Pediatric Learning Solutions' Course Alignment with CCRN® Exam Content Outline.

The following Pediatric Learning Solutions courses align to focus areas of the Pediatric CCRN® Exam Content Outline. These courses equip candidates with the foundational knowledge necessary to approach the Pediatric CCRN® exam with confidence. Go to the Association of Critical-Care Nurses site for more information on the CCRN Exam. Pediatric Learning Solutions' course alignment with Pediatric CCRN® Exam Content Outline. (Note: PLS Courses are in italics under topic area)
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Clinical Judgement Cont.

**Pulmonary**
- Acute Pulmonary Embolus
- Acute Respiratory Distress Syndrome
  - Acute Respiratory Distress Syndrome
  - Introduction to Arterial Blood Interpretation
  - Understanding Abnormal Blood Gases
  - Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation
  - Management of the Difficult Airway
  - Advanced Concepts in Respiratory Physiology
  - Mechanical Ventilation: Introduction to Pediatric Practices
  - High-Frequency Ventilation
  - Preventing Ventilator-Associated Infections
  - Introduction to ECMO
  - Caring for a Child with a Tracheostomy
- Acute Respiratory Failure
  - Acute Respiratory Distress Syndrome
  - Introduction to Arterial Blood Interpretation
  - Understanding Abnormal Blood Gases
  - Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation
  - Management of the Difficult Airway
  - Advanced Concepts in Respiratory Physiology
  - Mechanical Ventilation: Introduction to Pediatric Practices
  - High-Frequency Ventilation
  - Preventing Ventilator-Associated Infections
  - Introduction to ECMO
  - Caring for a Child with a Tracheostomy
- Acute Respiratory Infection (e.g., pneumonia)
  - Acute Respiratory Distress Syndrome
  - Lower Airway Diseases
- Air-leak Syndromes
  - Neonatal Respiratory Distress Syndrome
  - Pneumothorax in the Neonate
- Aspiration
  - Bronchopulmonary Dysplasia
- Congenital Anomalies
  - Congenital Diaphragmatic Hernia
  - Esophageal Atresia and TE Fistula
  - Gastrochisis and Omphalocele
- Chronic Conditions (e.g., asthma, bronchitis)
- Lower Airway Disease
  - Acute Respiratory Distress Syndrome
  - Introduction to Arterial Blood Interpretation
  - Understanding Abnormal Blood Gases

**Endocrine/Hematology/Gastrointestinal/Renal/Integumentary**

**Endocrine**
- Acute Hypoglycemia, Hyperglycemia
  - Diabetes Mellitus
  - Diabetes Insipidus and SIADH
- Diabetes Insipidus
  - Diabetes Insipidus and SIADH
- Diabetic Ketoacidosis
  - Diabetic Ketoacidosis
- Hyperglycemia
  - Diabetes Mellitus
  - Diabetes Insipidus and SIADH
- Inborn Errors of Metabolism
  - Newborn Metabolic Disorders
- SIADH
  - Diabetes Insipidus and SIADH

**Hematology/Immunology**
- Anemia
  - Anemia and Polycythemia in the Newborn
- Coagulopathies (e.g., ITP, DIC, HIT)
  - Disseminated Intravascular Coagulation
- Immune Deficiencies
  - Diabetes Mellitus
- Leukopenia
- Oncologic Complications
  - Oncologic Emergencies
- Sickle Cell Crisis
  - Sickle Cell Crisis
- Thrombocytopenia
  - Disseminated Intravascular Coagulation
  - Blood Administration: Exchange Transfusion
  - Thrombocytopenia: ITP and HIT/T

**Integumentary**
- IV Infiltration
  - Pediatric Peripheral IV Care & Management
  - Management of PIV Complications in the Pediatric Patient
- Pressure Ulcer
  - Introduction to Pediatric Pressure Injuries
  - Pressure Injuries in the Pediatric Population: Staging and Care
  - Pressure Injury Staging Assessment
- Wounds (infectious, surgical, trauma)
  - Preventing Surgical Site Infections
  - Pediatric Burns
### Renal/Genitourinary

- Acute Kidney Injury, Failure, Acute Tubular Necrosis
  - Renal Failure in the Pediatric Patient
  - Hemodialysis
  - Continuous Renal Replacement Therapy
  - General Post-Op Care of the Transplant Patient
- Chronic Kidney Disease
  - Hemodialysis
  - Peritoneal Dialysis
  - General Post-Op Care of the Transplant Patient
- Renal/GI Infections
  - Pediatric Assessment:
    - Gastrointestinal System
    - Genitourinary System
  - General Post-Op Care of the Transplant Patient

### Gastrointestinal

- Acute Abdominal Trauma
  - Pediatric Abdominal Trauma
  - Abdominal Emergencies
- Acute GI Hemorrhage
  - Pediatric Abdominal Trauma
  - Abdominal Emergencies
- Bowel Infarction/Obstruction/Perforation
- Abdominal Emergencies
- Gastroesophageal reflux
  - Nutrition in the Critically Ill Child
- GI Abnormalities (e.g., omphalocele, gastrochisis, volvulus, imperforate anus, Hirschsprung disease, malrotation, intussusception)
  - Gastrochisis and Omphalocele
- Malnutrition and Malabsorption
  - Nutrition in the Critically Ill Child
  - Neonatal Nutrition
  - Pediatric Nutrition Overview

### Endocrine/Hematology/Gastrointestinal/Renal/Integumentary

- Congenital Diaphragmatic Hernia
- Abdominal Emergencies
- GI Surgeries
  - Gastrochisis and Omphalocele
  - Congenital Diaphragmatic Hernia
  - General Post-Op Care of the Transplant Patient
  - Abdominal Emergencies
- Hepatic Failure/Coma (e.g., biliary atresia, etc.)
  - Liver Transplant
  - General Post-Op Care of the Transplant Patient

### Musculoskeletal/Neurology/Psychosocial

#### Musculoskeletal Infections:
**No applicable PLS Courses**

#### Neurology

- Spinal Cord Injury
  - Pediatric Spinal Column/Cord Injuries
- Brain Death
  - Pediatric Traumatic Brain Injury
  - Organ and Tissue Donation: The Gift of Life
- Congenital Neurologic Abnormalities (e.g., AV malformation, myelomeningocele, encephalocele)
  - Neonatal Cranial Hemorrhage
- Encephalopathy
  - Meningitis and Encephalitis
  - Intracranial Pressure Monitoring
- Head Trauma
  - Pediatric Traumatic Brain Injury
  - Intracranial Pressure Monitoring
  - Craniotomy
  - Hemorrhage (intracranial, intraventricular, subarachnoid)
  - Intracranial Pressure Monitoring
  - Craniotomy
  - Neonatal Cranial Hemorrhage
  - Hydrocephalus
  - Hydrocephalus
  - Ischemic Stroke
  - Intracranial Pressure Monitoring
  - Neurologic Infectious Disease (e.g., viral, bacterial, fungal)
  - Meningitis and Encephalitis
  - Neuromuscular Disorders
  - Neurosurgery
  - Craniotomy
  - Pediatric Traumatic Brain Injury
  - Seizure Disorders
  - Status Epilepticus
  - Neonatal Seizures
  - Space-occupying Lesions (e.g., brain tumors)
  - Craniotomy
  - Intracranial Pressure Monitoring
  - Spinal Fusion
  - Traumatic Brain Injury (e.g., epidural, subdural, concussion, non-accidental trauma)
  - Pediatric Traumatic Brain Injury
  - Intracranial Pressure Monitoring
  - Craniotomy
**Behavioral/Psychosocial**
- Abuse, Maltreatment, Neglect
  - Child Abuse and Neglect
  - Trauma-Informed Practice: Concepts, Goals and Principles
  - Implementing Trauma-Informed Sensitive Practice
- Agitation
  - Attention-Deficit/Hyperactivity Disorder (ADHD)
  - Autism Spectrum Disorder (ASD)
  - Care of the Pediatric Patient with Suicidal Ideation
  - Caring for the Behaviorally Challenged Patient
  - Crisis Prevention through Verbal and Nonverbal De-escalation Strategies
  - Effective Use of Psychotropic Medications in the Prevention and Management of Disruptive Behaviors
- Developmental Delays
  - Autism Spectrum Disorder (ASD)
  - Caring for the Behaviorally Challenged Patient
  - Pediatric Restraint and Seclusion
- Failure to Thrive
  - Nutrition in the Critically Ill Child
  - Neonatal Nutrition
  - Pediatric Nutritional Overview
- Medical Non-adherence
  - Care of Pediatric Patient with Suicidal Ideation
  - Attention-Deficit/Hyperactivity Disorder (ADHD)

**Professional Caring and Ethical Practice**
- Advocacy/Moral Agency
  - Introduction to Ethics
  - Family-Centered Care in the ICU
  - Therapeutic Relationships and Professional Behavior
- Caring Practices
  - Introduction to Ethics
  - Family-Centered Care in the ICU
  - Response to Diversity
  - Introduction to Workplace Diversity
- Facilitation of Learning
  - Precepting:
    - Adult Learners
    - Preceptor Roles and Responsibilities
- Collaboration
  - Building Effective Teams
  - Clinical Delegation
  - Coaching Empowering Teams
- Systems Thinking
  - Building Effective Teams
  - Empowering Teams
  - Introduction to Finance
- Clinical Inquiry
  - Introduction to Research

**Patient Care**
- Assessment of the Critically Ill Child
- Blood Administration:
  - Administration of Blood and Blood Components
  - Blood Components
  - Transfusion Reaction
  - Caring for the Complex Patient

**Other related and supporting PLS Content**
### Multisystem

- Asphyxia
  - Acute Respiratory Distress Syndrome
- HIE
- Comorbidity in Patients with Transplant History
  - Liver Transplant
  - General Post-Op Care of the Transplant Patient
- End of Life
  - Care of the Dying Child:
  - Care Issues
  - Grief
  - The Dying Process
  - Health Care Advance Directives: Communicating Wishes
  - Organ and Tissue Donation: The Gift of Life
- Healthcare-associated Infections (CLABSI, CAUTI, VAP)
  - Preventing Catheter-Associated Urinary Tract Infection (CAUTI)
  - Preventing Central Line-Associated Bloodstream Infections (CLABSI)
  - Preventing Surgical Site Infections
  - Preventing Ventilator-Associated Infections
- Hemolytic Uremic Syndrome
- Renal Failure in the Pediatric Patient
- Hypotension
- Infectious Diseases (MDROs; influenza)
  - Management of MDROs in the Health Care Setting (Clinical)
  - Tuberculosis
- Multi-organ Dysfunction Syndrome
  - Deadly Triad of Trauma
- Multisystem Trauma
  - Deadly Triad of Trauma
- Pain
  - Pain Management:
    - Assessment of Pain
    - Non-Pharmacological Therapies in the Management of Pediatric Pain
    - Pain Pathophysiology
    - Pharmacological Management of Pediatric Pain
  - Pain Technologies: PCA & Epidural Analgesia
  - Sedation and Analgesia in the ICU
  - Procedural Sedation in the Pediatric Patient
- Palliative Care
  - Care of the Dying Child:
    - Care Issues
    - Grief
    - The Dying Process
- Sepsis Continuum (SIRS, sepsis, severe sepsis, septic shock)
  - Pediatric Sepsis
  - Neonatal Sepsis
  - Care of the Pediatric Patient in Shock
  - Blood Administration: Exchange Transfusion
- Shock States (distributive, hypovolemic)
  - Care of the Pediatric Patient in Shock
- Sleep Disruption (including sensory overload)
- Submersion Injuries
- Thermoregulation
  - Thermoregulation
- Toxic Ingestions/Inhalations
  - Pediatric Toxicology Exposure
- Toxin/drug Exposure (including allergies)
  - Pediatric Toxicology Exposure
  - Blood Administration: Exchange Transfusion