

NEUROLOGICAL SURGERY (NEURSURG)

NEURSURG 699 – NEUROSURGERY: DIRECTED IN STUDY IN RESEARCH

1-3 credits.

Offers undergraduates majoring in an area of the biological sciences, and interested in preparing for advanced coursework in graduate or medical school, an opportunity to participate in neurological surgery research.

Requisites: Consent of instructor

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2026

NEURSURG 919 – INDIVIDUALIZED NEUROLOGICAL SURGERY ELECTIVE

2-4 credits.

Individually scheduled clinical elective, directly supervised by Neurological Surgery senior residents and attending physicians. Regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, participating in sub-specialty clinics, presenting cases and teaching topics, and discussing patient cases. Independent activities include reading about patient conditions and preparing for direct patient care as needed. Other patient care-related learning activities as assigned by instructors, dependent on the individual student, the patients under the student's care, and the location.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2026

Learning Outcomes: 1. Perform a hypothesis driven history and complete a targeted exam

Audience: Graduate

2. Develop and present a weighted differential diagnosis for medical and surgical conditions

Audience: Graduate

3. Using clinical evidence, adapt and justify the working diagnosis, and demonstrate an understanding of the surgical anatomy

Audience: Graduate

4. Present a diagnostic plan including laboratory and imaging modalities

Audience: Graduate

5. Correctly interpret imaging and laboratory findings and communicate results to patients and team members

Audience: Graduate

6. Develop and implement effective patient management plans

Audience: Graduate

7. Complete written documentation in a comprehensive, concise, accurate and timely manner

Audience: Graduate

8. Review, interpret, and present current literature to support patient care

Audience: Graduate

9. Communicate effectively with patients, families, physicians and non-physician team members

Audience: Graduate

10. Communicate and collaborate with consultants and/or primary team and other providers to coordinate care

Audience: Graduate

11. Engage patients in shared decision-making regarding tests, orders, and procedures

Audience: Graduate

12. Avoid medical jargon when communicating with patients and families

Audience: Graduate

13. Recognize limitations and seek assistance as appropriate

Audience: Graduate

NEURSURG 921 – INPATIENT NEURO ICU ELECTIVE

1-12 credits.

Direct supervision by Neurocritical Care attending physicians. Regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, observing procedures in the unit, presenting cases and teaching topics, and discussing patient cases. Independent activities, including reading about patient conditions and preparing for direct patient care, as needed. Other patient care related learning activities as assigned by instructors: these are dependent on the individual student and the patients under the student's care.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2026

Learning Outcomes: 1. Perform a hypothesis driven history and complete a targeted exam

Audience: Graduate

2. Develop and present a weighted differential diagnosis

Audience: Graduate

3. Using clinical evidence, adapt and justify the working diagnosis

Audience: Graduate

4. Present a diagnostic plan including laboratory and imaging modalities

Audience: Graduate

5. Correctly interpret imaging and laboratory findings and communicate results to patients and team members

Audience: Graduate

6. Complete written documentation in a comprehensive, concise, accurate and timely manner

Audience: Graduate

7. Review, interpret and present current literature to support patient care

Audience: Graduate

8. Develop clinically relevant questions to advance learning

Audience: Graduate

9. Communicate effectively with patients, families, physicians and non-physician team members

Audience: Graduate

10. Communicate and collaborate with consultants and/or primary team and other providers to coordinate care

Audience: Graduate

11. Engage patients in shared decision-making regarding tests, orders and procedures

Audience: Graduate

12. Avoid medical jargon when communicating with patients and families

Audience: Graduate

13. Recognize limitations and seek assistance as appropriate

Audience: Graduate