetrical (1 per program)
12. Manikin, trauma/burn, full body (1 per program)
13. Pulse oximeter [CO2 detector] (2 per program)
14. Radio transmitter/receiver, base station (1 per program)
15. Radio transmitter/receiver, 2-way portable (2 per program)
16. Skeleton, human (replica) (1 per program)
17. Ventilator, automatic transport (1 per program)
18. Pneumatic anti-shock garment (1 per program)
19. Computer w/monitor (1 per 4 students)
20. Printer, laser (1 per 2 computers)
21. Manikins, advanced (Adult, child, and neonate - code crisis manikins)
22. Quantitive CO2 monitor
23. 12-lead cardiac monitor/deffibulator with pacing
24. 12-lead simulator
25. IV pumps and poles
26. Neonatoal umbilical cannulation
27. Vascular access device
28. VAD needles
29. Naso/Oro gastric manikin
30. Cricoid manikin
31. CPAP/BiPAP
32. External jugular access device
33. Implanted ports/external and peripheral cath manikin
34. Broselow pediatric resusitation system
35. Scalp-vein manikin
36. Multi-purpose manikins
37. High Fidelity Simulation manikin

Non-Capitalized Items

1. Arm sling (1 per 2 students)
2. Bag-Valve-Mask device (1 per 2 students)
3. Blanket (1 per stretcher/cot)
4. Blood glucose monitor (1 per program)
5. Blood pressure cuff (4 per program)
6. Cervical collar (4 per program)
7. Containers, assorted medication
8. Cravats (1 per 2 students)
9. Cricothyrotomy device (1 per program)
10. ECG monitoring cables (2)

11. ECG electrodes (1 per program)
12. Head immobilizer (CID) (1 per program)
13. Restriction/extrication device (1 per program)
14. Intraosseus infusion simulator (1 per program)
15. IV training arm and hand, adult (2 per program)
16. IV training arm, pediatric (2 per program)
17. Laryngoscope intubation kit (1 per program)
18. Spine back board (2)
19. Manikin, child, CPR (1 per program)
20. Manikin, infant, CPR (1 per program)
21. Manikin, intubation, infant (1 per program)
22. Manikin, pneumothorax emergency training (1 per program)
23. Moulage kit (1 per program)
24. Nasal cannula (5)
25. Nasopharyngeal airway (2)
26. Non-rebreather masks (5)
27. Oropharyngeal airway, various sizes
28. Oxygen cylinder (2)
29. Oxygen regulator and flowmeter (1 per program)
30. Pen light (1 per 2 students)
31. Pillows (6 per program)
32. Pocket mask w/1-way valve and O2 port (2 per program)
33. Scissors, trauma (4 per program)
34. Sheets, ambulance Cot (2 per program)
35. Short spine board (2 per program)
36. Simulator, cricothyrotomy (1 per program)
37. Simulator, intramuscular injection (1 per program)
38. Splint, air, various sizes
39. Splint, ladder (1 per program)
40. Splint, traction, sager-hare (2)
41. Stethoscope (1 per 2 students)
42. Stethoscope, dual head (1 per program)
43. Straps, various sizes
44. Stretcher, scoop (1 per program)
45. Suction device, portable (1 per program)
46. Syringes, various cc volumes
47. Venturi mask (1 per program)
48. . Naso & orgastric tubes

Appendix B Curriculum Definitions and Terms

- Course Name – A common name that will be used by all community colleges in reporting students

- Course Abbreviation – A common abbreviation that will be used by all community and junior colleges in reporting students

- Classification – Courses may be classified as the following:
    - Career Certificate Required Course – A required course for all students completing a career certificate.
    - Technical Certificate Required Course – A required course for all students completing a technical certificate.
    - Technical Elective – Elective courses that are available for colleges to offer to students.

- Description – A short narrative that includes the major purpose(s) of the course

- Prerequisites – A listing of any courses that must be taken prior to or on enrollment in the course

- Corequisites – A listing of courses that may be taken while enrolled in the course

- Student Learning Outcomes – A listing of the student outcomes (major concepts and performances) that will enable students to demonstrate mastery of these competencies

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:

- The content of the courses in this document reflects approximately 75% of the time allocated to each course. The remaining 25% of each course should be developed at the local district level and may reflect the following:
    - Additional competencies and objectives within the course related to topics not found in the state framework, including activities related to specific needs of industries in the community college district
    - Activities that develop a higher level of mastery on the existing competencies and suggested objectives
    - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed or revised
    - Activities that include integration of academic and career–technical skills and course work, school-to-work transition activities, and articulation of secondary and postsecondary career–technical programs
    - Individualized learning activities, including work-site learning activities, to better prepare individuals in the courses for their chosen occupational areas

- Sequencing of the course within a program is left to the discretion of the local college. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors. Programs that offer an Associate of Applied Science Degree must include all of the required Career Certificate courses, Technical Certificate courses **AND** a minimum of 15 semester hours of General Education Core Courses. The courses in the General Education Core may be spaced out over the entire length of the program so that students complete some academic and Career Technical courses each semester. Each community college specifies the actual courses that are required to meet the General Education Core Requirements for the Associate of Applied Science Degree at their college.

- In order to provide flexibility within the districts, individual courses within a framework may be customized by doing the following:

    - Adding new student learning outcomes to complement the existing competencies and suggested objectives in the program framework
    - Revising or extending the student learning outcomes
    - Adjusting the semester credit hours of a course to be up 1 hour or down 1 hour (after informing the Mississippi Community College Board [MCCB] of the change)

Appendix C Textbook List

Recommended EMT/PARA BRIDGE Text Book List **CIP 51.0904 –** (Emergency Medical Technology/Technician EMT Paramedic)		
Book Title	**Author (s)**	**ISBN**
Bledsoe, Porter, and Cherry	Paramedic Care: Principles & Practice, Vols. 1-5, 5/e (2017).	0134575962 / 9780134575964

Appendix D Course Crosswalk

Course Crosswalk
EMT/PARA BRIDGE

CIP 51.0904 – (Emergency Medical Technology/Technician EMT Paramedic)

2021 MS Curriculum Framework

Course Number	Course Title	Hours
EMS 1222	Prehospital Fundamental Concepts	2
EMS 1231	Prehospital Operation and Incident Management	1
EMS 1262	Prehospital Pharmacology	2
EMS 1362	Prehospital Respiratory Management	2
EMS 1373	Prehospital Medical Management	3
EMS 1384	Prehospital Trauma Management	4
EMS 1533	Prehospital Practicum I	3
EMS 1543	Prehospital Paramedic Pharmacology	3
EMS 1552	Prehospital Paramedic Respiratory Management	2
EMS 2764	Prehospital Paramedic Cardiology Management	4
EMS 2773	Prehospital Paramedic Medical Management	3
EMS 1533	Prehospital Practicum II	4
EMS 2863	Prehospital Paramedic Maternal, Child, and Special Populations Management	3
EMS 2873	Prehospital Practicum III	3
EMS 2883	Prehospital Paramedic Care Capstone	3
EMS 2893	Prehospital Paramedic Practicum Capstone	3

Course Crosswalk
EMT/PARA BRIDGE

CIP 51.0904 – (Emergency Medical Technology/Technician EMT Paramedic)

2021 MS Curriculum Framework

Course Number	Course Title	Hours
EMS 1593	Paramedic Bridge	3
EMS 1543	Prehospital Paramedic Pharmacology	3
EMS 1552	Prehospital Paramedic Respiratory Management	2
EMS 2764	Prehospital Paramedic Cardiology Management	4
EMS 2773	Prehospital Paramedic Medical Management	3
EMS 2784	Prehospital Practicum II	4
EMS 2863	Prehospital Paramedic Maternal, Child, and Special Populations Management	3
EMS 2873	Prehospital Practicum III	3
EMS 2883	Prehospital Paramedic Care Capstone	3
EMS 2893	Prehospital Paramedic Practicum Capstone	3