

## **Elective Description**

**Campus:** Northeast (Grand Forks)

**Department:** Internal Medicine

**Elective/Experience Title:** Respiratory/Critical Care

**Course Number:** IMED 9316

**Location of Elective:** Altru Hospital – Grand Forks, ND

**Preceptor(s):** Oscar Llanos, MD; Anto Mangardich, MD; Mahesh Mudireddy, MD & Maria Pino, MD;

**Period(s) Offered:** All

**Course prerequisites:** Completion of IMED Clerkship

**Number of students per period:** 1

**Revised Curriculum Phase(s):** 2 & 3

**Purpose:** To provide education and experience in the care of patients requiring respiratory/critical care services.

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

1. Demonstrate expertise in evaluation, treatment, and management of patients with respiratory disease of all varieties especially asthma and COPD.
2. Demonstrate expertise in the physical exam of the chest.
3. Interpret chest x-rays and pulmonary function studies.
4. Utilize the different equipment used in respiratory therapy and the pulmonary function lab as well as the sleep lab. The student will be able to state the indications for this equipment's use.
5. Demonstrate familiarity with the various respiratory ventilators.
6. State the indications for fiber-optic bronchoscopy as well as the strengths and weaknesses of this procedure.
7. State the indications for thoracentesis, pleural biopsy, chest tube insertion, Swan-Ganz catheter insertion, arterial line insertion, and percutaneous needle biopsy of the lung. Additionally, the student will be able to discuss the strengths and weaknesses of these different procedures.

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

1. Rotation through the pulmonary function lab and the rest Kerry therapy department.
2. Hospital rounds on critical care patients, routine patients, and in consultation patients.
3. Selected reading from standard textbooks.
4. Quizzes administered periodically through the rotation as a teaching aid and a focus for discussion.

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

1. Utilize the standardized UNDSMHS senior elective evaluation form.
2. Evaluate the student's written histories and physicals, progress notes, and consultation documentation.
3. Evaluate by direct observation the student's interpretation of uncomplicated chest x-rays and pulmonary function tests.
4. Evaluate by direct observation the student's interaction with the respiratory therapy team.
5. Evaluate by direct observation the student's performance of procedures in the Critical Care Unit.
6. Evaluate by direct observation the student's interpretation of arterial blood gases and acid/base disorders.
7. Evaluate by direct observation the student's communication skills with all members of the healthcare team.