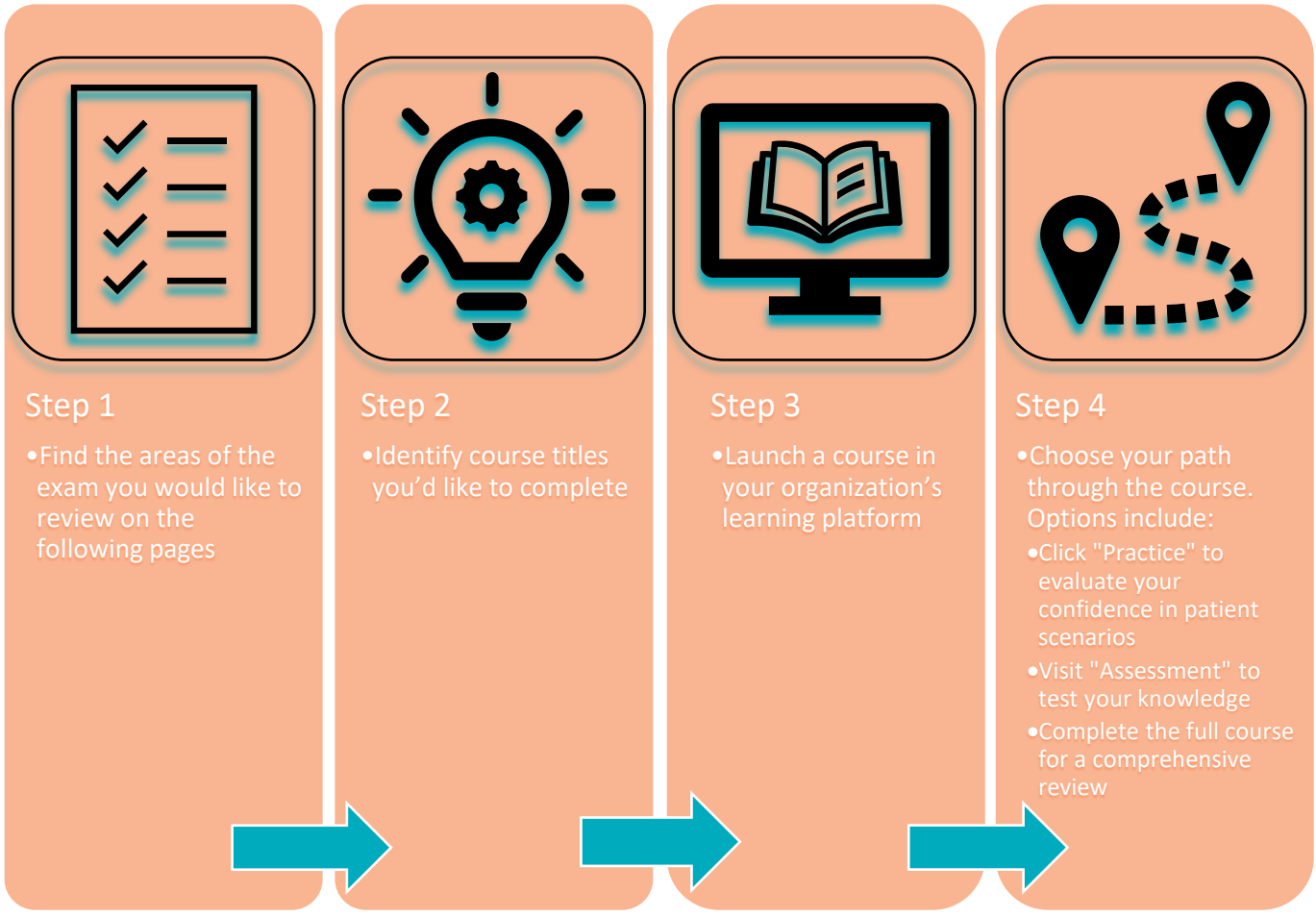
Pediatric Learning Solutions' Course Alignment with CCRN® Exam Content Outline

The following Pediatric Learning Solutions courses align to focus areas of the Pediatric CCRN® Exam Content Outline. These courses support candidates by delivering foundational content and are a respected preparatory resource to consider prior to their exam. Go to the Association of Critical-Care Nurses site for more information on the CCRN® Exam.

Steps to Using this Study Guide



As you review this study guide, please note:

- ✓ It may not be necessary to complete every course on the list—Focus on areas in which learning reinforcement is needed and desired.
- ✓ Some courses apply to multiple exam content focus areas and are therefore listed multiple times.

Clinical Judgment

Cardiovascular

Cardiac Infection & Inflammatory Diseases

- ✓ Acquired Heart Disease
- ✓ Caring for the Pediatric Patient in Shock
- ✓ Congestive Heart Failure
- ✓ Introduction to Hemodynamic Monitoring
- ✓ Cardiovascular Laboratory Procedures: Diagnostic and Interventional
- ✓ Vasoactive Medications
- ✓ Introduction to ECMO
- ✓ General Post-Op Care of the Transplant Patient

Cardiac Malformations & Cardiac Surgery

- ✓ CHD: An Overview
- ✓ CHD: Increased Pulmonary Blood Flow
- ✓ CHD: Decreased Pulmonary Blood Flow
- ✓ CHD: Decreased Systemic Blood Flow
- ✓ Introduction to Hemodynamic Monitoring
- ✓ Vasoactive Medications
- ✓ Introduction to ECMO
- ✓ General Post-Op Care of the Transplant Patient
- ✓ Nursing Management of Chest Tubes

Cardiogenic Shock

- ✓ Caring for the Pediatric Patient in Shock
- ✓ Introduction to Hemodynamic Monitoring
- ✓ Vasoactive Medications
- ✓ Introduction to ECMO

Cardiomyopathies

- ✓ Acquired Heart Disease
- ✓ Congestive Heart Failure
- ✓ Introduction to Hemodynamic Monitoring
- ✓ Vasoactive Medications
- ✓ Introduction to ECMO
- ✓ General Post-Op Care of the Transplant Patient

Cardiovascular Catheterization

- ✓ Cardiovascular Laboratory Procedures: Diagnostic and Interventional

Dysrhythmias

- ✓ Arrhythmia Recognition: Just the Basics for the Pediatric Clinician
- ✓ Arrhythmia Recognition: Structure and Function of the Heart
- ✓ Arrhythmia Recognition: Electrophysiology
- ✓ Arrhythmia Recognition: The Cardiac Monitor
- ✓ Introduction to Arterial Blood Interpretation
- ✓ Arrhythmia Recognition: Lines, Waves and Segments
- ✓ Arrhythmia Recognition: Analyzing the ECG Rhythm Strip
- ✓ Arrhythmia Recognition: Sinus Rhythms
- ✓ Arrhythmia Recognition: Atrial Arrhythmias
- ✓ Arrhythmia Recognition: Junctional Arrhythmias
- ✓ Arrhythmia Recognition: Ventricular Arrhythmias
- ✓ Arrhythmia Recognition: Atrioventricular Arrhythmias
- ✓ Arrhythmia Recognition: Channelopathies
- ✓ Arrhythmia Recognition: Temporary Pacemakers
- ✓ Arrhythmia Recognition: Permanent Pacemakers and ICDs

Heart Failure

- ✓ Congestive Heart Failure
- ✓ Introduction to Hemodynamic
- ✓ Monitoring Vasoactive Medications
- ✓ Introduction to ECMO

Hypertensive Crises

- ✓ Pulmonary Arterial Hypertension
- ✓ Introduction to Hemodynamic Monitoring
- ✓ Vasoactive Medications

Myocardial Conduction System Defects

- ✓ Acquired Heart Disease
- ✓ Arrhythmia Recognition: Just the Basics for the Pediatric Clinician
- ✓ Arrhythmia Recognition: Atrial Arrhythmias
- ✓ Arrhythmia Recognition: Junctional Arrhythmias
- ✓ Arrhythmia Recognition: Ventricular Arrhythmias
- ✓ Arrhythmia Recognition: Atrioventricular Arrhythmias
- ✓ Arrhythmia Recognition: Channelopathies

Obstructive Shock

- ✓ Caring for the Pediatric Patient in Shock
- ✓ Introduction to Hemodynamic Monitoring

Vascular Occlusion

- ✓ Acquired Heart Disease
- ✓ Arrhythmia Recognition: Just the Basics for the Pediatric Clinician
- ✓ Cardiovascular Laboratory Procedures: Diagnostic and Interventional

Clinical Judgment

Respiratory

Acute Pulmonary Edema

- ✓ Acquired Heart Disease
- ✓ Acute Respiratory Distress Syndrome
- ✓ Advanced Concepts in Respiratory Physiology
- ✓ Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation
- ✓ Congestive Heart Failure
- ✓ Understanding Abnormal Blood Gases
- ✓ Introduction to Hemodynamic Monitoring
- ✓ Mechanical Ventilation: Introduction to Pediatric Practices
- ✓ High-Frequency Ventilation
- ✓ Preventing Ventilator-Associated Infections

- ✓ Vasoactive Medications
- ✓ Introduction to ECMO
- ✓ Lower Airway Disease
- ✓ Status Asthmaticus
- ✓ Pediatric Burns
- ✓ Pediatric Drowning

Acute Pulmonary Embolus

- ✓ Care of the Pediatric Patient in Shock
- ✓ Understanding Abnormal Blood Gases

Acute Respiratory Distress Syndrome (ARDS)

- ✓ 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 Pneumonia
- ✓ Introduction to ECMO
- ✓ Caring for the Pediatric Patient in Shock
- ✓ Caring for a Child with a Tracheostomy
- ✓ NAVA

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 Pneumonia
- ✓ Introduction to ECMO
- ✓ Caring for the Pediatric Patient in Shock
- ✓ Caring for a Child with a Tracheostomy
- ✓ Status Asthmaticus
- ✓ Introduction to ECMO
- ✓ NAVA

Acute Respiratory Infection

- ✓ Acute Respiratory Distress Syndrome
- ✓ Lower Airway Diseases
- ✓ Neonatal Sepsis
- ✓ Pediatric Sepsis
- ✓ Caring for the Pediatric Patient in Shock

Air-leak Syndromes

- ✓ Acute Respiratory Distress Syndrome
- ✓ Neonatal Respiratory Distress Syndrome
- ✓ Pneumothorax in the Neonate
- ✓ Mechanical Ventilation: Introduction to Pediatric Practices

Apnea of Prematurity

- ✓ Apnea of Prematurity
- ✓ Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation
- ✓ NAVA

Aspiration

- ✓ Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation
- ✓ Meconium Aspiration Syndrome

Chronic Pulmonary Conditions

- ✓ Lower Airway Disease
- ✓ Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation
- ✓ Bronchopulmonary Dysplasia
- ✓ Cystic Fibrosis
- ✓ Status Asthmaticus
- ✓ Caring for the Child with a Tracheostomy

Congenital Airway Malformations

- ✓ Congenital Diaphragmatic Hernia
- ✓ Esophageal Atresia and TE Fistula
- ✓ Management of the Difficult Airway

Failure to Wean from Mechanical Ventilation

- ✓ Advanced Concepts in Respiratory Physiology
- ✓ Mechanical Ventilation: Introduction to Pediatric Practices
- ✓ Caring for a Child with a Tracheostomy

Pulmonary Hypertension

- ✓ Pulmonary Arterial Hypertension
- ✓ Persistent Pulmonary Hypertension of the Newborn

Status Asthmaticus

- ✓ Lower Airway Disease
- ✓ Status Asthmaticus
- ✓ Basic Principles of Oxygen Therapy, Specialty Gases and Noninvasive Ventilation

Thoracic and Airway Trauma

- ✓ Pediatric Thoracic Trauma
- ✓ Management of the Difficult Airway
- ✓ The Deadly Triad of Trauma

Thoracic Surgery

- ✓ CHD: Increased Pulmonary Blood Flow
- ✓ CHD: Decreased Systemic Blood FlowNursing Management of Chest Tubes
- ✓ General Post-Op Care of the Transplant Patient

Clinical Judgment

Endocrine/Hematology/Gastrointestinal/Renal/Integumentary

Endocrine

Adrenal Insufficiency

Diabetes Insipidus (DI)
- ✓ Diabetes Insipidus & SIADH

Diabetic Ketoacidosis (DKA)
- ✓ Diabetic Ketoacidosis

Diabetes Mellitus
- ✓ Diabetes Mellitus

Hyperglycemia
- ✓ Diabetes Mellitus
- ✓ Diabetes Insipidus & SIADH
- ✓ Diabetic Ketoacidosis
- ✓ Metabolic Disorders of the Newborn

Hypoglycemia
- ✓ Diabetes Mellitus
- ✓ Metabolic Disorders of the Newborn

Inborn Errors of Metabolism
- ✓ Metabolic Disorders of the Newborn

Syndrome of Inappropriate Secretion of Antidiuretic Hormone (SIADH)
- ✓ Diabetes Insipidus & SIADH

Hematology & Immunology

Anemia
- ✓ Anemia and Polycythemia in the Newborn

Coagulopathies
- ✓ Disseminated Intravascular Coagulation
- ✓ Thrombocytopenia: ITP and HIT/T

Immune Deficiencies
- ✓ Diabetes Mellitus
- ✓ Metabolic Disorders of the Newborn Pediatric
- ✓ Sepsis

Myelosuppression (thrombocytopenia, neutropenia)
- ✓ Disseminated Intravascular Coagulation
- ✓ Blood Administration: Exchange Transfusion
- ✓ Thrombocytopenia: ITP and HIT/T

Oncologic Complications
- ✓ Oncologic Emergencies

Sickle Cell Crisis
- ✓ Sickle Cell Crisis

Transfusion Reactions
- ✓ Blood Transfusion Reaction

Gastrointestinal

Abdominal Compartment Syndrome
- ✓ Abdominal Emergencies
- ✓ Gastroschisis and Omphalocele

Abdominal Trauma
- ✓ Pediatric Abdominal Trauma
- ✓ Abdominal Emergencies
- ✓ The Deadly Triad of Trauma

Bowel Infarction, Obstruction and Perforation
- ✓ Abdominal Emergencies
- ✓ Pediatric Abdominal Trauma

Gastroesophageal reflux
- ✓ Nutrition in the Critically Ill Child

GI Hemorrhage
- ✓ Abdominal Emergencies
- ✓ Pediatric Abdominal Trauma
- ✓ The Deadly Triad of Trauma

GI Surgery
- ✓ Abdominal Emergencies
- ✓ Congenital Diaphragmatic Hernia
- ✓ Gastroschisis and Omphalocele
- ✓ Liver Transplant
- ✓ General Post-Op Care of the Transplant Patient

Liver Disease and Failure
- ✓ Liver Transplant
- ✓ General Post-Op Care of the Transplant Patient

Malnutrition and Malabsorption
- ✓ Nutrition in the Critically Ill Child
- ✓ Neonatal Nutrition
- ✓ Pediatric Nutrition Overview

Necrotizing Enterocolitis (NEC)
- ✓ Necrotizing Enterocolitis (NEC)

Peritonitis
- ✓ Abdominal Emergencies

Renal/Genitourinary

Acute Kidney Injury
- ✓ Pediatric Assessment: The Genitourinary System
- ✓ Renal Failure in the Pediatric Patient
- ✓ Pediatric Abdominal Trauma
- ✓ Hemodialysis
- ✓ Peritoneal Dialysis
- ✓ Continuous Renal Replacement Therapy

Chronic Kidney Disease
- ✓ Pediatric Assessment: The Genitourinary System
- ✓ Renal Failure in the Pediatric Patient
- ✓ Hemodialysis

- ✓ Peritoneal Dialysis
- ✓ General Post-Op Care of the Transplant Patient

Hemolytic Uremic Syndrome (HUS)
- ✓ Renal Failure in the Pediatric Patient

Kidney Transplant
- ✓ Renal Failure in the Pediatric Patient
- ✓ General Post-Op Care of the Transplant Patient

Life-threatening Electrolyte Imbalances
- ✓ Fluids and Electrolytes Imbalance: Dehydration
- ✓ Fluids and Electrolytes: Laboratory Assessment
- ✓ Fluids and Electrolytes: Physical Assessment
- ✓ Fluids and Electrolytes: Physiological Differences
- ✓ Fluids and Electrolytes: Replacement Therapy
- ✓ Fluids and Electrolytes: Water Intoxication and Fluid Shift

Renal/Genitourinary Infections
- ✓ Pediatric Assessment: The Genitourinary System
- ✓ Preventing Catheter-Associated Urinary Tract Infections
- ✓ Pediatric Abdominal Trauma
- ✓ General Post-Op Care of the Transplant Patient

Integumentary

IV Infiltration
- ✓ Pediatric Peripheral IV Care & Management
- ✓ Management of PIV Complications in the Pediatric Patient

Pressure Injury
- ✓ Introduction to Pediatric Pressure Injuries
- ✓ Pressure Injuries in the Pediatric Population: Staging and Care
- ✓ Pressure Injury Staging Assessment

Skin Failure (e.g., hypoperfusion)
- ✓ Care of the Pediatric Patient in Shock

Wounds
- ✓ Preventing Surgical Site Infections
- ✓ Pediatric Burns

Clinical Judgment

Musculoskeletal/Neurological/Behavioral & Psychosocial

Musculoskeletal

Compartment Syndrome
- ✓ Pediatric Orthopedic Trauma

Musculoskeletal Surgery
- ✓ Pediatric Orthopedic Trauma

Musculoskeletal Trauma
- ✓ Pediatric Orthopedic Trauma
- ✓ The Deadly Triad of Trauma

Rhabdomyolysis
- ✓ Pediatric Orthopedic Trauma

Neurologic

Acute Spinal Cord Injury
- ✓ Pediatric Spinal Column/Cord Injuries

Brain Death
- ✓ Pediatric Traumatic Brain Injury
- ✓ Pediatric Stroke
- ✓ Intracranial Pressure Monitoring and Management
- ✓ Organ and Tissue Donation: The Gift of Life

Congenital Neurologic Abnormalities
- ✓ Craniotomy
- ✓ Hydrocephalus
- ✓ Neonatal Cranial Hemorrhage
- ✓ Pediatric Stroke

Renal/Genitourinary Surgery
- ✓ Pediatric Assessment: The Genitourinary System

Agitation
- ✓ Sedation and Analgesia in the ICU
- ✓ Anxiety and Obsessive-Compulsive Disorders (OCD)
- ✓ Attention-Deficit/Hyperactivity Disorder (ADHD)
- ✓ Autism Spectrum Disorder (ASD)
- ✓ Care of the Pediatric Patient with Suicidal Ideation
- ✓ Caring for the Patient with Behavioral Challenges
- ✓ Crisis Prevention through Verbal and Nonverbal De-escalation Strategies
- ✓ Effective Use of Psychotropic Medications in the Prevention and Management of Disruptive Behavior
- ✓ Oppositional Defiant Disorder (ODD)
- ✓ Pediatric Mood Disorders
- ✓ Pediatric Restraint and Seclusion
- ✓ Psychotic Disorders
- ✓ Trauma- and Stressor-related Disorders
- ✓ Trauma-Informed Practice: Concepts, Goals and Key Principles
- ✓ Implementing Trauma-Informed Sensitive Practice

Encephalopathy
- ✓ Meningitis and Encephalitis
- ✓ Intracranial Pressure Monitoring and Management

Head Trauma
- ✓ Pediatric Traumatic Brain Injury
- ✓ Intracranial Pressure Monitoring and Management
- ✓ Craniotomy
- ✓ The Deadly Triad of Trauma

Hydrocephalus
- ✓ Hydrocephalus

Intracranial Hemorrhage
- ✓ Intracranial Pressure Monitoring and Management
- ✓ Craniotomy
- ✓ Neonatal Cranial Hemorrhage
- ✓ Pediatric Stroke

Neurogenic Shock
- ✓ Care of the Pediatric Patient in Shock
- ✓ Pediatric Spinal Column/Cord Injuries

Neurologic Infectious Disease
- ✓ Meningitis and Encephalitis

Neuromuscular Disorders
- ✓ Pediatric Assessment: The Neurological System

Neurosurgery
- ✓ Craniotomy
- ✓ Pediatric Traumatic Brain Injury

Seizure Disorders
- ✓ Status Epilepticus
- ✓ Neonatal Seizures

Space-Occupying Lesions
- ✓ Craniotomy
- ✓ Intracranial Pressure Monitoring and Management
- ✓ Solid Tumors: Brain and Spine

Pain (acute, chronic)
- ✓ Pain Management: Assessment of Pain
- ✓ Pain Management: Non-Pharmacological Therapies in the Management of Pediatric Pain
- ✓ Pain Management: Pain Pathophysiology
- ✓ Pain Management: Pharmacological Management of Pediatric Pain
- ✓ Pain Technologies: PCA & Epidural Analgesia
- ✓ Procedural Sedation in the Pediatric Patient
- ✓ Sedation and Analgesia in the ICU

Spinal Fusion
- ✓ Pediatric Spinal Column/Cord Injuries

Stroke
- ✓ Pediatric Stroke

Traumatic Brain Injury (TBI)
- ✓ Pediatric Traumatic Brain Injury
- ✓ Intracranial Pressure Monitoring and Management
- ✓ Craniotomy

Behavioral & Psychosocial

Abuse and Neglect
- ✓ Child Abuse and Neglect
- ✓ Intimate Partner Violence
- ✓ Trauma-Informed Practice: Concepts, Goals and Principle
- ✓ Implementing Trauma-Informed Sensitive Practice

Post-Traumatic Stress Disorder (PTSD)
- ✓ Trauma-Informed Practice: Concepts, Goals and Key Principles
- ✓ Implementing Trauma-Informed Sensitive Practice
- ✓ Trauma- and Stressor-related Disorders
- ✓ Care of the Pediatric Patient with Suicidal Ideation
- ✓ Crisis Prevention through Verbal and Nonverbal De-escalation Strategies
- ✓ Effective Use of Psychotropic Medications in the Prevention and Management of Disruptive Behaviors
- ✓ Pediatric Restraint and Seclusion
- ✓ Anxiety Disorders and Obsessive-Compulsive Disorder

Post-Intensive Care Syndrome (PICS)
- ✓ Trauma-Informed Practice: Concepts, Goals and Key Principles
- ✓ Implementing Trauma-Informed Sensitive Practice
- ✓ Trauma- and Stressor-related Disorders

Self-Harm
- ✓ Care of the Pediatric Patient with Suicidal Ideation
- ✓ Anxiety and Obsessive-Compulsive Disorders (OCD)
- ✓ Pediatric Mood Disorders

Suicidal Ideation and Behavior
- ✓ Care of the Pediatric Patient with Suicidal Ideation
- ✓ Caring for the Patient with Behavioral Challenges
- ✓ Crisis Prevention through Verbal and Nonverbal De-escalation Strategies
- ✓ Effective Use of Psychotropic Medications in the Prevention and Management of Disruptive Behaviors
- ✓ Pediatric Mood Disorders
- ✓ Psychotic Disorders
- ✓ Trauma- and Stressor-related Disorders
- ✓ Trauma-Informed Practice: Concepts, Goals and Key Principles
- ✓ Implementing Trauma-Informed Sensitive Practice

Clinical Judgment

Multisystem

Acid-base Balance

- ✓ Introduction to Arterial Blood Interpretation
- ✓ Understanding Abnormal Blood Gases
- ✓ Advanced Concepts in Respiratory Physiology

Anaphylactic Shock

- ✓ Care of the Pediatric Patient in Shock

Death and Dying

- ✓ Care of the Dying Child: Care Issues
- ✓ Care of the Dying Child: Grief
- ✓ Care of the Dying Child: The Dying Process
- ✓ Health Care Advance Directives: Communicating Wishes
- ✓ Organ and Tissue Donation: The Gift of Life

Toxin and Drug Exposure

- ✓ Pediatric Toxicology Exposure
- ✓ Blood Administration: Exchange Transfusion

Hyperthermia and Hypothermia

- ✓ Care of the Pediatric Patient in Shock
- ✓ The Deadly Triad of Trauma
- ✓ Thermoregulation of the Newborn Infant

Suicidal Ideation and Behavior

- ✓ Care of the Pediatric Patient with Suicidal Ideation
- ✓ Caring for the Patient with Behavioral Challenges
- ✓ Crisis Prevention through Verbal and Nonverbal De-escalation Strategies
- ✓ Effective Use of Psychotropic Medications in the Prevention and Management of Disruptive Behaviors
- ✓ Pediatric Mood Disorders
- ✓ Psychotic Disorders
- ✓ Trauma- and Stressor-related Disorders
- ✓ Trauma-Informed Practice: Concepts, Goals and Key Principles
- ✓ Implementing Trauma-Informed Sensitive Practice

Self-Harm

- ✓ Care of the Pediatric Patient with Suicidal Ideation
- ✓ Anxiety and Obsessive-Compulsive Disorders (OCD)
- ✓ Pediatric Mood Disorders

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, Equity and Inclusion

Facilitation of Learning

- ✓ Precepting: Adult Learners
- ✓ Precepting: Preceptor Roles and Responsibilities

Collaboration

- ✓ Building and Leading Effective Teams
- ✓ Clinical Delegation
- ✓ Coaching
- ✓ Empowering Teams
- ✓ Giving and Receiving Feedback
- ✓ Therapeutic Relationships and Professional Behavior

Systems Thinking

- ✓ Building and Leading Effective Teams
- ✓ Empowering Teams
- ✓ Introduction to Finance

Clinical Inquiry

- ✓ Introduction to Research Ethics