

Course Objectives/Course Outline
Spokane Community College

Course Title: Pediatrics/Neonatal RT

Prefix and Course Number: RT 401

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Evaluate the care of neonatal and/or pediatric patient from the delivery room through critical care
 - Identify the high risk mother and neonate
 - Organize the general care given to the patient population
 - Demonstrate how to provide a neutral thermal environment
 - Apply the How to provide stabilization and resuscitation standards from both the Neonatal Resuscitation Program and Pediatric Advanced Life Support
 - Evaluate Infant and Pediatric Chest X-Rays
 - Describe oxygenation, ventilation, airway management, noninvasive and invasive techniques to include assessment and monitoring in this population (HHFNC, CPAP,
 - Apply Bubble CPAP and HFOV) along with arterial blood, capillary and cord gases
- Design a Demonstrate a research evidence based paper/poster presentation, on a specific topic or condition

Course Outline:

- I. Caring for the Neonatal and Pediatric Patient
 - A. Fetal Lung Development and Gas exchange/circulation
 - B. Identification of the high risk mother and neonate
 - C. Physical Examination of the Neonate and Pediatric Patients
 - D. General Care principles from the delivery room to the mothers room
 - E. Providing a neutral thermal environment and prevention of heat loss through evaporation, radiation, conduction and convection
 - F. Neonatal and Pediatric Disorders, diagnosis, treatments and monitoring
 - G. Neonatal Resuscitation Program standards
 1. Delivery room equipment/techniques
 2. Bag-Mask ventilation with flow and self-inflating, T-piece, CPAP
 3. Compressions
 4. Medications
 - H. Pediatric Advanced Life Support standards
 1. Equipment/techniques
 2. Bag-Mask ventilation with flow and self-inflating, transport ventilators and other forms of positive pressure
 3. Arrhythmia recognitions and response
 4. Compressions
 5. Medication
 6. Case Scenarios

I. Chest X-rays and other special procedures

J. Respiratory Care Procedures

1. Oxygen therapy to include HHFNC and O2 hoods additionally
2. Blood Gas analysis and interpretation, heel, cord and umbilical/arterial lines
3. Aerosols and Medication Administration
4. Airway Clearance and hyperinflation Therapy
5. Continuous Positive Airway Pressure with nasal, mouth and bubble
6. Need for either Non-invasive Mechanical Ventilation or Invasive Mechanical Ventilation of both the neonate and pediatric patients
7. Discharging a pediatric ventilator patient from the acute care facility