



OLD DOMINION UNIVERSITY
SCHOOL OF NURSING

NEONATAL PHYSICIAN ASSISTANT CERTIFICATE PROGRAM
COURSE SCHEDULE

Course Number	Course Name	Description	Credit Hours
NURS 751/HL SC 751	Developmental Neonatal Physiology <i>(summer semester)</i>	This course provides an in-depth examination of human genetics, embryologic development and normal physiologic functioning of developing body systems. Mechanisms involved in cell division, gametogenesis, and inheritance patterns are addressed. Basic genetics and epigenetics will be included. The structural and functional development of fetal systems, during critical periods, is emphasized. Abnormalities and alterations in fetal development are explored.	2
NURS 772/HLSC 771	Foundations of Advanced Neonatal Care <i>(summer semester)</i>	This course focuses on the common conditions affecting the newborn and the implementation of evidence-based management strategies that include support of the infant's family. The focus is on neonatal conditions seen in the newborn and late preterm infant. The specifics on the physiology and management of the late preterm infant will be discussed. The concept of differential diagnosis will be introduced.	3
NURS 773/HL SC 773	Pharmacology for Advanced Neonatal Care <i>(fall semester)</i>	This course offers scientific inquiry into the use of pharmacologic agents in the advanced care of infants, including fetal, neonatal life, and early childhood. Pharmacokinetics, pharmacodynamics, drug use in pregnancy and lactation, pharmacologic agents used in disease prevention and treatment, drug monitoring and drug safety in the home are explored.	3
NURS 774/HL SC774	Advanced Neonatal Care: High Risk Management I <i>(fall semester)</i>	This course is designed to build upon evolving expertise in advanced practice with very low birth weight (VLBW) and extremely low birth weight (ELBW) infants. The course emphasizes demonstration of critical thinking and diagnostic reasoning skills in clinical decision making, developing a plan of care based on scientific evidence and practice guidelines, and instituting evidence-based strategies to provide psychosocial support and education for the infants' family.	3

<p>NURS 775/HL SC 775</p>	<p>Advanced Neonatal Nursing Care: High Risk Management II <i>(spring semester)</i></p>	<p>This course provides the student with in-depth knowledge of advanced practice management of infants requiring surgery. Emphasis is on the utilization of relevant theories, critical thinking, and evidence-based knowledge to formulate differential diagnoses, diagnoses, treatment plans, and optimal outcome parameters for physiologically for infants requiring surgery and advanced technologies such as full genome sequencing, high frequency ventilation, cooling, iNO and ECMO. The focus of this course is complex conditions and end of life care for critically ill neonates. Developmental care for the medically fragile infant will also be addressed.</p>	<p>3</p>
<p>Total Credits</p>			<p>14</p>