

National EMS Education Standards Transition Template

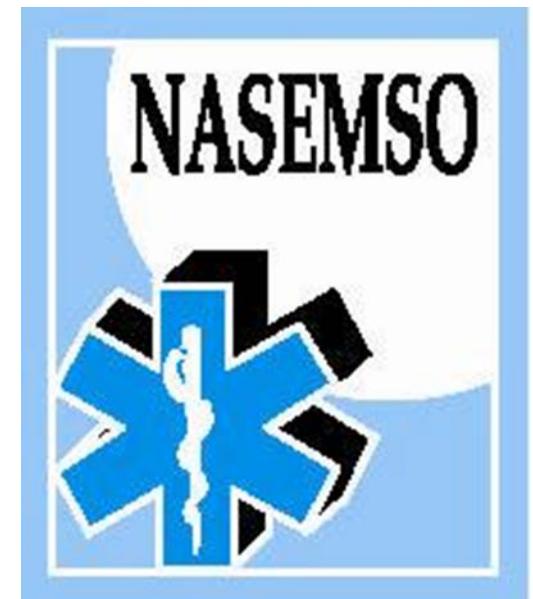
A Comparison of EMS Knowledge and Skills to Assist the Transition and Implementation of the National EMS Education Standards for the

First Responder to Emergency Medical Responder (EMR)

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National Association of State EMS Officials

Falls Church, VA



Background:

In 1996, the National Highway Traffic Safety Administration (NHTSA) and the Health Resources and Services Administration (HRSA) published the national consensus document titled *EMS Agenda for the Future (Agenda)*. The intent of the *Agenda* is to create a common vision for the future of EMS and is designed for use by government and private organizations at the national, state and local levels to help guide EMS planning, decision making, and policy. In 2000, the *Agenda* was followed by the *EMS Education Agenda for the Future: A Systems Approach (Education Agenda)*. Since the release of the *Agenda*, the *National EMS Core Content (Core Content)*, *National EMS Scope of Practice Model (Scope of Practice Model)*, and the *National EMS Education Standards (Education Standards)* have been completed and published along with Instructional Guidelines geared to each practitioner level. States license EMS personnel and EMS agencies as a means of ensuring public health and safety. Because of this common and important function, the National Association of State EMS Officials (NASEMSO) has taken the lead in coordinating implementation of the *Education Agenda*. Because states may need to revise or develop processes to facilitate a smooth transition from the *U.S. Department of Transportation National Standard Curricula (NSC)* to the new *Education Standards*, the National Association of State EMS Officials (NASEMSO) collaborated with a panel of experts and several national stakeholder groups to establish a *Gap Analysis Template* in 2009. States were encouraged to consider several important factors to implement of the *Education Standards*:

- Individual states are encouraged to use the *National EMS Scope of Practice Model* as a foundation to establish state EMS practitioner levels.
- Individual states are encouraged to use the *Gap Analysis Template* to help define system processes that support the transition of EMS practitioners to the state-adopted scope of practice.
- The *Education Standards* promotes increased flexibility, encourages creativity within each EMS education program and encourages alternative delivery methods. The *Education Standards* do not represent a prescriptive sequence or content grouping for a class presentation. States and/or educational programs will need to determine the sequence for teaching the materials.
- Course outcome evaluations should be based on student competency, not the time to course completion, as this may vary. Time estimates may be provided to guide the *planning* for presentation of course materials.
- States and/or education programs should re-evaluate student qualifications, co-requisites, or pre-requisites for all EMS practitioner levels.
- States and/or programs should consider co-requisites or pre-requisites for transition courses to help establish the depth and breadth of new content.
- Individuals transitioning within a level (i.e. EMT-P to Paramedic) are responsible for the knowledge and skills that are implicit to all previous levels.

States retain the authority to credential individual practitioners in a way that best meets the needs of the state. Some states have already identified state-based learning objectives and educational priorities that exist both above and below the *Education Standards* making it difficult to establish a “national curriculum” for transition. Because a transition course per se would have a limited shelf life as the *Education Standards* are implemented, available resources have been focused on developing materials that will support implementation of the new practitioner levels and pre-packaged educational materials geared specifically *to the changes* are generally unavailable. To assist this effort, NASEMSO has utilized the *Gap Analysis Template* to help identify the generic “Gap Content” that can be used to enhance the knowledge and skills of existing practitioners that

desire certification/licensure at the level of the *Education Standards*. Proper learning objectives should be developed by end users and accompany an identification of methods (i.e. medical literature, publisher materials, in-service programs, and Learning Management Systems) that can be used to achieve educational goals. Page guides have been included to cross reference content with the *Education Standards* and more detail regarding content can be found within the Instructional Guidelines. Time frames (rough estimates) have been provided to assist in planning and are not intended to serve as a mandate. For the purposes of the Transition Templates:

- **“Essential Content”** is content or material that has been identified by an expert panel as having significantly changed (including expanded) from the NSC with sufficient clinical relevance that review and/or instruction during the transition process is **strongly recommended**.
- **“Supplemental Content”** is content or material that has been highlighted by the panel as changed (including expanded) from the NSC with sufficient clinical relevance that review and/or instruction **should be considered**.

Content areas that do not include time frames likely contain content changes that were felt to be insufficient to warrant updating. These content areas should, at a minimum, be reviewed by the state and added to transition learning requirements if deemed appropriate. Proper learning objectives should be developed by end users and accompany an identification of methods (i.e. medical literature, publisher materials, in-service programs, and Learning Management Systems) that can be used to achieve educational goals. Page guides have been included to cross reference content with the *Education Standards* and more detail regarding content can be found within the Instructional Guidelines. Declarative time frames (rough estimates) have been provided to assist planning efforts and are not intended to serve as a mandate. In addition, the *Education Standards* recognize the National Incident Management System (NIMS) and Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, 29 CFR 1910.120 as pre- or co-requisite training requirements. Additional time may be needed to accommodate this content.

States will need to determine which content and/or skills must be tested and/or verified to complete state-based transition processes and communicate this information to stakeholders.

A list of EMS publisher materials that support the implementation of the Education Standards is maintained by NASEMSO on our web site at www.nasemso.org. *Education Standards* and *Instructional Guidelines* listed in this document serve as an example for convenience of the reader. Official documents published by NHTSA are available at www.ems.gov.

The NASEMSO Implementation Team is available to provide technical assistance to states with *Education Agenda* implementation efforts. State officials that desire additional information can contact NASEMSO via info@nasemso.org or call NASEMSO Program Advisor Kathy Robinson at (703) 538-1799 ext 1708.

Transition of First Responder to Emergency Medical Responder

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
Preparatory	Uses simple knowledge of the EMS system, safety/well-being of the EMR, medical/legal issues at the scene of an emergency while awaiting a higher level of care. (P. 11)			Total for Section E = 0 min. S = 75 min.	
<ul style="list-style-type: none"> • EMS Systems 	Simple depth, simple breadth <ul style="list-style-type: none"> • EMS systems • Roles/ responsibilities/professionalism of EMS personnel • Quality improvement (P. 11)	Added required affective/behavioral characteristics Added quality improvement	II. Roles, Responsibilities, and Professionalism of EMS Personnel A. Roles and Responsibilities B. Professionalism III. Quality Improvement A. Dynamic System for Continually Evaluating and Improving Care (P. 1)	30 min.	Supplemental
<ul style="list-style-type: none"> • Research 	Simple depth, simple breadth <ul style="list-style-type: none"> • Impact of research on EMR care • Data collection (P. 11)	All new section	I. Impact of Research on EMR Care A. Research Findings Are Important to Identify What Should Be Changed in EMS Assessment and Management and to Improve Patient Care and Outcome (i.e. CPR guidelines change based on current research) B. Quality Assurance Research For An EMS System Can Improve Service Delivery C. Data Collection (P. 4)	10 min.	Supplemental
<ul style="list-style-type: none"> • Workforce Safety and Wellness 	Simple depth, simple breadth <ul style="list-style-type: none"> • Standard safety precautions • Personal protective equipment • Stress management <ul style="list-style-type: none"> ◦ Dealing with death and dying • Prevention of response related injuries • Lifting and moving patients (P. 12)	Content changes insufficient to warrant update	(P. 4)	0	

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
• Documentation	Simple depth, simple breadth • Recording patient findings (P. 13)	Content changes insufficient to warrant update	(P. 12)	0	
• EMS System Communication	Simple depth, simple breadth Communication needed to • Call for Resources • Transfer care of the patient • Interact within the team structure (P. 13)	Fundamental information about transferring patient care to incoming EMTs	I. Communications B. Transfer Care of Patient (P. 13)	15 min.	Supplemental
• Therapeutic Communications	Simple depth, simple breadth Principles of communicating with patients in a manner that achieves a positive relationship • Interviewing techniques (P. 13)	Content changes insufficient to warrant update	(P. 14)	0	
• Medical/Legal Ethics	Simple depth, simple breadth • Consent/refusal of care • Confidentiality • Advanced directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations • End-of-life issues (P. 13)	HIPPA (new content) Living Wills (added) Surrogate decision makers (added) Civil and criminal court cases (expanded)	II. Confidentiality A. Obligation to Protect Patient Information B. Health Information Portability and Accountability Act (HIPAA) III. Advanced Directives B. Living Wills C. Surrogate Decision-Makers IV. Types of Court Cases A. Civil (Tort) B. Criminal (P. 15)	20 min.	Supplemental
Anatomy and Physiology	Uses simple knowledge of the anatomy and function of the upper airway, heart, vessels, blood, lungs, skin, muscles, and bones as the foundation of emergency care. (P. 14)	Brief discussion on the life support chain focusing on oxygenation and perfusion	II. Life Support Chain A. Fundamental Elements B. Issues Impacting Fundamental Elements (P. 18)	Total for Section E = 30 min. S = 0 min.	
Medical Terminology	Uses simple medical and anatomical terms. (P. 14)	All new content	I. Medical Terminology A. Recognizes Simple Medical Prefixes, Suffixes, and Combining Words (P. 21)	Total for Section E= 15 min. S = 0 min.	

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Physiology	Uses simple knowledge of shock and respiratory compromise to respond to life threats. (P. 14)	Expanded content on respiratory dysfunction and shock	I. Respiratory Compromise A. Impaired Airway, Respiration, or Ventilation II. Shock A. Impaired Blood Flow to the Organs and Cells (P. 22)	Total for Section E = 30 min. S = 0 min.	
Life Span Development	Uses simple knowledge of age related differences to assess and care for patients. (P. 14)	Content changes insufficient to warrant update	(P. 24)	Total for Section E = 0 min. S = 0 min.	
Public Health	Have an awareness of local public health resources and the role EMS personnel play in public health emergencies. (P. 15)	Content changes insufficient to warrant update	(P. 26)	Total for Section E = 0 min. S = 0 min.	
Pharmacology	Uses simple knowledge of the medications that the EMR may self-administer or administer to a peer in an emergency. (P. 15)		(P. 27)	Total for Section E = 90 min.* S = 0 min.	*Can be waived or modified by state if content was previously taught at this level
<ul style="list-style-type: none"> Principles of Pharmacology 	No knowledge related to this competency is applicable at this level. (P. 15)	N/A	(P. 27)	0	
<ul style="list-style-type: none"> Medication Administration 	Simple depth, simple breadth Within the scope of practice of the EMR, how to <ul style="list-style-type: none"> Self-administer medication Peer-administer medication (P. 16)	The use of an auto injector for self-preservation or for use on one's peers (chemical attack)	I. Self-Administration (Intramuscular Injection by Auto injector) A. Advantages B. Disadvantages C. Techniques II. Peer Administration (Intramuscular Injection by Auto injector) A. Advantages B. Disadvantages C. Techniques (P. 28)	60 min.*	*Essential

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
<ul style="list-style-type: none"> Emergency Medications 	Simple depth, simple breadth Within the scope of practice of the EMR <ul style="list-style-type: none"> Names Effects Indications Routes of administration Dosages for the medications administered (P. 16)	Chemical antidote auto injector only	I. Specific Medications (i.e. Chemical Antidote Auto injector Devices) (P. 29)	30 min.*	*Essential
Airway Management, Respiration, and Artificial Ventilation	Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting additional EMS response for patients of all ages. (P. 17)		(P. 30)	Total for Section E = 180 min. S = 0 min.	
<ul style="list-style-type: none"> Anatomy and Physiology 	Fundamental depth, simple breadth <ul style="list-style-type: none"> Anatomy of the respiratory system (P. 17)	Increased respiratory physiology Enhanced skills Interrelationship between ventilation and circulation	I. Anatomy of the Respiratory System A. Includes All Airway Anatomy Covered in the Airway Management Section B. Additional Respiratory System Anatomy C. Vascular Structures That Support Respiration II. Physiology of Respiration A. Pulmonary Ventilation B. Oxygenation C. Respiration III. Pathophysiology of Respiration A. Pulmonary Ventilation B. Oxygenation C. Respiration (P. 33)	60 min.	Essential
<ul style="list-style-type: none"> Airway Management 	Fundamental depth, simple breadth Within the scope of practice of the EMR <ul style="list-style-type: none"> Airway anatomy Airway assessment Techniques of assuring a patent airway (P. 17)	Content changes insufficient to warrant update	(P. 30)	0	

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
<ul style="list-style-type: none"> • Respiration 	<p>(See also Anatomy and Physiology for relevant content) Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> • Physiology and pathophysiology of respiration <ul style="list-style-type: none"> o Pulmonary ventilation o Oxygenation o Respiration <ul style="list-style-type: none"> <input type="checkbox"/> External <input type="checkbox"/> Internal <input type="checkbox"/> Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy (P. 18) 	Increased level of detail	<p>V. Management of Adequate and Inadequate Respiration A. Assure Patent Airway (techniques described in Airway Management section) B. Techniques for Assuring Adequate Respirations</p> <p>VI. Supplemental Oxygen Therapy A. Portable Oxygen Cylinder B. Oxygen Delivery Devices (P. 35)</p>	60 min.	Essential
<ul style="list-style-type: none"> • Artificial Ventilation 	<p>Fundamental depth, simple breadth Assessment and management of adequate and inadequate ventilation</p> <ul style="list-style-type: none"> • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output (P. 18) 	Increased level of detail	<p>I. Assessment of Adequate and Inadequate Ventilation A. Adequate B. Inadequate</p> <p>II. Oxygenation A. Adequate B. Inadequate</p> <p>III. Management of Adequate and Inadequate Ventilation A. Patients With Adequate Ventilation B. Patients With Inadequate Ventilation</p> <p>IV. Ventilation of an Apneic Patient A. To Oxygenate and Ventilate the Patient B. Indications C. Monitoring Patient D. Limitation</p> <p>V. Differentiate Normal Ventilation From Positive Pressure Ventilation A. Air Movement B. Blood Movement</p>	60 min.	Essential

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			C. Esophageal Opening Pressure D. Excess Rate or Depth of Ventilation Using Pocket Mask or Bag-Mask Can Harm the Patient as ventilating too fast or too deep may cause low blood pressure, vomiting, or decreased blood flow when the chest is compressed during CPR (P. 37)		
Patient Assessment	Use scene information and simple patient assessment findings to identify and manage immediate life threats and injuries within the scope of practice of the EMR. (P. 19)		(P. 41)	Total for Section E = 60 min. S = 0 min.	
<ul style="list-style-type: none"> Scene Size Up 	Complex depth, comprehensive breadth <ul style="list-style-type: none"> Scene safety Fundamental depth, foundational breadth <ul style="list-style-type: none"> Scene management <ul style="list-style-type: none"> Impact of the environment on patient care Addressing hazards Violence Need for additional or specialized resources Standard precautions (P. 19)	Re-emphasis on scene safety	I. Scene Safety A. Common Scene Hazards B. Evaluation of the Scene (P. 41)	5 min.	Essential
<ul style="list-style-type: none"> Primary Assessment 	Simple depth, simple breadth <ul style="list-style-type: none"> Primary assessment for all patient situations <ul style="list-style-type: none"> Level of consciousness ABCs Identifying life threats Assessment of vital functions Begin interventions needed to preserve life (P. 20)	New terminology	I. Primary Survey/Primary Assessment A. The Primary Survey Quickly Attempts to Identify Those Conditions That Represent an Immediate Threat to the Patient's Life B. Level of Consciousness C. Airway Status D. Breathing Status E. Circulatory Status F. Identifying Life Threats G. Assessment of Vital Functions (P. 44)	20 min.	Essential
<ul style="list-style-type: none"> History-Taking 	Simple depth, simple breadth <ul style="list-style-type: none"> Determining the chief complaint 	New terminology	I. Determining the Chief Complaint II. Mechanism of Injury or Nature of Illness	20 min.	Essential

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
	<ul style="list-style-type: none"> Mechanism of injury/nature of illness Associated signs and symptoms (P. 20) 	Geriatric content added	III. Associated Signs and Symptoms IV. Age-Related Variations for Pediatric and Geriatric Assessment and Management A. Pediatric (review optional) B. Geriatric (P. 48)		
<ul style="list-style-type: none"> Secondary Assessment 	Simple depth, simple breadth <ul style="list-style-type: none"> Performing a rapid full body scan Focused assessment of pain Assessment of vital signs (P. 20) 	New terminology Increased level of detail BP Assessment	I. Performing a Rapid Full-Body Scan II. Focused Assessment of Pain III. Assessment of Vital Signs (P. 50)	10 min.	Essential
<ul style="list-style-type: none"> Monitoring Devices 	No knowledge related to this competency is applicable at this level. (P. 21)	N/A	(P. 53)	0	
<ul style="list-style-type: none"> Reassessment 	Simple depth, simple breadth <ul style="list-style-type: none"> How and when to reassess patients (P. 21) 	Reassessment of vital signs added	I. How and When to Reassess II. Age-Related Considerations for Pediatric and Geriatric Assessment (P. 54)	5 min	Essential
Medicine	Recognizes and manages life threats based on assessment findings of a patient with a medical emergency while awaiting additional emergency response. (P. 22)		(P. 56)	Total for Section E = 0 min. S = 205 min.	
<ul style="list-style-type: none"> Medical Overview 	Simple depth, simple breadth Assessment and management of a <ul style="list-style-type: none"> Medical complaint (P. 22) 	Re-use of new assessment terminology	I. Overview of Medical Complaints A. Assessment B. Manage life-threatening problems as they are discovered (P. 56)	10 min	Supplemental
<ul style="list-style-type: none"> Neurology 	Simple depth, simple breadth Anatomy, presentations, and management of <ul style="list-style-type: none"> Stroke (P. 23) 	Stroke discussion (all new)	IV. Stroke A. Causes B. Assessment Findings and Symptoms C. Management of Patient With Stroke Assessment Findings or Symptoms (P. 57)	20 min	Supplemental

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<ul style="list-style-type: none"> Abdominal and Gastrointestinal Disorders 	Simple depth, simple breadth Anatomy, presentations and management of shock associated with abdominal emergencies <ul style="list-style-type: none"> Gastrointestinal bleeding (P. 24)	Content changes insufficient to warrant update	(P. 59)	0	
<ul style="list-style-type: none"> Immunology 	Simple depth, simple breadth Recognition and management of shock and difficulty breathing related to <ul style="list-style-type: none"> Anaphylactic reactions (P. 25)	Content changes insufficient to warrant update	(P. 61)	0	
<ul style="list-style-type: none"> Infectious Diseases 	Simple depth, simple breadth Awareness of <ul style="list-style-type: none"> A patient who may have an infectious disease How to decontaminate equipment after treating a patient (P. 26)	Two added definitions Brief discussion on transmission routes	I. Infectious Disease Awareness A. Definitions 1. Infectious disease 2. Communicable disease B. Transmission Routes 1. Direct contact 2. Coughing and sneezing 3. Blood borne 4. Other body fluids (P. 62)	10 min	Supplemental
<ul style="list-style-type: none"> Endocrine Disorders 	Simple depth, simple breadth Awareness that <ul style="list-style-type: none"> Diabetic emergencies cause altered mental status (P. 27)	Increased level of detail on diabetes	I. Diabetic Conditions A. Introduction (P. 63)	10 min	Supplemental
<ul style="list-style-type: none"> Psychiatric 	Simple depth, simple breadth Recognition of <ul style="list-style-type: none"> Behaviors that pose a risk to the EMR, patient or others (P. 28)	New material Suicide risk assessment	I. Define II. Assessment A. General Appearance B. Speech C. Skin D. Posture/Gait E. Mental Status F. Mood, Thought, Perception, Judgment, Memory, and Attention III. Behavioral Change A. Factors That May Alter a Patient's Behavior—May Include Situational Stresses, Medical Illnesses, History,	20 min	Supplemental

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
			Psychiatric Problems, Alcohol or Drugs, Patient Not Taking Psychiatric Medication B. Common Causes of Behavioral Alteration C. Behavioral Emergencies That Can Be a Danger to the EMR, Patient or Others D. Assessment for Suicide Risk IV. Methods to Calm Behavioral Emergency Patients V. Emergency Medical Care VI. Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management (P. 65)		
<ul style="list-style-type: none"> Cardiovascular 	Simple depth, simple breadth Anatomy, signs, symptoms and management <ul style="list-style-type: none"> Chest pain Cardiac arrest (P. 29)	Added content on chest pain and heart attack	I. Chest Pain A. Causes B. Assessment C. Management II. Consider Age-Related Variations for Pediatric and Geriatric Patients for Assessment and Management of Cardiac Compromise III. Cardiac Arrest (Refer to Shock and Resuscitation section) (P. 68)	30 min	Supplemental
<ul style="list-style-type: none"> Toxicology 	Simple depth, simple breadth <ul style="list-style-type: none"> Recognition and management of <ul style="list-style-type: none"> Carbon monoxide poisoning Nerve agent poisoning How and when to contact a poison control center (P. 30)	New information Use of chemical antidote auto-injector	IV. Nerve Agent Antidote Auto-injector Kit A. Types 1. Mark I 2. DuoDote (P. 70)	45 min	Supplemental
<ul style="list-style-type: none"> Respiratory 	Simple depth, simple breadth Anatomy, signs, symptoms and management of respiratory emergencies including those that affect the <ul style="list-style-type: none"> Upper airway Lower airway (P. 31)	Increased level of detail on respiratory distress	I. Anatomy of the Respiratory System A. Upper Airway B. Lower Airway C. Lungs and Accessory Structures II. Normal Respiratory Effort A. Assessment Findings and Symptoms and Management for Respiratory Conditions III. Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management (P. 73)	30 min.	Supplemental

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
• Hematology	No knowledge related to this competency is applicable at this level. (P. 32)	N/A	(P. 74)	0	
• Genitourinary/Renal	Simple depth, simple breadth • Blood pressure assessment in hemodialysis patients (P. 33)	Hemodialysis added	I. Hemodialysis A. Hemodialysis B. Special Considerations for Hemodialysis Patients C. Life-Threatening Emergencies Associated With Dialysis Patients D. Management of a Patient with a Dialysis Emergency (P. 75)	10 min.	Supplemental
• Gynecology	Simple depth, simple breadth Recognition and management of shock associated with • Vaginal bleeding (P. 34)	Vaginal bleeding added	I. Vaginal bleeding A. Causes B. Assess for signs of shock C. Presence of pain D. Management (P. 76)	10 min.	Supplemental
• Non-traumatic Musculoskeletal Disorders	No knowledge related to this competency is applicable at this level. (P. 34)	N/A	(P. 77)	0	
• Diseases of the Eyes, Ears, Nose, and Throat	Simple depth, simple breadth Recognition and management of • Nose bleed (P. 35)	Nosebleed added	I. Nosebleed A. Causes B. General Assessment Findings and Symptoms C. Techniques to Stop Bleeding in Conscious Patient If No Risk of Spine Injury (P. 78)	10 min.	Supplemental
Shock and Resuscitation	Uses assessment information to recognize shock, respiratory failure or arrest, and cardiac arrest based on assessment findings and manages the emergency while awaiting additional emergency response. (P. 35)	New section that combines the CPR information from the old curriculum with more detail and a discussion on the use of the AED; more detailed shock information	I. Ethical Issues in Resuscitation A. Withholding Resuscitation Attempts II. Anatomy and Physiology Review A. Respiratory System B. Cardiovascular System III. Respiratory Failure IV. Cardiac Arrest V. Resuscitation VI. Automated External Defibrillation (AED) (P. 79)	Total for Section E = 45 min. S = 0 min.	

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
Trauma	Uses simple knowledge to recognize and manage life threats based on assessment findings for an acutely injured patient while awaiting additional emergency medical response. (P. 35)			Total for Section E = 25 min. S = 100 min.	
• Trauma Overview	No knowledge related to this competency is applicable at this level. (P. 35)	Field Triage Decision Scheme added	I. Identification and Categorization of Trauma Patients A. Entry-level students need to be familiar with: 1. National Trauma Triage Protocol VII. Shock (P. 82)	25 min	Essential
• Bleeding	Simple depth, simple breadth Recognition and management of • Bleeding (P. 35)	Content changes insufficient to warrant update	(P. 83)	0	
• Chest Trauma	Simple depth, simple breadth Recognition and management of • Blunt versus penetrating mechanisms • Open chest wound • Impaled object (P. 37)	Content changes insufficient to warrant update	(P. 85)	0	
• Abdominal and Genitourinary Trauma	Simple depth, simple breadth Recognition and management of • Blunt versus penetrating mechanisms • Evisceration • Impaled object (P. 38)	Content changes insufficient to warrant update	(P. 86)	0	
• Orthopedic Trauma	Simple depth, simple breadth Recognition and management of • Open fractures • Closed fractures • Dislocations • Amputations (P. 39)	New terminology: fracture and dislocation added	I. Fractures and Dislocations A. Fractures B. Dislocations C. Signs and Symptoms -- may be extremely difficult to distinguish a fracture from a dislocation D. Emergency Medical Care of Bone Injuries (P. 87)	10 min.	Supplemental
• Soft Tissue Trauma	Simple depth, simple breadth Recognition and management of • Wounds • Burns	Foreign Bodies of the Eye added Extent of burns added	V. Foreign Body in Eye A. Dirt, Dust, or Chemical B. Signs and Symptoms C. Treatment	15 min.	Supplemental

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	<ul style="list-style-type: none"> o Electrical o Chemical o Thermal • Chemicals in the eye and on the skin (P. 40) 		VI. Burns A. Severity (P. 89)		
<ul style="list-style-type: none"> • Head, Facial, Neck and Spine Trauma 	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> • Life threats • Spine trauma (P. 41)	Increased level of detail to special management situations	I. Head, Face, Neck, and Spine Trauma (A.)4. Special Management Considerations a. Maintain airway/ ventilation/oxygenation b. Primary assessment with manual in-line spinal stabilization should be done on scene c. Monitor the patient's mental status d. Dress and bandage open wound as indicated in the emergency medical care of soft tissue injuries (P. 93)	15 min.	Supplemental
<ul style="list-style-type: none"> • Nervous System Trauma 	No knowledge related to this competency is applicable at this level. (P. 42)	N/A	(P. 96)	0	
<ul style="list-style-type: none"> • Special Considerations in Trauma 	Simple depth, simple breadth Recognition and management of trauma in <ul style="list-style-type: none"> • Pregnant patient • Pediatric patient • Geriatric patient (P. 42)	Pregnant patients added Elderly patients added	I. Pregnant Patient A. Recognition B. Management III. Elderly Patient A. Recognition B. Management (P. 97)	20 min.	Supplemental
<ul style="list-style-type: none"> • Environmental Trauma 	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> • Submersion incidents • Temperature-related illness (P. 43)	Use of AEDs in Environmental Trauma added Submersion added	I. Environmental Emergencies A. Exposure to Cold C. Submersion (P. 99)	20 min.	Supplemental
<ul style="list-style-type: none"> • Multi-System Trauma 	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> • Multi-system trauma (P. 43)	Increased level of detail added	I. Multi-System Trauma A. Patients Subjected to Significant Forces Have an Increased Risk for Injuries to Multiple Organs Within the Body at the Same Time B. Multi-Trauma Patients Are at a Greater Risk of Developing Shock C. Suspect Multi-Systems Trauma in Any Patient	20 min.	Supplemental

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
			Subjected to Significant External Forces (P. 103)		
Special Patient Populations	(P. 44) Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response.		(P. 104)	Total for Section E = 0 min. S = 70 min.	
<ul style="list-style-type: none"> Obstetrics 	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> Normal delivery Vaginal bleeding in the pregnant patient (P. 44)	Vaginal bleeding added Braxton Hicks added	II. Vaginal Bleeding in the Pregnant Patient III. General Assessment and Management of the Obstetrical Patient A. Signs of Labor 1. Braxton Hicks/false labor contractions (P. 104)	15 min	Supplemental
<ul style="list-style-type: none"> Neonatal Care 	Simple depth, simple breadth <ul style="list-style-type: none"> Newborn care Neonatal resuscitation (P. 45)	Content changes insufficient to warrant update	(P. 107)	0	
<ul style="list-style-type: none"> Pediatrics 	Simple depth, simple breadth Age-related assessment findings, and age-related assessment and treatment modifications for pediatric specific major diseases and/or emergencies <ul style="list-style-type: none"> Upper airway obstruction Lower airway reactive disease Respiratory distress/failure/arrest Shock Seizures Sudden Infant Death Syndrome (P. 46)	Pediatric assessment triangle added Refocus from "circulatory failure" to "shock"	II. Assessment Process B. Patient Assessment 1. Pediatric assessment triangle -- 15- to 30-second assessment of the severity of the patient's illness or injury II. Shock A. Causes B. Assessment C. Management (P. 108)	20 min	Supplemental
<ul style="list-style-type: none"> Geriatrics 	Simple depth, simple breadth <ul style="list-style-type: none"> impact of age-related changes on assessment and care (P. 47)	All new content	I. Age-Associated Changes A. Age Dependent and Variable B. Sensory Changes in Older Patients C. Heart/Blood Vessels D. Lungs and Breathing E. Stomach and Intestines F. Brain and Nervous System G. Muscles and Bones	30 min	Supplemental

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
			H. Other II. Assessment and Care Implications A. Assessment B. Care (P. 112)		
<ul style="list-style-type: none"> Patients With Special Challenges 	Simple depth, simple breadth <ul style="list-style-type: none"> Recognizing and reporting abuse and neglect (P. 48) 	Elder abuse added	I. Recognizing and Reporting Abuse and Neglect B. Elder Abuse (P. 114)	5 min	Supplemental
EMS Operations	Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety(P. 48)		(P. 115)	Total for Section E = * S = 30 min.	*Essential content determined by NIMS and HAZWOPER requirements
<ul style="list-style-type: none"> Principles of Safely Operating a Ground Ambulance 	Simple depth, simple breadth <ul style="list-style-type: none"> Risks and responsibilities of emergency response (P. 48) 	Increased depth of discussion on the risks of emergency response and leaving the scene	I. Risks and Responsibilities of Emergency Response A. Apparatus and Equipment Readiness B. Pre-Arrival Considerations C. Scene Safety D. Leaving the Scene (P. 115)	5 min	Supplemental
<ul style="list-style-type: none"> Incident Management 	Simple depth, simple breadth <ul style="list-style-type: none"> Establish and work within the incident management system (P. 49) 	ICS and federal requirements added	I. Establish and Work Within the Incident Management System A. Entry-Level Students Need to Be Certified in 1. ICS-100: Introduction to ICS, or equivalent 2. FEMA IS-700: NIMS, An Introduction (P. 117)	This Can Be Done as a Co requisite or Prerequisite or as Part of the Entry-Level Course	Essential
<ul style="list-style-type: none"> Multiple Casualty Incidents 	Simple depth, simple breadth <ul style="list-style-type: none"> Triage principles Resource management (P. 49) 	Content changes insufficient to warrant update	(P. 118)	0	
<ul style="list-style-type: none"> Air Medical 	Simple depth, simple breadth	New material added	I. Safe Air Medical Operations	10 min	Supplemental

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
	<ul style="list-style-type: none"> • Safe air medical operations • Criteria for utilizing air medical response (P. 49) 	Patient transfer issues Interaction with AM personnel, scene safety, LZ selection and prep	A. Types B. Advantages C. Disadvantages D. Patient Transfer E. Landing Zone Selection and Preparation F. Approaching the Aircraft G. Communication Issues II. Criteria for Utilizing Air Medical Response A. Indications for Patient Transport B. Activation (P. 120)		
<ul style="list-style-type: none"> • Vehicle Extrication 	Simple depth, simple breadth <ul style="list-style-type: none"> • Safe vehicle extrication • Use of simple hand tools (P. 49)	Situational safety added Use of simple hand tools added	I. Safe Vehicle Extrication D. Situational Safety 1. Control traffic flow 2. 360-degree assessment 3. Vehicle stabilization 4. Unique hazards 5. Evaluate the need for additional resources 6. Extrication considerations II. Use of Simple Hand Tools A. Hammer B. Center Punch C. Pry Bar D. Hack Saw E. Come-Along (P. 122)	5 min	Supplemental
<ul style="list-style-type: none"> • Hazardous Materials Awareness 	Simple depth, simple breadth <ul style="list-style-type: none"> • Risks and responsibilities of operating in a cold zone at a hazardous material or other special incident (P. 49)	HAZWOPER standard added	I. Risks and Responsibilities of Operating in a Cold Zone at a Hazardous Material or Other Special Incident A. Entry-Level Students Need to Be Certified in: 1. Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, 29 CFR 1910.120 (q)(6)(i) -First Responder Awareness Level (P. 125)	This Can Be Done as a Co requisite or Prerequisite or as Part of the Entry-Level Course	Essential

Section Title	EMS Education Standard	Gap Analysis of NSC to Education Standards	EMR Instructional Guidelines	Declarative E = Essential S = Supplemental	Essential Content
<ul style="list-style-type: none"> Mass Casualty Incidents Due to Terrorism and Disaster 	Simple depth, simple breadth <ul style="list-style-type: none"> Risks and responsibilities of operating on the scene of a natural or man-made disaster (P. 50) 	All new content	I. Risks and Responsibilities of Operating on the Scene of a Natural or Man-Made Disaster A. Role of EMS B. Safety (P. 126)	5 min	Supplemental

For a current First Responder (based on 1995 First Responder National Standard Curriculum) transitioning to Emergency Medical Responder (EMR), the following skills are **no longer taught**:

- Insertion of a nasopharyngeal airway
- Pressure points and elevation for hemorrhage control

New Skill Considerations: use of a bag-valve mask, obtaining manual blood pressures, use of an auto-injector, eye irrigation, AED, oxygen administration, and use of simple hand tools.

Summary of proposed time for planning purposes: Essential content = 7.9 hrs. Supplemental = 8.0 hrs.
 These projections do not include a time allotment for NIMS and HAZWOPER requirements or performance of clinical skills.