Elective Description

**Campus:** Northeast Campus  
**Department:** Pediatrics  
**Elective Title:** Neonatology  
**Course Number:** PED 9302  
**Location of Elective:** Altru Hospital – Grand Forks, ND

**Preceptor(s):** Durga Panda, MD

**Period(s) offered:** Six months/year during those months when there is no resident from the Family Practice Residency on their required rotation in the NICU.

**Course prerequisites:** Pediatrics Clerkship

**Number of students per period:** Prefer one student/month.

**Revised Curriculum Phase(s):** 3

**Purpose:** To provide experience in the care of the sick and/or small neonate requiring neonatal intensive care services.

**Objectives:** Following successful completion of this elective, the student will be able to:

1. Explain the principles of neonatal resuscitation and its proper technique.
2. Demonstrate proficiency in the physical examination of neonates that are admitted to the NICU and explain how the examination of the term neonate differs from that of the premature neonate.
3. Explain the concept of size-for-dates and differentiate the etiological possibilities relative to appropriate, large and small-for-dates neonates.
4. Differentiate the various etiologies of respiratory distress in the neonate relative to maternal history, resuscitation, gestational age, and physical examination; and, explain the choice and use of the various types of respiratory support in the NICU.
5. Write hospital orders related to the fluid, electrolyte and nutritional needs of the high risk neonate.
6. Explain the importance of the diagnosis of sepsis in the neonate; and discuss the significance of Group B Streptococcal disease from a perinatal perspective.
7. Discuss issues related to the infant of the diabetic mother as the premiere example of a metabolic problem common in the NICU.

**Instructional Activities:** During this elective, the student will be involved in/experience:

1. Rounding with a neonatologist daily.
2. Assuming “responsibility,” under the supervision of the preceptor, for the admission, history and physical examination, daily evaluation, and subsequent discharge of a selected group of neonates in the NICU; including presentation of the patient on rounds and to the preceptor.
3. Writing all orders on assigned patients under the supervision of the preceptors.
4. Preceptor discussions with the family pre and post-delivery.
5. Attendance at normal, high risk, and cesarean section delivery.

**Criteria for Grading:** During and following this elective, the preceptor will:

1. Evaluate by direct observation the quality of the student’s physical examinations, problem identification and management plan formulation skills.
2. Evaluate by direct observation the quality of assigned tasks performance.
3. Evaluate by direct observation the student’s ability to perform procedures that were instructed during the elective.
4. Utilize the standardized UNDSMHS senior elective form.