Neurosurgery - NS 630

Course Syllabus

Course Description:
NS 630 is a two-week rotation for third-year medical students, offering hands-on experience in diagnosing and treating common neurological issues. This Traditional - EL Clinical Rotation is worth 5 credit hours and aims to introduce M3 students with the daily work of neurosurgery in academic medical centers.

Course Director: Allison Strickland, MD astrickland1@umc.edu
Course Coordinator: Alexandra Waterbury awaterbury@umc.edu
601-984-5705

Teaching Personnel:

Chad Washington, MD - Chair	Allison Strickland, MD
Gustavo Luzardo, MD	M. Omar Chohan, MD
Zach Smalley, MD	Joaquin Hidalgo, MD
Mason Shiflett, MD	Kristin Weaver, MD
Jared Marks, MD	Drew Smith, MD

Course Objectives Based on Core Competencies:

1. **Medical Knowledge:** Examine intracranial and spine conditions treated by neurosurgery.
2. **Practice-Based Learning and Improvement:** Develop clinical decision-making skills for neurosurgical patient care.
3. **Interpersonal and Communication Skills:** Participate in patient rounds with surgical teams.
4. **Systems-Based Practice:** Prepare for observed cases, understanding surgical indications and principles.
5. **Patient Care:** Perform a basic neurological examination.
6. **Professionalism:** Demonstrate commitment to ethical principles and sensitivity to a diverse patient population in all aspects of their education and interactions with patients.

Teaching Methods:
Wednesday morning didactic lecture from 7 to 9 AM, along with clinical sessions, operating room (OR) experience, and opportunities for shadowing and active participation in rounds.

Grading Criteria and Weightage:

Professionalism	10%
Evaluation from Faculty or Resident	20%
Submit History and Physical	20%
Neurosurgery Test	50%

Educational Resources:
Handbook of Neurosurgery by Mark S. Greenberg, M.D. 10th Edition

Neurosurgery - NS 655A & 656A

Course Syllabus

Course Description:
NS 655A is a four-week rotation for fourth-year medical students, offering hands-on experience in the evaluation and treatment of neurological surgery problems. This Traditional – EL Clinical Rotation is worth 5 credit hours and aims to familiarize students with the diagnosis and management of common neurological problems, related surgical procedures, and consultations.

Course Director: Allison Strickland, MD astrickland1@umc.edu
Course Coordinator: Alexandra Waterbury awaterbury@umc.edu
601-984-5705

Teaching Personnel:

Chad Washington, MD - Chair	Allison Strickland, MD
Gustavo Luzardo, MD	M. Omar Chohan, MD
Zach Smalley, MD	Joaquin Hidalgo, MD
Mason Shiflett, MD	Kristin Weaver, MD
Jared Marks, MD	Drew Smith, MD

Course Objectives Based on Core Competencies:
1. **Medical Knowledge:** Examine intracranial and spine conditions treated by neurosurgery.
2. **Practice-Based Learning and Improvement:** Develop clinical decision-making skills for neurosurgical patient care.
3. **Interpersonal and Communication Skills:** Participate in patient rounds with surgical teams.
4. **Systems-Based Practice:** Prepare for observed cases, understanding surgical indications and principles.
5. **Patient Care:** Perform a basic neurological examination.
6. **Professionalism:** Demonstrate commitment to ethical principles and sensitivity to a diverse patient population in all aspects of their education and interactions with patients.

Teaching Methods:
Wednesday morning didactic lecture from 7 to 9 AM, along with clinical sessions, operating room (OR) experience, and opportunities for shadowing and active participation in rounds.

Grading Criteria and Weightage:

Professionalism	10%
Evaluation from Faculty or Resident	20%
Submit History and Physical	20%
Give a Presentation	50%

Educational Resources:
Handbook of Neurosurgery by Mark S. Greenberg, M.D. 10th Edition

Neurosurgery - NS 851, NS 852, NS 853

Course Syllabus

Course Description:
NS 851, 852, and 853 are four-week extramural rotations for fourth-year medical students, providing hands-on experience in diagnosing and treating neurological surgery cases. These Traditional - EL Clinical Rotations are worth 5 credit hours and focus on introducing students to the diagnosis and management of common neurological issues, associated surgical procedures, and consultations.

Course Director: Allison Strickland, MD astrickland1@umc.edu
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Course Objectives Based on Core Competencies:

7. **Medical Knowledge:** Examine intracranial and spine conditions treated by neurosurgery.
8. **Practice-Based Learning and Improvement:** Develop clinical decision-making skills for neurosurgical patient care.
9. **Interpersonal and Communication Skills:** Participate in patient rounds with surgical teams.
10. **Systems-Based Practice:** Prepare for observed cases, understanding surgical indications and principles.
11. **Patient Care:** Perform a basic neurological examination.
12. **Professionalism:** Demonstrate commitment to ethical principles and sensitivity to a diverse patient population in all aspects of their education and interactions with patients.

Teaching Methods:
Dependent on extramural location, but should include didactic lectures, along with clinical sessions, operating room (OR) experience, and opportunities for shadowing and active participation in rounds.

Grading Criteria and Weightage:

Professionalism	40%
Evaluation from Faculty or Resident	60%

Educational Resources:
Handbook of Neurosurgery by Mark S. Greenberg, M.D. 10th Edition

Neurosurgery - NS 631

Course Syllabus

Course Description:
NS elective is a two-week rotation where third-year medical students gain experience in the evaluation and treatment of patients who have suffered injuries or disabilities. The clerkship introduces students to the daily practice of PM&R, including managing patients following a stroke or central nervous system injury, diagnosing and treating acute & chronic pain, and treating musculoskeletal injuries suffered through falls, sports injuries, and workplace accidents. There is exposure to various procedures including Botox injections and fluoroscopic & ultrasound guided injections.

Course Director: Hyung Kim, MD hkim@umc.edu
Course Coordinator: Alexandra Waterbury awaterbury@umc.edu
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Course Objectives Based on Core Competencies:

1. **Medical Knowledge:** Identify common medical conditions that affect people with disabilities.
2. **Practice-Based Learning and Improvement:** Create an assessment and plan for medical management of conditions treated by physiatrists.
3. **Interpersonal and Communication Skills:** Discuss PMR's role in the care of people with disabilities, including improvement in quality of life and functioning.
4. **Systems-Based Practice:** Prepare for observed cases, understanding surgical indications and principles.
5. **Patient Care:** Perform a PMR-oriented history and physical with the emphasis on functional status and disability
6. **Professionalism:** Demonstrate commitment to ethical principles and sensitivity to a diverse patient population in all aspects of their education and interactions with patients.

Teaching Methods:
Didactic lectures, along with Ambulatory and Inpatient clinical experience, and opportunities for shadowing and active participation in rounds.

Grading Criteria and Weightage:

Professionalism	25%
Clinical Evaluation from Faculty	75%

Educational Resources:
Access to a computer with **Citrix Receiver, Google Chrome or Microsoft Edge, and Office apps** installed. Applications for Macs (such as Pages and Numbers) are not appropriate for this course and files submitted in one of their formats **will not be graded.**

Neurosurgery - NS 658

Course Syllabus

Course Description:
NS 658 is four-week clerkship for fourth-year medical students to gain experience in evaluating and treating patients with injuries or disabilities. The rotation covers managing post-stroke or central nervous system injuries, diagnosing and treating acute and chronic pain, and addressing musculoskeletal injuries from falls, sports, and workplace accidents. It includes acute inpatient rehabilitation, outpatient exposure to various musculoskeletal and spine conditions, pediatric rehabilitation, sports medicine, orthotic and amputee medicine, and exposure to procedures like Botox injections and guided injections. This Traditional - EL Clinical Rotation is a 10 credit-hour course introducing students to the evaluation and treatment of individuals with significant impairments and disabilities during long-term hospitalization, emphasizing the integration of medical and surgical knowledge in patient care

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Course Coordinator: Alexandra Waterbury awaterbury@umc.edu
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Course Objectives Based on Core Competencies:

7. **Medical Knowledge:** Identify common medical conditions that affect people with disabilities.
8. **Practice-Based Learning and Improvement:** Create an assessment and plan for medical management of conditions treated by physiatrists.
9. **Interpersonal and Communication Skills:** Discuss PMR's role in the care of people with disabilities, including improvement in quality of life and functioning.
10. **Systems-Based Practice:** Prepare for observed cases, understanding surgical indications and principles.
11. **Patient Care:** Perform a PMR-oriented history and physical with the emphasis on functional status and disability
12. **Professionalism:** Demonstrate commitment to ethical principles and sensitivity to a diverse patient population in all aspects of their education and interactions with patients.

Teaching Methods:
Didactic lectures, along with Ambulatory and Inpatient clinical experience, and opportunities for shadowing and active participation in rounds.

Grading Criteria and Weightage:

Professionalism	25%
Clinical Evaluation from Faculty	75%

Educational Resources:
Access to a computer with **Citrix Receiver, Google Chrome or Microsoft Edge, and Office apps** installed. Applications for Macs (such as Pages and Numbers) are not appropriate for this course and files submitted in one of their formats **will not be graded.**