

## **Elective Description**

Campus: Northwest (Minot) Department: Surgery

Elective/Experience Title: Neurosurgery Course Number: SURG 9420

Preceptor(s): TBD

Location of Elective: Trinity Health - Minot, ND

Period(s) Offered: All

Number of students per period: 1 student per period

Course Prerequisites: Surgery Clerkship

Revised Curriculum Phase(s): 2 & 3

Purpose: To provide the opportunity to learn several aspects of neurosurgery, including diagnosis and treatment.

## **Objectives:** Following successful completion of this elective, the <u>student</u> will be able to:

- 1. Demonstrate competency obtaining a neurologic history, performing a neurologic examination, and differentiating between common disorders affecting the nervous system.
- 2. Appreciate the roles of various specialized diagnostic procedures such as EEG, EMG, cat scanning, angiography, and other neuroradiological studies in the evaluation of neurological and neurosurgical disorders.
- 3. Interpret the diagnostic approach to patients with neurological and neurosurgical disorders and to identify treatment plans for patients with such disorders.
- 4. Correlate neurological findings with the location of neuroanatomical and neurophysiological lesions.
- 5. Formulate the short-term and long-term management of patients with neurological and neurosurgical disorders.

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

- 1. Functioning as an intern in close association with the neurosurgical teaching staff and under the supervision of the chief of the department of neurosurgery.
- 2. Gaining experience in diagnostic evaluations, after which time certain patients will be assigned to the student for diagnostic workups, special diagnostic procedures, and assisting in the surgical procedures for the patient.
- 3. The postoperative care and management in association with the neurosurgical staff.
- 4. Participation in evening rounds and participation in emergency call and in the emergency care of those patients requiring such care.
- 5. The opportunity to accompany members of the neurosurgical staff on recheck of outpatient visits.
- 6. All autopsies that are carried out during the period of the elective.
- 7. The opportunity of becoming involved in research activities.

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

- 1. Assess by direct observation the ability of the student to obtain a neurologic history and perform a neurologic examination.
- 2. Evaluate by direct observation the ability of the student to present a patient and discuss a differential diagnosis and treatment plan.
- 3. Judge by direct observation competency in ordering appropriate laboratory, x-ray, and specific diagnostic studies.
- 4. Assess by direct observation the ability of the student to relate the neurological findings to the neuroanatomical and neuropathological location of the lesion.
- 5. Evaluate the student's written histories, examinations and consult papers.
- 6. Assess by direct observation that the student is competent in meeting standards of performance.
- 7. Judge by direct observation the student's ability to display professional attitude and behavior to medical staff and patients.
- 8. Utilize the standardized UNDSMHS senior elective form.

Formerly NEUR 9404 Updated: Fall 2025