

## New Mexico Paramedic Curriculum

<p><b>Behavioral Emergencies and Communication</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• EMS Communication system</li> <li>• Communication with other health care professionals</li> <li>• Team communication and dynamics</li> <li>• Principles of communicating with patients in a manner that achieves a positive relationship                             <ul style="list-style-type: none"> <li>○ Factors that affect communication</li> <li>○ Interviewing techniques</li> <li>○ Dealing with difficult patients</li> <li>○ Adjusting communication strategies of age, stage of development, patients with special needs, and differing cultures.</li> </ul> </li> <li>• Integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.</li> <li>• Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>• Integrates comprehensive knowledge of pathophysiology of major human systems.</li> <li>• Integrates comprehensive knowledge of life span development.</li> <li>• Within the scope of practice of the paramedic                             <ul style="list-style-type: none"> <li>○ Names</li> <li>○ Actions</li> <li>○ Indications</li> <li>○ Contraindications</li> <li>○ Complications</li> <li>○ Routes of administration</li> <li>○ Side effects</li> <li>○ Interactions</li> </ul> </li> <li>• Dosages for the medication administered</li> <li>• Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.</li> <li>• Integrated scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Scene management                             <ul style="list-style-type: none"> <li>○ Impact of the environment</li> <li>○ Addressing hazards</li> <li>○ Violence</li> <li>○ Multiple patient situations</li> </ul> </li> <li>• Primary assessment for all patient situations                             <ul style="list-style-type: none"> <li>○ Initial general impression</li> <li>○ Level of consciousness</li> <li>○ ABCs</li> <li>○ Identifying life threats</li> <li>○ Assessment of vital functions</li> </ul> </li> <li>• Integration of treatment/procedure needed to preserve life</li> <li>• Components of the patient history</li> </ul>
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	<ul style="list-style-type: none"> <li>• Interviewing techniques</li> <li>• How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation</li> <li>• Techniques of physical examination for all major             <ul style="list-style-type: none"> <li>○ Body systems</li> <li>○ Anatomical regions</li> </ul> </li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Within the scope of practice of paramedic             <ul style="list-style-type: none"> <li>○ Obtaining and using information from patient monitoring devices including (but not limited to):                 <ul style="list-style-type: none"> <li>▪ Continuous ECG monitoring</li> <li>▪ 12 lead ECG interpretation</li> <li>▪ Carbon dioxide monitoring</li> <li>▪ Basic blood chemistry</li> </ul> </li> </ul> </li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• How and when to perform a reassessment for all patient situations</li> <li>• Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.</li> <li>• Pathophysiology, assessment, and management of medical complaints to include             <ul style="list-style-type: none"> <li>○ Transport mode</li> <li>○ Destination decisions</li> </ul> </li> <li>• Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of             <ul style="list-style-type: none"> <li>○ Patterns of violence/abuse/neglect</li> </ul> </li> <li>• Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings:             <ul style="list-style-type: none"> <li>○ Cholinergics</li> <li>○ Anticholinergics</li> <li>○ Sympathomimetics</li> <li>○ Opiates</li> <li>○ Alcohol intoxication and withdrawal</li> <li>○ Over the-counter and prescription medications</li> <li>○ Carbon monoxide</li> <li>○ Illegal drugs</li> <li>○ Herbal preparations</li> </ul> </li> </ul>
<p><b>Cardiovascular Theory</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems</li> <li>• Integrates comprehensive anatomical medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>• Integrates comprehensive knowledge of pathophysiology of major systems.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Within the scope of practice of the paramedic             <ul style="list-style-type: none"> <li>○ Names</li> <li>○ Actions</li> <li>○ Indications</li> <li>○ Contraindications</li> </ul> </li> </ul>

- Complications
  - Routes of administration
  - Side effects
  - Interactions
  - Dosages for the medication administered
  - Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway adequate mechanical ventilation, and respiration for patients of all ages.
- Complex depth, comprehensive breadth
- Primary assessment for all patients situations
    - Initial general impression
    - Level of consciousness
    - ABCs
    - Identifying life threats
    - Assessment of vital functions
  - Integration of treatment/procedures needed to preserve life
- Complex depth, comprehensive breadth
- Components of the patient history
  - Interviewing techniques
  - How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation.
  - Techniques of physical examination for all major
    - Body systems
    - Anatomical regions
- Fundamental depth, foundational breadth
- Within the scope of practice of the paramedic
    - Obtaining and using information from patient monitoring devices including (but not limited to):
      - Continuous ECG monitoring
      - 12 lead ECG interpretation
      - Carbon dioxide monitoring
      - Basic blood chemistry
- Complex depth, comprehensive breadth
- How and when to perform a reassessment for all patient situations
  - Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
  - Pathophysiology, assessment, and management of medical complaints to include
    - Transport mode
    - Destination decisions
  - Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
    - Acute coronary syndrome
      - Angina pectoris
      - Myocardial infarction
    - Heart failure
    - Non-traumatic cardiac tamponade
    - Hypertensive emergencies
    - Cardiogenic shock
    - Vascular disorders
      - Abdominal aortic aneurysm

	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>▪ Arterial occlusion</li> <li>▪ Venous thrombosis</li> </ul> </li> <li>○ Aortic aneurysm/dissection</li> <li>○ Thromboembolism</li> <li>○ Cardiac rhythm disturbances</li> </ul> <p>Fundamental depth, foundation breadth</p> <ul style="list-style-type: none"> <li>• Infectious diseases of the heart             <ul style="list-style-type: none"> <li>○ Endocarditis</li> <li>○ Pericarditis</li> </ul> </li> <li>• Congenital abnormalities</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Traumatic aortic disruption</li> <li>○ Pulmonary contusion</li> <li>○ Blunt cardiac injury</li> <li>○ Hemothorax</li> <li>○ Pneumothorax                 <ul style="list-style-type: none"> <li>▪ Open</li> <li>▪ Simple</li> <li>▪ Tension</li> </ul> </li> <li>○ Cardiac tamponade</li> <li>○ Rib fractures</li> <li>○ Flail chest</li> <li>○ Commotio cordis</li> <li>○ Tracheobronchial disruption</li> <li>○ Diaphragmatic rupture</li> <li>○ Traumatic asphyxia</li> </ul> </li> </ul>
<p><b>Endocrine and GI/GU Theory</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.</li> <li>• Integrates comprehensive anatomic and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>• Integrates comprehensive knowledge of pathophysiology of major human systems.</li> <li>• Within the scope of practice of the paramedic             <ul style="list-style-type: none"> <li>○ Names</li> <li>○ Actions</li> <li>○ Indications</li> <li>○ Contraindications</li> <li>○ Complications</li> <li>○ Routes of administration</li> <li>○ Side effects</li> <li>○ Interactions</li> </ul> </li> <li>• Dosages for the medication administered</li> <li>• Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.</li> <li>• Integrate scene and patient assessment findings with the knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.</li> </ul>

**Complex depth, comprehensive breadth**

- Primary assessment for all patient situations
  - Initial general impression
  - Level of consciousness
  - ABCs
  - Identifying life threats
  - Assessment of vital functions
- Integration of treatment/procedures needed to preserve life
- Components of the patient history
- Interviewing techniques
- How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
- Techniques of physical examination for all major
  - Body systems
  - Anatomical regions

**Complex depth, comprehensive breadth**

- How and when to perform a reassessment for all patient situations
- Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Pathophysiology, assessment, and management of medical complaints to include
  - Transport mode
  - Destination decisions
- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
  - Acute and chronic gastrointestinal hemorrhage
  - Liver disorders
  - Peritonitis
  - Ulcerative diseases

**Fundamental depth, foundational breadth**

- Irritable bowel syndrome
- Inflammatory disorders
- Pancreatitis
- Bowel obstruction
- Hernias
- Infectious disorders
- Gall bladder and biliary tract disorders

**Simple depth, simple breadth**

- Rectal abscess
- Rectal foreign body obstruction
- Mesenteric ischemia

**Complex depth, comprehensive breadth**

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of
  - Meningococcal meningitis
  - Tuberculosis
  - Tetanus
  - Viral Diseases
  - Sexually Transmitted Diseases
  - Gastroenteritis
  - Fungal Infections
  - Lyme Disease

	<ul style="list-style-type: none"> <li>○ Rocky Mountain Spotted Fever</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Anatomical, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of             <ul style="list-style-type: none"> <li>○ Acute diabetic emergencies</li> <li>○ Diabetes</li> </ul> </li> </ul> <p>Fundamental depth, foundation breadth</p> <ul style="list-style-type: none"> <li>● Adrenal disease</li> <li>● Pituitary and thyroid disorders</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of             <ul style="list-style-type: none"> <li>○ Complications of                 <ul style="list-style-type: none"> <li>▪ Acute renal failure</li> <li>▪ Chronic renal failure</li> <li>▪ Dialysis</li> </ul> </li> <li>○ Renal calculi</li> </ul> </li> </ul> <p>Fundamental depth, foundation breadth</p> <ul style="list-style-type: none"> <li>● Acid base disturbances</li> <li>● Fluid and electrolyte</li> <li>● Infection</li> <li>● Male genital tract conditions</li> <li>● Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states.</li> <li>● Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.</li> </ul>
<p><b>Environmental Theory</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.</li> <li>● Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>● Integrates knowledge of pathophysiology of major human systems.</li> <li>● Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment of develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Integrate scene and patient assessment findings with the knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.</li> <li>● Scene management             <ul style="list-style-type: none"> <li>○ Impact of the environment on patient care</li> <li>○ Addressing hazards</li> <li>○ Violence</li> <li>○ Multiple patient situations</li> </ul> </li> <li>● Primary assessment for all patient situations             <ul style="list-style-type: none"> <li>○ Initial general impression</li> <li>○ Level of consciousness</li> <li>○ ABSs</li> <li>○ Identifying life threats</li> </ul> </li> </ul>

- Assessment of vital functions
  - Integration of treatment/procedure needed to preserve life
  - Components of the patient history
  - Interviewing techniques
  - How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
  - Techniques of physical examination for all major
    - Body systems
    - Anatomical regions
- Fundamental depth, foundational breadth
- Within the scope of practice of the paramedic
    - Obtaining and using information from patient monitoring devices including (but not limited to):
      - Continuous ECG monitoring
      - 12 lead ECG interpretation
      - Carbon dioxide monitoring
      - Basic blood chemistry
- Complex depth, comprehensive breadth
- How and when to perform a reassessment for all patient situations
  - Integrates assessment findings with principles of epidemiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
  - Pathophysiology, assessment, and management of medical complaints to include
    - Transport mode
    - Destination decisions
  - Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of
    - Meningococcal meningitis
    - Tuberculosis
    - Tetanus
    - Viral Diseases
    - Sexually Transmitted Diseases
    - Gastroenteritis
    - Fungal Infections
    - Lyme Disease
    - Rocky Mountain Spotted Fever
  - Anatomy, physiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings
    - Cholinergics
    - Anticholinergics
    - Sympathomimetics
    - Sedative/hypnotics
    - Opiates
    - Alcohol intoxication and withdrawal
    - Over-the-counter and prescription medications
    - Carbon monoxide
    - Illegal drugs
    - Herbal preparations
- Complex depth, comprehensive breadth
- Pathophysiology, assessment, and management of
    - Wounds
      - Avulsions
      - Bite wounds

	<ul style="list-style-type: none"> <li>▪ Lacerations</li> <li>▪ Puncture wounds</li> <li>○ Burns             <ul style="list-style-type: none"> <li>▪ Electrical</li> <li>▪ Chemical</li> <li>▪ Thermal</li> </ul> </li> <li>○ High-pressure injection</li> <li>○ Crush Syndrome</li> </ul>
<p><b>Human Systems Pathophysiology and Development</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems</li> <li>• Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>• Integrates knowledge of pathophysiology of major human systems.</li> <li>• Integrates comprehensive knowledge of life span development.</li> <li>• Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.</li> <li>• Within the scope of practice of the paramedic             <ul style="list-style-type: none"> <li>○ Names</li> <li>○ Actions</li> <li>○ Indications</li> <li>○ Contraindications</li> <li>○ Complications</li> <li>○ Routes of administration</li> <li>○ Side effects</li> <li>○ Interactions</li> </ul> </li> <li>• Dosages for the medication administered</li> <li>• Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Within the scope of practice of paramedic             <ul style="list-style-type: none"> <li>○ Airway anatomy</li> <li>○ Airway assessment</li> <li>○ Techniques of assuring a patent airway</li> </ul> </li> <li>• Anatomy of the respiratory system</li> <li>• Physiology, and pathophysiology of respiration             <ul style="list-style-type: none"> <li>○ Pulmonary ventilation</li> <li>○ Oxygenation</li> <li>○ Respiration                 <ul style="list-style-type: none"> <li>▪ External</li> <li>▪ Internal</li> <li>▪ Cellular</li> </ul> </li> </ul> </li> <li>• Assessment and management of adequate and inadequate respiration</li> <li>• Supplemental oxygen therapy</li> <li>• Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.</li> </ul>



**Complex depth, comprehensive breadth**

- Primary assessment for all patient situations
  - Initial general impression
  - Level of consciousness
  - ABCs
  - Identifying life threats
  - Assessment of vital functions
- Integration of treatment/procedure needed to preserve life
- Components of the patient history
- Interviewing techniques
- How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
- Techniques of physical examination for all major
  - Body systems
  - Anatomical regions

**Complex depth, comprehensive breadth**

- How and when to perform a reassessment for all patient situations
- Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Pathophysiology, assessment, and management of medical complaints to include
  - Transport mode
  - Destination decisions

**Complex depth, comprehensive**

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and manage of
  - Stroke/intracranial/hemorrhage/transient ischemic attack
  - Seizure
  - Status epileptics
  - Headache

**Fundamental depth, foundational breadth**

- Dementia
- Neoplasms
- Demyelinating disorders
- Parkinson's disease
- Cranial nerve disorders
- Movement disorders
- Neurologic inflammation/infection
- Spinal cord compression
- Hydrocephalus
- Wernicke's encephalopathy

**Complex depth, comprehensive breadth**

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
  - Acute and chronic gastrointestinal hemorrhage
  - Liver disorders
  - Peritonitis
  - Ulcerative diseases

**Fundamental depth, foundational breadth**

- Irritable bowel syndrome
- Inflammatory disorders
- Pancreatitis

- Bowel Obstruction
- Hernias
- Infectious disorders
- Gall bladder and biliary tract disorders

Simple depth, simple breadth

- Rectal abscess
- Rectal foreign body obstruction
- Mesenteric ischemia

Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major immune system disorders and/or emergencies.
- Hypersensitivity
- Allergic and anaphylactic reactions
- Anaphylactoid reactions

Fundamental depth, foundational breadth

- Collagen vascular disease
- Transplant related problems
- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of
  - Meningococcal meningitis
  - Tuberculosis
  - Tetanus
  - Viral Diseases
  - Sexually Transmitted Diseases
  - Gastroenteritis
  - Fungal Infections
  - Lyme Disease
  - Rocky Mountain Spotted Fever

Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
  - Acute diabetic emergencies
  - Diabetes

Fundamental depth, foundational breadth

- Adrenal disease
- Pituitary and thyroid disorders

Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
- Acute coronary syndrome
  - Angina pectoris
  - Myocardial infarction
- Heart failure
- Non-traumatic cardiac tamponade
- Hypertensive emergencies
- Cardiogenic shock
- Vascular disorders
  - Abdominal aortic aneurysm
  - Arterial occlusion
  - Venous thrombosis
- Aortic aneurysm/dissection
- Thromboembolism

	<ul style="list-style-type: none"> <li>• Cardiac rhythm disturbances</li> </ul> <p>Fundamental depth, foundation breadth</p> <ul style="list-style-type: none"> <li>• Infectious diseases of the heart                     <ul style="list-style-type: none"> <li>○ Endocarditis</li> <li>○ Pericarditis</li> </ul> </li> <li>• Congenital abnormalities</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of</li> <li>• Acute upper airway infections</li> <li>• Spontaneous pneumothorax</li> <li>• Obstructive/restrictive lung diseases</li> <li>• Pulmonary infections</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Neoplasm</li> <li>• Pertussis</li> <li>• Cystic fibrosis</li> </ul> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major hematological diseases and/or emergencies.</li> <li>• Sickle cell diseases</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Blood transfusion complications</li> <li>• Hemostatic disorders</li> <li>• Lymphomas</li> <li>• Red blood cell disorders</li> <li>• White blood cell disorders</li> <li>• Coagulopathies</li> </ul> <p>Complex, depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Anatomy, physiology, epidemiology, [pathophysiology, psychosocial impact, presentations, prognosis, and management of                     <ul style="list-style-type: none"> <li>○ Complications of                             <ul style="list-style-type: none"> <li>▪ Acute renal failure</li> <li>▪ Chronic renal failure</li> <li>▪ Dialysis</li> </ul> </li> <li>○ Renal calculi</li> </ul> </li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Acid base disturbances</li> <li>• Fluid and electrolyte</li> <li>• Infection</li> <li>• Male genital tract conditions</li> <li>• Anatomical, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major non-traumatic musculoskeletal disorders.</li> <li>• Disorders of the spine</li> <li>• Muscle abnormalities</li> <li>• Overuse syndromes</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Knowledge of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of                     <ul style="list-style-type: none"> <li>○ Common or major diseases of the eyes, ears, nose, and</li> </ul> </li> </ul>
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	<p>throat, including nose bleed</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Bleeding</li> </ul> </li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Pediatric fractures</li> <li>○ Tendon laceration/transection/rupture (Achilles and patellar)</li> <li>○ Compartment syndrome</li> </ul> </li> </ul> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Upper and lower extremity orthopedic trauma</li> <li>• Open fractures</li> <li>• Closed fractures</li> <li>• Dislocations</li> </ul>
<p><b>Intro Lab - Basic</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Provider safety and well-being</li> <li>• Prevention of work related injuries</li> <li>• Lifting and moving patients</li> <li>• Principles of medical documentation and report writing</li> <li>• EMS communication system</li> <li>• Communication with other health care professionals</li> <li>• Team communication and dynamics</li> <li>• Principles of communicating with patients in a manner that achieves a positive relationship</li> <li>• Factors that affect communication</li> <li>• Interviewing techniques</li> <li>• Dealing with difficult patients</li> <li>• Adjusting communication strategies for age, stage of development, patients, with special needs, and differing cultures</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Consent/refusal of care</li> <li>• Confidentiality</li> <li>• Advanced directives</li> <li>• Tort and criminal actions</li> <li>• Statutory responsibilities</li> <li>• Mandatory reporting</li> <li>• Health care regulation</li> <li>• Patient rights/Advocacy</li> <li>• End-of-Life issues</li> <li>• Ethical principles/moral obligations</li> <li>• Ethical tests and decision making</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Integrate comprehensive knowledge of pharmacology to formulate a treatment plan intend to mitigate emergencies and improve the overall health of the patient.</li> <li>• Medication safety</li> <li>• Medication legislation</li> <li>• Naming</li> <li>• Classifications</li> <li>• Schedules</li> <li>• Pharmacokinetics</li> <li>• Storage and security</li> </ul>

- Autonomic pharmacology
- Metabolism and excretion
- Mechanism of action
- Phases of medication activity
- Medication response relationships
- Medication interactions
- Toxicity

Complex depth, comprehensive breadth

- Routes of administration
- Within the scope of practice of the paramedic, administer medications to a patient
  - Names
  - Actions
  - Indications
  - Contraindications
  - Routes of administration
  - Side effects
  - Interactions
  - Dosages for the medications administered
- Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.

Complex depth, comprehensive breadth

- Anatomy of the respiratory system
- Physiology, and pathophysiology of respiration
  - Pulmonary ventilation
  - Oxygenation
  - Respiration
    - External
    - Internal
    - Cellular
- Assessment and management of adequate and inadequate respiration
- Supplemental oxygen therapy
- Assessment and management of adequate and inadequate ventilation
  - Artificial ventilation
  - Minute ventilation
  - Alveolar ventilation
  - Effect of artificial ventilation on cardiac output
- Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
- Scene management
  - Impact of the environment on patient care
  - Addressing hazards
  - Violence
  - Multiple patient situations
- Primary assessment for all patient situations
  - Initial general impression
  - Level of consciousness

- ABCs
  - Identifying life threats
  - Assessment of vital functions
  - Integration of treatment/procedure needed to preserve life
  - Components of the patient history
  - Interviewing techniques
  - How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
- Techniques of physical examination for all major
- Body systems
  - Anatomical regions
- Fundamental depth, foundational breadth
- Within the scope of practice of the paramedic
    - Obtaining and using information from patient monitoring devices including (but not limited to):
      - Continuous ECG monitoring
      - 12 lead ECG interpretation
      - Carbon dioxide monitoring
      - Basic blood chemistry
- Complex depth, comprehensive breadth
- How and when to perform a reassessment for all patient situations
  - Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
  - Pathophysiology, assessment, and management of medical complaints to include
    - Transport mode
    - Destination decisions
- Complex depth, comprehensive
- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and manage of
    - Stroke/intracranial/hemorrhage/transient ischemic attack
    - Seizure
    - Status epileptics
    - Headache
- Fundamental depth, foundational breadth
- Dementia
  - Neoplasms
  - Demyelinating disorders
  - Parkinson’s disease
  - Cranial nerve disorders
  - Movement disorders
  - Neurologic inflammation/infection
  - Spinal cord compression
  - Hydrocephalus
  - Wernicke’s encephalopathy
- Complex depth, comprehensive breadth
- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
    - Acute and chronic gastrointestinal hemorrhage
    - Liver disorders
    - Peritonitis
    - Ulcerative diseases

## Fundamental depth, foundational breadth

- Irritable bowel syndrome
- Inflammatory disorders
- Pancreatitis
- Bowel Obstruction
- Hernias
- Infectious disorders
- Gall bladder and biliary tract disorders

## Simple depth, simple breadth

- Rectal abscess
- Rectal foreign body obstruction
- Mesenteric ischemia

## Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings:
  - Cholinergics
  - Anticholinergics
  - Sympathomimetics
  - Opiates
  - Alcohol intoxication and withdrawal
  - Over the-counter and prescription medications
  - Carbon monoxide
  - Illegal drugs
  - Herbal preparations

## Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of
  - Acute upper airway infections
  - Spontaneous pneumothorax
  - Obstructive/restrictive lung diseases
  - Pulmonary infections

## Fundamental depth, foundational breadth

- Neoplasm
- Pertussis
- Cystic fibrosis

## Complex depth, comprehensive breadth

- Pathophysiology, assessment, and management of
  - Traumatic aortic disruption
  - Pulmonary contusion
  - Blunt cardiac injury
  - Hemothorax
  - Pneumothorax
    - Open
    - Simple
    - Tension
  - Cardiac tamponade
  - Rib fractures
  - Flail chest
  - Commotio cordis
  - Tracheobronchial disruption
  - Diaphragmatic rupture
  - Traumatic asphyxia
  - Vascular injury

	<ul style="list-style-type: none"> <li>○ Solid and hollow organ injuries</li> <li>○ Blunt versus penetrating mechanisms</li> <li>○ Evisceration</li> <li>○ Retroperitoneal injuries</li> <li>○ Injuries to the external genitalia</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>● Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Cauda equina syndrome</li> <li>○ Nerve root injury</li> <li>○ Peripheral nerve injury</li> </ul> </li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Traumatic brain injury</li> <li>● Spinal cord injury</li> <li>● Spinal shock</li> <li>● Pathophysiology, assessment, and management of trauma in the             <ul style="list-style-type: none"> <li>○ Pregnant patient</li> <li>○ Pediatric patient</li> <li>○ Geriatric patient</li> <li>○ Cognitively impaired patient</li> </ul> </li> </ul>
<p><b>Lab - Advanced</b></p>	
<p><b>Medical Legal Issues and Report Writing</b></p>	<p>Fundamental depth, foundation breadth</p> <ul style="list-style-type: none"> <li>● History of EMS</li> <li>● Research principles to interpret literature and advocate evidence-based practice</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● EMS Systems</li> <li>● Roles/responsibilities/</li> <li>● Professionalism of EMS Personnel</li> <li>● Quality Improvement</li> <li>● Patient safety</li> <li>● Provider safety and wellbeing</li> <li>● Stress management             <ul style="list-style-type: none"> <li>○ Dealing with death and dying</li> </ul> </li> <li>● Prevention of work related injuries</li> <li>● Lifting and moving patients</li> <li>● Principles of medical documentation and report writing</li> <li>● EMS communication system</li> <li>● Communication with other health care Professionals</li> <li>● Team communication and dynamics</li> <li>● Consent/refusal of care</li> <li>● Confidentiality</li> <li>● Advanced directives</li> <li>● Tort and criminal actions</li> <li>● Statutory responsibilities</li> <li>● Mandatory reporting</li> <li>● Health care regulation</li> <li>● Patient rights/Advocacy</li> <li>● End-of-Life issues</li> <li>● Ethical principles/moral obligations</li> <li>● Ethical tests and decision making</li> <li>● Integrate comprehensive anatomical and medical terminology and</li> </ul>



	<p>abbreviations into the written and oral communication with colleagues and other health care professionals.</p> <ul style="list-style-type: none"> <li>• Integrate scene and patient assessment finding with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.</li> <li>• Primary assessment for all patient situations             <ul style="list-style-type: none"> <li>○ Initial general impression</li> <li>○ Level of consciousness</li> <li>○ ABSs</li> <li>○ Identifying life threats</li> <li>○ Assessment of vital functions</li> </ul> </li> <li>• Integration of treatment/procedure needed to preserve life</li> <li>• Components of the patient history</li> <li>• Interviewing techniques</li> <li>• How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation</li> <li>• How and when to perform a reassessment for all patient situations</li> <li>• Transport mode</li> <li>• Destination decisions</li> <li>• Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.</li> <li>• Pathophysiology, assessment, and management of medical complaints to include             <ul style="list-style-type: none"> <li>○ Transport mode</li> <li>○ Destination decisions</li> </ul> </li> <li>• Anatomy, physiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings             <ul style="list-style-type: none"> <li>○ Cholinergics</li> <li>○ Anticholinergics</li> <li>○ Sympathomimetics</li> <li>○ Sedative/hypnotics</li> <li>○ Opiates</li> <li>○ Alcohol intoxication and withdrawal</li> <li>○ Over-the-counter and prescription medications</li> <li>○ Carbon monoxide</li> <li>○ Illegal drugs</li> <li>○ Herbal preparations</li> </ul> </li> </ul> <p>Techniques of physical examination for all major</p> <ul style="list-style-type: none"> <li>• Body systems</li> <li>• Anatomical regions</li> </ul>
<p><b>Neurological Theory/Therapy</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Primary assessment for all patient situations             <ul style="list-style-type: none"> <li>○ Initial general impression</li> <li>○ Level of consciousness</li> <li>○ ABSs</li> <li>○ Identifying life threats</li> <li>○ Assessment of vital functions</li> </ul> </li> <li>• Integration of treatment/procedure needed to preserve life</li> <li>• Components of the patient history</li> <li>• Interviewing techniques</li> </ul>

- How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
- Techniques of physical examination for all major
  - Body systems
  - Anatomical regions
- How and when to perform a reassessment for all patient situations
- Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Pathophysiology, assessment, and management of medical complaints to include
  - Transport mode
  - Destination decisions
- Anatomy, physiology, epidemiology, pathophysiology, presentations, prognosis, and management of
  - Stroke/intracranial hemorrhage/transient ischemic attack
  - Seizure
  - Status epilepticus
  - Headache

Fundamental depth, foundational breadth

- Dementia
- Neoplasms
- Demyelinating disorders
- Parkinson's disease
- Cranial nerve disorders
- Movement disorders
- Neurologic inflammation/infection
- Spinal cord compression
- Hydrocephalus
- Wernicke's encephalopathy
- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of
  - Meningococcal meningitis
  - Tuberculosis
  - Tetanus
  - Viral Diseases
  - Sexually Transmitted Diseases
  - Gastroenteritis
  - Fungal Infections
  - Lyme Disease
  - Rocky Mountain Spotted Fever

Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
  - Acute psychosis
  - Agitated delirium
  - Acute psychosis
  - Thought Disorders
  - Mood Disorders
  - Neurotic Disorders
  - Substance-related disorders/addictive behavior
  - Somatoform disorders
  - Factitious Disorders

	<ul style="list-style-type: none"> <li>○ Personality Disorders</li> <li>○ Patterns of violence/abuse/neglect</li> <li>○ Organic psychoses</li> <li>● Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major non-traumatic musculoskeletal disorders             <ul style="list-style-type: none"> <li>○ Disorders of the spine</li> </ul> </li> <li>● Pathophysiology, assessment and management of the trauma patient             <ul style="list-style-type: none"> <li>○ Trauma scoring</li> <li>○ Transport and destination issues</li> </ul> </li> <li>● Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Unstable facial fractures</li> <li>○ Orbital fractures</li> <li>○ Perforated tympanic membrane</li> <li>○ Skull fractures</li> <li>○ Penetrating neck trauma</li> <li>○ Laryngeotracheal injuries</li> <li>○ Spine Trauma                 <ul style="list-style-type: none"> <li>▪ Dislocation/subluxations</li> <li>▪ Fractures</li> <li>▪ Sprains/strains</li> </ul> </li> </ul> </li> <li>● Mandibular fractures</li> <li>● Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Cauda equina syndrome</li> <li>○ Nerve root injury</li> <li>○ Peripheral nerve injury</li> <li>○ Traumatic brain injury</li> <li>○ Spinal cord injury</li> <li>○ Spinal shock</li> </ul> </li> </ul>
<p><b>Pediatrics &amp; OB</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Principles of communicating with patients in a manner that achieves a positive relationship             <ul style="list-style-type: none"> <li>○ Factors that affect communication</li> <li>○ Interviewing techniques</li> <li>○ Dealing with difficult patients</li> <li>○ Adjusting communication strategies of age, stage of development, patients with special needs, and differing cultures.</li> </ul> </li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems</li> <li>● Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>● Integrates knowledge of pathophysiology of major human systems.</li> <li>● Integrates comprehensive knowledge of life span development.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Medication safety</li> <li>● Medication legislation</li> <li>● Naming</li> <li>● Classifications</li> <li>● Schedules</li> <li>● Pharmacokinetics</li> <li>● Storage and security</li> </ul>

- Autonomic pharmacology
- Metabolism and excretion
- Mechanism of action
- Phases of medication activity
- Medication response relationships
- Medication interactions
- Toxicity

Complex depth, comprehensive

- Within the scope of practice of the paramedic
  - Names
  - Actions
  - Indications
  - Contraindications
  - Complications
  - Routes of administration
  - Side effects
  - Interactions
- Dosages for the medication administered
- Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- Integrated scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.

Complex depth, comprehensive breadth

- Scene management
  - Impact of the environment
  - Addressing hazards
  - Violence
  - Multiple patient situations
- Primary assessment for all patient situations
  - Initial general impression
  - Level of consciousness
  - ABCs
  - Identifying life threats
  - Assessment of vital functions
- Integration of treatment/procedure needed to preserve life
- Components of the patient history
- Interviewing techniques
- How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
- Techniques of physical examination for all major
  - Body systems
  - Anatomical regions

Fundamental depth, foundational breadth

- Within the scope of practice of paramedic
  - Obtaining and using information from patient monitoring devices including (but not limited to):
    - Continuous ECG monitoring
    - 12 lead ECG interpretation
    - Carbon dioxide monitoring
    - Basic blood chemistry

**Complex depth, comprehensive breadth**

- How and when to perform a reassessment for all patient situations
- Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Pathophysiology, assessment, and management of medical complaints to include
  - Transport mode
  - Destination decisions

**Complex depth, comprehensive breadth**

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
  - Acute coronary syndrome
    - Angina pectoris
    - Myocardial infarction
  - Heart failure
  - Non-traumatic cardiac tamponade
  - Hypertensive emergencies
  - Cardiogenic shock
  - Vascular disorders
    - Abdominal aortic aneurysm
    - Arterial occlusion
    - Venous thrombosis
  - Aortic aneurysm/dissection
  - Thromboembolism
  - Cardiac rhythm disturbances

**Fundamental depth, foundation breadth**

- Infectious diseases of the heart
  - Endocarditis
  - Pericarditis
- Congenital abnormalities

**Complex depth, comprehensive breadth**

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major gynecological diseases and/or emergencies.
- Vaginal bleeding
- Sexual assault

**Fundamental depth, foundational breadth**

- Infections
- Pelvic Inflammatory Disease
- Ovarian cysts
- Dysfunctional uterine bleeding
- Vaginal foreign body

**Complex depth, comprehensive breadth**

- Pathophysiology, assessment and management of the trauma patient
  - Trauma scoring
  - Transport and destination issues

**Complex depth, comprehensive breadth**

- Pathophysiology, assessment, and management of
  - Traumatic aortic disruption
  - Pulmonary contusion
  - Blunt cardiac injury
  - Hemothorax

	<ul style="list-style-type: none"> <li>○ Pneumothorax             <ul style="list-style-type: none"> <li>▪ Open</li> <li>▪ Simple</li> <li>▪ Tension</li> </ul> </li> <li>○ Cardiac tamponade</li> <li>○ Rib fractures</li> <li>○ Flail chest</li> <li>○ Commotio cordis</li> <li>○ Tracheobronchial disruption</li> <li>○ Diaphragmatic rupture</li> <li>○ Traumatic asphyxia</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>● Pathophysiology, assessment, and management of             <ul style="list-style-type: none"> <li>○ Pediatric fractures</li> <li>○ Tendon laceration/transection/rupture (Achilles and patellar)</li> <li>○ Compartment syndrome</li> </ul> </li> </ul> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>● Upper and lower extremity orthopedic trauma</li> <li>● Open fractures</li> <li>● Closed fractures</li> <li>● Dislocations</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Traumatic brain injury</li> <li>● Spinal cord injury</li> <li>● Spinal shock</li> <li>● Pathophysiology, assessment, and management of trauma in the             <ul style="list-style-type: none"> <li>○ Pregnant patient</li> <li>○ Pediatric patient</li> <li>○ Geriatric patient</li> <li>○ Cognitively impaired patient</li> </ul> </li> </ul>
<p><b>Pharmacology Theory</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.</li> <li>● Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>● Integrates comprehensive knowledge of pathophysiology of major human systems.</li> <li>● Integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Integrate comprehensive knowledge of pharmacology to formulate a treatment plan intend to mitigate emergencies and improve the overall health of the patient.</li> <li>● Medication safety</li> <li>● Medication legislation</li> <li>● Naming</li> <li>● Classifications</li> <li>● Schedules</li> <li>● Pharmacokinetics</li> <li>● Storage and security</li> <li>● Autonomic pharmacology</li> </ul>

	<ul style="list-style-type: none"> <li>• Metabolism and excretion</li> <li>• Mechanism of action</li> <li>• Phases of medication activity</li> <li>• Medication response relationships</li> <li>• Medication interactions</li> <li>• Toxicity</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Routes of administration</li> <li>• Within the scope of practice of the paramedic, administer medications to a patient             <ul style="list-style-type: none"> <li>○ Names</li> <li>○ Actions</li> <li>○ Indications</li> <li>○ Contraindications</li> <li>○ Routes of administration</li> <li>○ Side effects</li> <li>○ Interactions</li> <li>○ Dosages for the medications administered</li> </ul> </li> <li>• Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.</li> <li>• Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Anatomy, physiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings             <ul style="list-style-type: none"> <li>○ Cholinergics</li> <li>○ Anticholinergics</li> <li>○ Sympathomimetics</li> <li>○ Sedative/hypnotics</li> <li>○ Opiates</li> <li>○ Alcohol intoxication and withdrawal</li> <li>○ Over-the-counter and prescription medications</li> <li>○ Carbon monoxide</li> <li>○ Illegal drugs</li> <li>○ Herbal preparations</li> </ul> </li> </ul>
<p><b>Drug Calculation</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.</li> <li>• Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.</li> <li>• Integrates comprehensive knowledge of pathophysiology of major human systems.</li> <li>• Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.</li> </ul>

**Respiratory Theory**

## Complex depth, comprehensive breadth

- Integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.
- Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.
- Integrates comprehensive knowledge of pathophysiology of major human systems.
- Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.

## Complex depth, comprehensive breadth

- Within the scope of practice of the paramedic, administer medications to a patient
  - Names
  - Actions
  - Indications
  - Contraindications
  - Routes of administration
  - Side effects
  - Interactions
  - Dosages for the medications administered
- Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.

## Complex depth, comprehensive breadth

- Within the scope of practice of the paramedic
  - Airway anatomy
  - Airway assessment
  - Techniques of assuring a patent airway

## Complex depth, comprehensive breadth

- Anatomy of the respiratory system
- Physiology, and pathophysiology of respiration
  - Pulmonary ventilation
  - Oxygenation
  - Respiration
    - External
    - Internal
    - Cellular
- Assessment and management of adequate and inadequate respiration
- Supplemental oxygen therapy
- Assessment and management of adequate and inadequate ventilation
  - Artificial ventilation
  - Minute ventilation
  - Alveolar ventilation
  - Effect of artificial ventilation on cardiac output
- Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical



reasoning to modify the assessment and formulate a treatment plan.

- Scene management
  - Impact of the environment on patient care
  - Addressing hazards
  - Violence
  - Multiple patient situations
- Primary assessment for all patient situations
  - Initial general impression
  - Level of consciousness
  - ABCs
  - Identifying life threats
  - Assessment of vital functions
- Integration of treatment/procedure needed to preserve life
- Components of the patient history
- Interviewing techniques
- How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation

Techniques of physical examination for all major

- Body systems
- Anatomical regions

Fundamental depth, foundational breadth

- Within the scope of practice of the paramedic
  - Obtaining and using information from patient monitoring devices including (but not limited to):
    - Continuous ECG monitoring
    - 12 lead ECG interpretation
    - Carbon dioxide monitoring
    - Basic blood chemistry

Complex depth, comprehensive breadth

- How and when to perform a reassessment for all patient situations
- Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Pathophysiology, assessment, and management of medical complaints to include
  - Transport mode
  - Destination decisions

Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major immune system disorders and/or emergencies.
- Hypersensitivity
- Allergic and anaphylactic reactions
- Anaphylactoid reactions

Fundamental depth, foundational breadth

- Collagen vascular disease
- Transplant related problems
- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of
  - Meningococcal meningitis
  - Tuberculosis
  - Tetanus
  - Viral Diseases

- Sexually Transmitted Diseases
- Gastroenteritis
- Fungal Infections
- Lyme Disease
- Rocky Mountain Spotted Fever

Complex depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of
- Acute upper airway infections
- Spontaneous pneumothorax
- Obstructive/restrictive lung diseases
- Pulmonary infections

Fundamental depth, foundational breadth

- Neoplasm
- Pertussis
- Cystic fibrosis

Complex depth, foundational breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major hematological diseases and/or emergencies.
- Sickle cell diseases

Fundamental depth, foundational breadth

- Blood transfusion complications
- Hemostatic disorders
- Lymphomas
- Red blood cell disorders
- White blood cell disorders
- Coagulopathies

Complex, depth, comprehensive breadth

- Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of
  - Complications of
    - Acute renal failure
    - Chronic renal failure
    - Dialysis
  - Renal calculi

Fundamental depth, foundational breadth

- Acid base disturbances
- Fluid and electrolyte
- Infection
- Male genital tract conditions

Fundamental depth, foundational breadth

- Knowledge of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of
  - Common or major diseases of the eyes, ears, nose, and throat, including nose bleed
- Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states.
- Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.

Fundamental depth, foundational breadth

- Pathophysiology, assessment, and management of
  - Unstable facial fractures

	<ul style="list-style-type: none"> <li>○ Orbital fractures</li> <li>○ Perforated tympanic membrane</li> </ul> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>○ Skull fractures</li> <li>○ Penetrating neck trauma</li> <li>○ Laryngeotracheal injuries</li> <li>○ Spine Trauma             <ul style="list-style-type: none"> <li>▪ Dislocation/subluxations</li> <li>▪ Fractures</li> <li>▪ Sprains/strains</li> </ul> </li> <li>● Mandibular fractures</li> </ul>
<p><b>Trauma Advanced Theory</b></p>	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>● Patient Safety</li> <li>● Provider safety and well-being</li> <li>● Prevention of work related injuries</li> <li>● Disease transmission</li> <li>● Principles of communication with patients in a manner that achieves a positive relationship             <ul style="list-style-type: none"> <li>○ Factors that affect communication</li> <li>○ Interviewing techniques</li> <li>○ Dealing with difficult patients</li> <li>○ Adjusting communication strategies of age, stage of development, patients with special needs, and differing cultures.</li> </ul> </li> <li>● Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.</li> <li>● Routes of administration</li> <li>● Within the scope of practice of the paramedic, administer medications to a patient             <ul style="list-style-type: none"> <li>○ Names</li> <li>○ Actions</li> <li>○ Indications</li> <li>○ Contraindications</li> <li>○ Routes of administration</li> <li>○ Side effects</li> <li>○ Interactions</li> <li>○ Dosages for the medications administered</li> </ul> </li> <li>● Within the scope of practice of the paramedic             <ul style="list-style-type: none"> <li>○ Airway anatomy</li> <li>○ Airway assessment</li> <li>○ Techniques of assuring a patient airway</li> </ul> </li> <li>● Anatomy of the respiratory system</li> <li>● Physiology, and pathophysiology of respiration             <ul style="list-style-type: none"> <li>○ Pulmonary ventilation</li> <li>○ Oxygenation</li> <li>○ Respiration                 <ul style="list-style-type: none"> <li>▪ External</li> <li>▪ Internal</li> <li>▪ Cellular</li> </ul> </li> </ul> </li> <li>● Assessment and management of adequate and inadequate respiration</li> <li>● Supplement oxygen therapy</li> </ul>

- Assessment and management of adequate and inadequate ventilation
  - Artificial ventilation
  - Minute ventilation
  - Alveolar ventilation
  - Effect of artificial ventilation on cardiac output
- Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
- Scene management
  - Impact of the environment on patient care
  - Addressing hazards
  - Violence
  - Multiple patient situations
- Primary assessment for all patient situations
  - Initial general impression
  - Level of consciousness
  - ABSs
  - Identifying life threats
  - Assessment of vital functions
- Integration of treatment/procedure needed to preserve life
- Components of the patient history
- Interviewing techniques
- How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation

Techniques of physical examination for all major

- Body systems
- Anatomical regions
- How and when to perform a reassessment for all patient situations
- Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states.
- Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
- Integrates assessment findings with principles of epidemiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.
- Pathophysiology, assessment and management of the trauma patient
  - Trauma scoring
  - Transport and destination issues
- Pathophysiology, assessment, and management of
  - Bleeding
  - Traumatic aortic disruption
  - Pulmonary contusion
  - Blunt cardiac injury
  - Hemothorax
  - Pneumothorax
    - Open
    - Simple
    - Tension
  - Cardiac tamponade
  - Rib fractures
  - Flail chest

- Comotio cordis
- Tracheobronchial disruption
- Diaphragmatic rupture
- Traumatic asphyxia
- Vascular injury
- Solid and hollow organ injuries
- Blunt versus penetrating mechanisms
- Evisceration
- Retroperitoneal injuries
- Injuries to the external genitalia
- Pediatric fractures
- Tendon laceration/transection/rupture (Achilles and patellar)
- Compartment syndrome
- Upper and lower extremity orthopedic trauma
- Open fractures
- Closed fractures
- Dislocations
- Wounds
  - Avulsions
  - Bite wounds
  - Lacerations
  - Puncture wounds
- Burns
  - Electrical
  - Chemical
  - Thermal
- High-pressure injection
- Crush syndrome
- Unstable facial fractures
- Orbital fractures
- Perforated tympanic membrane
- Skull fractures
- Penetrating neck trauma
- Laryngeotracheal injuries
- Spine Trauma
  - Dislocation/subluxations
  - Fractures
  - Sprains/strains
- Mandibular fractures
- Cauda equina syndrome
- Nerve root injury
- Peripheral nerve injury
- Traumatic brain injury
- Spinal cord injury
- Spinal shock
- Pathophysiology, assessment, and management of trauma in the
  - Pregnant patient
  - Pediatric patient
  - Geriatric patient
  - Cognitively impaired patient

Upon completion of this course, the student should be able to:

1. Obtain patient history
2. Determine appropriate Field/Differential Diagnosis based on patient presentation
3. Identify appropriate treatment/transport decisions based on patient presentation
4. Direct other team members as Lead Medic and multi---task to manage scenes
5. Show competency as entry level paramedic

### **Description and Purpose of Clinical Education**

Clinical education is the segment of your professional education that takes place in the work environment under the guidance of experienced clinical educators, or preceptors. It is in the clinical setting that you will translate the knowledge, skills and professional attributes learned in the classroom and lab into professional practice.

The goals and purposes of clinical education are to guide the learning experience to give the student the opportunity to:

- Develop proficiency in practice
- Gain exposure to the EMS environment
- Develop professional standards and ethics
- Observe professional role models
- Learn from experienced providers
- Apply concepts to the realities of practice
- Develop clinical problem solving & critical thinking skills
- Develop independence
- Develop work organization skills
- Develop decision---making skills
- Assume professional responsibility
- Develop compassion and communication skills
- Become socialized into the profession
- Learn not just the *skills* of a paramedic, but the *professional attributes* of a paramedic

It is the responsibility of the clinical education program and clinical preceptors to guide and direct the experiences of students, to encourage and guide reflection on these experiences, and create optimal conditions for learning. However, it is up to the student to process the input received in order to learn.

## Performing Clinical Skills

Paramedic students may observe and/or perform the following skills. BLS skills may be performed according to the BLS scope of practice. ALS skills may only be performed after students have been formally cleared by a lab instructor. Students will receive written documentation when they are cleared to perform these skills. Students must still only perform these skills as ordered and under the direct supervision of a preceptor. If a clinical facility, service or region does not allow specific procedures the student can not perform them.

Skill	Observe only	Perform when cleared	BLS skill	Assist only
<b>BLS Skills</b>				
Vital Signs & Pulse Oximetry			x	
Lifting and Moving Pts.			x	
Patient Assessment (Medical)			x	
Patient Assessment (Trauma)			x	
Bleeding control/ Bandaging			x	
C-Spine			x	
Short Board			x	
Long Board			x	
Traction Splint			x	
Splinting/Immobilization			x	
Oral Suction			x	
CPR/AED/BLS obstruction			x	
Manual airway maneuvers			x	
Basic airway adjuncts			x	
Oxygen administration			x	
Burn Scale (rule of 9)			x	
Bag Valve Mask (BVM)			x	
Combi/King/LMA			x	
Triage			x	
Occulsive sucking chest			x	
<b>Assessment</b>				
ALS Trauma Assessment		x		
ALS Medical Assessment		x		
ALS Pediatric Assessment		x		
ALS Neonatal Assessment		x		
Stoke Scale		x		
STEMI protocol		x		
GCS		x		
Revised Trauma Scale		x		
APGAR scoring		x		
<b>Cardiac Skills</b>				
EKG monitoring		x		
12-lead EKG acquisition		x		
Transcutaneous pacing		x		
Manual/Pads defibrillation		x		
Synchronized Cardioversion		x		
Transthoracic pacing	x			
Vagal maneuvers		x		
Blood Chemistry analysis		x		
NG/OG tube insertion		x		
Gastric lavage	x			
Foley (bladder) catheterization		x		
LVAD				x

OB Skills	Observe only	Perform when cleared	BLS skill	Assist only
		x		
Vaginal delivery (Normal)		x		
Vaginal delivery (Breech)		x		
Vaginal delivery (Caesarian)				x
Placental Previa		x		
Uterine Rupture		x		
Prolapsed Cord/Uterine		x		
Pre/Eclampsia		x		
Ectopic Pregnancy				x
Abortion				x
Fundal massage		x		
Ped/Neo Management & Ventilation	Observe only	Perform when cleared	BLS skill	Assist only
Endotracheal intubation (ETT)		x		
Digital/Blind intubation		x		
Endotracheal suctioning		x		
Magill Forceps		x		
ETCO2		x		
Needle Cricothyrotomy		x		
Thoracic decompression		x		
CPAP/BPAP		x		
Ventilator (pressure)		x		
Ventilator (Volume)		x		
Meconium Suction		x		
Airway Management & Ventilation	Observe only	Perform when cleared	BLS skill	Assist only
Endotracheal intubation (ETT)		x		
Nasal intubation		x		
Digital/Blind intubation		x		
Endotracheal suctioning		x		
Magill Forceps		x		
ETCO2		x		
Needle Cricothyrotomy		x		
Transtracheal jet insufflation		x		
Surgical Cricothyrotomy		x		
Thoracic decompression		x		
CPAP/BPAP		x		
Ventilator (pressure)		x		
Ventilator (Volume)		x	x	
Phlebotomy & IV Therapy/IO	Observe only	Perform when cleared	BLS skill	Assist only
Phlebotomy		x		
Heel sticks/finger sticks		x		
Glucometer		x		
IV Peripheral		x		
IV External Jugular (EJ)		x		
Central Line (access only)		x		
IV Pump		x		
Pressure Bag		x		
Blood Products				x
ABG sampling				x
Adult IO/Easy IO		x		
Pediatric Intraosseous (IO)		x		
Parkland Formula		x		
Medication Administration	Observe only	Perform when cleared	BLS skill	Assist only
Meds by mouth (PO)/(SL)		x		
Meds Topical		x		
Meds Intra Nasal		x		
Meds Rectal		x		
Meds Nebulizer		x		
Meds IM/SQ		x		
Meds IV push		x		
Meds IO		x		
Meds Central Line		x		
Meds IV Infusion		x		
Approved Drug List		x		



<b>Required Certification</b>				
ACLS		x		
PALS		x		
Airway 9-11 (Optional)		x		
<b>Operations/Communications</b>	<b>Observe only</b>	<b>Perform when cleared</b>	<b>BLS skill</b>	<b>Assist only</b>
Verbal or radio report		x		
ICS		x		
Hazmat awareness		x		
Mass Casualty Incident (MCI)		x		
Rescue Operations	x			
<b>Special Procedures</b>	<b>Observe only</b>	<b>Perform when cleared</b>	<b>BLS skill</b>	<b>Assist only</b>
Chest Tube				x
Morgan Lens/Eye irrigation		x		
Suturing				x
Central Line Placement				x
Wound Irrigation				x
Restraints		x		
Dressing Changes		x		
Casting/Advanced Splinting				X

