Wheeling Jesuit University’s Respiratory Care Program
Concentration in Neonatal and Pediatric Respiratory Care

B.S. in Respiratory Care with a Concentration in Neonatal and Pediatric Care

The primary goal of Wheeling Jesuit University’s B.S.R.C. with a Concentration in Neonatal and Pediatric Care curriculum is to better prepare students who plan to specialize in neonatal and pediatric respiratory care. The following organizations provided advice during the development of the concentration: Cincinnati Children’s Hospital Medical Center, University of West Virginia Children’s Hospital, UPMC-Children’s Hospital, University of Virginia Health System and Wheeling Hospital.

Course of Study: Eligibility for Concentration

The core respiratory therapy program remains unchanged. Concentration completion requires several elective classes and requirements. The electives are only available after successful completion of the junior year and with the approval of both the Director of Clinical Education and Program Director. In addition, the prospective student must obtain at least a B in the program-required RET-340 Neonatal and Pediatric Respiratory Care course. All prior course prerequisites remain unchanged.

In addition to the remainder of the core respiratory care program, concentration students are required to complete the following courses:

CLS 334 Pathophysiology
A survey a disease processes which affect tissues, organs, or the body as a whole.
A system-wide approach with interactions
RET 345 Neonatal and Pediatric Respiratory Care
Students will master concepts relating to: fetal growth and development, fetal gas exchange and circulation, the process of neonatal delivery, and common neonatal and pediatric pulmonary disease processes. Material learned from CLS 334 Pathophysiology is also applied and furthered (congenital cardiac defects, asthma, hypersensitivity reactions, aspiration, drowning, sepsis, thoracic trauma and shock and anaphylaxis.) This course will also help students to identify and master the following skills: Antenatal assessment and high-risk delivery, neonatal assessment and high-risk delivery, examination and assessment of the neonatal and pediatric patient, invasive blood gas analysis and cardiovascular monitoring, noninvasive monitoring in neonatal and pediatric care, airway management, medical gas and aerosol administration, CPAP, all forms of mechanical ventilation, ECMO and surfactant replacement therapy.

RET 485 Advanced Neonatal and Pediatric Procedure and Assessment
Advanced Neonatal and Pediatric Procedure and Assessment builds upon the knowledge gained in RET-345. This class is required for the Neonatal and Pediatric Respiratory Care Concentration and for those interested in working with children. Topics such as the STABLE program, transport, bronchoscopy, PFT testing and education within the neonatal and pediatric patient population are covered.

RET 486 Advanced Neonatal Pharmacology and Pathophysiology
Advanced Neonatal Pharmacology and Pathophysiology builds off of the knowledge gained in CLS-334 and RET-345. This class explores more infrequent pathologies seen in the neonatal and pediatric populations. The more frequent pathologies are also explored again in more detail. Evidence-based pharmacological treatment is studied with each disease.

RET 478 Clinical Practicum for the Neonatal/Pediatric Concentration
This concentration-level clinical practicum is designed to follow the senior practicum. Additional hands-on neonatal and pediatric care further enhances the student's clinical skills in preparation for the career in neonatal and pediatric respiratory care.

In addition to the specialized training, concentration students are required to obtain certification NRP and PALS.