

**CLINICAL NEUROLOGY
NEU 829**

Course Department, Title, Department & Number: NEU 829, Clinical Neurology

Course credit or length: Two to four weeks

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Course location: Cabell Huntington Hospital; Marshall Medical Center, Department of Neurosciences

Brief Course Description: This course will familiarize the student with the presentation and techniques of evaluation appropriate to patients with neurological disorders. The student will participate as an integral member of the neurology team. This involvement allows the students to: (1) build on their basic science and clerkship experience in terms of knowledge and physical examination skills; (2) expand their skills in ambulatory neurology, with an emphasis on neurological problems which they will encounter throughout their career, regardless of specialty; (3) gain knowledge regarding newer treatment modalities and research in the field; (4) explore the option of neurology as a career choice; (5) learn more about sub specialization in neurology.

Key Responsibilities of the student while on Elective:

1. Function as an integral member of the outpatient and inpatient neurology team (ward and/or consults)
2. Independently assess patients, present their findings, and begin a plan of care under the supervision of senior residents and attending physicians.
3. Appropriately follow and document their patients' progress.
4. Presentation of the neurological patient and demonstration of the neurological examination.
5. Appropriate application of neurological and neurophysiological techniques.
6. Attend assigned clinics.
7. Attend and participate in the Department's grand rounds and other regularly scheduled conferences

Institutional Objective

Patient Care - Students must demonstrate the ability to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Course Objective

The student will demonstrate the ability to perform and interpret the basic neurological examination and to make a reasonably correct clinical diagnosis.

Outcome Measure

During a two week elective, the student will orally present to the faculty member at least fifteen (15) patient encounters from the following list of inpatient and outpatient encounters (five patient encounters will be randomly selected by the faculty member). The student must also orally demonstrate the ability to perform and interpret the basic neurologic examination and make a reasonably correct clinical diagnosis for the following:

Altered Mental Status
Back Pain
Balance Problems
Headache
Memory Disorders
Movement Disorder
Multiple Sclerosis

Neuropathy
Seizure
Stroke
Weakness

For a four week elective, the student shall present thirty (30) patient encounter presentations utilizing the same criterion as noted above and below.

Course Objective

The student will know principles of laboratory and neuroimaging workup to aid in differentiation of diagnostic problems.

Outcome Measure

The student will include in the oral presentation to a faculty member from the above, the principles of laboratory and neuroimaging workup to aid in differentiation of diagnostic problems.

Course Objective

The student will know principles of treatment, management and rehabilitation of patients with neurologic diseases and deficits.

Outcome Measure

The student will orally discuss with a faculty member, the principles of treatment, management and rehabilitation of patients with neurologic diseases and deficits.

Institutional Objective

Medical Knowledge- Students must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.

Basic Science Objective

The student shall be able to demonstrate the ability to apply evolving biomedical, clinical, epidemiological and social-behavioral sciences to neurological patient care.

Outcome Measure

The student shall present to the faculty a topic such as "Treatment of Brain Tumors" or "MRI Imaging in MS" during the two week rotation. For a four week rotation, the student shall make two presentations to the faculty. The presentation topic(s) is (are) to be pre-approved by the course director.

Course Objective

Students will have the opportunity to see patients undergoing EMG and EEG tests. They will also have the opportunity to understand the role of multiple diagnostic modalities including CT, MRI and ultrasound imaging as well as lumbar puncture and other lab investigations relevant to patients seen on the floors and in the clinics.

Outcome Measure

Students shall see at least two EMG's and two EEG's and shall record the experiences on the patient logger system. Students shall also orally demonstrate to the faculty a basic understanding of the role of other multiple diagnostic modalities including CT, MRI and ultrasound imaging as well as lumbar puncture and other lab investigations relevant to patients seen on the floors and in the clinics.

Institutional Objective

Interpersonal and Communication Skills- Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Course Objective

As part of the health care team, the student must be able to communicate information effectively.

Outcome Measure

The student will orally present to a faculty member on a regular basis as described above. Communication skills will be assessed at that time.

Institutional Objective

Professionalism- Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

Course Objective

Students must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health and in an ethical, responsible, reliable and dependable manner.

Outcome Measure

The student will be directly observed by faculty to determine the appropriateness of the behaviors noted above.

ASSESSMENT METHODS

Mid-Point Evaluation

Two Week Rotations

Students will be given verbal feedback on their performance at the end of week one.

Four Week Rotations

The Course Director will evaluate student performance at the end of the first two week to review the student's professional, clinical and academic performance up to that point. This formative evaluation must be reviewed with the student and the student will have an opportunity to discuss with the Course Director. The form must be signed by the student and returned to the Course Director. The Course Director shall then forward a copy of the form to the Office of Academic Affairs. The form will NOT be included in the student's official academic record.

Preceptor Evaluation- 100%

The preceptors' evaluation will be based upon, but are not limited to, the following factors:

- Attendance and participation in tutorials
- Conference attendance
- Demonstration of basic knowledge of patient care during clinic
- Maturity and Professionalism
- Oral Case presentation/patient workup
- Participation in call
- Participation in clinic
- Performance on Clinical Presentations
- Preparedness
- Topic Presentations

FOR THOSE TAKING THE FOUR WEEK ROTATION a case presentation will also be required.

Case Presentation

The student will be required to give a 10-15 minute case presentation at a pre-arranged time during their clinical rotation. The presentation will be given to the course director and medical students. Students will be notified of the date and time of their presentation one week in advance.

GRADING

The final grade for this course will be either Honors, Pass or Fail and will be based upon the factors outlined above.

ATTENDANCE

If at any time the medical student is unable to meet their clinical responsibilities they must notify the Course Director directly during working hours Monday-Friday, 8:00 am - 5:00 pm. All absenteeism will be required to be made up and may be at a rate of one days make up for every day missed.

If a student misses two or more unexcused days, the student will be required to reschedule the missed days on the rotation. Request for an excused absence must be submitted in writing at least one week in advance via the Student Scheduler to the course coordinator. The request will be reviewed by the course director who will either grant or deny the request. Excused absences will not be retroactively granted.

Attendance at Grand Rounds is mandatory. Unexcused absences will result in one extra case presentation for each absence.

MUJCESOM Policies: All medical students taking this course will comply with School of Medicine policies given at <http://musom.marshall.edu/students/policies>.

Individual policies can be found at the following websites:

Student Infectious Material Exposure:

<http://musom.marshall.edu/ups/postexposure.asp>

MS-IV Attendance:

<https://musom.marshall.edu/students/documents/policies/Yr4attendance.pdf>

Academic Dishonesty Policy:

<https://musom.marshall.edu/students/documents/policies/Standards-of-Professionalism-and-Honor-Code.pdf>

Academic Standards Policy:

<https://musom.marshall.edu/students/documents/Policies/ASC-FINAL-POLICY.pdf>

Policy for Students with Disabilities:

<https://musom.marshall.edu/students/documents/Guidelines.pdf>

University Computing Services' Acceptable Use Policy:

<http://www.marshall.edu/ucs/CS/acptuse.asp>

Affirmative Action Policy:

pp. 16-17

http://www.marshall.edu/catalog/Graduate/S2008/gr_sp08.pdf

Inclement Weather Policy:

<https://musom.marshall.edu/students/documents/policies/MUSOM-Inclement-Weather-Policy.pdf>

Notification of delays and cancellations of classes are posted on the Medical Education Home Page when Marshall University Main Campus is not in session

<https://musom.marshall.edu/weather>

Required/Recommended Reading:

Overview of Neurology, suggested as background reading during clerkship (choose one):

Lange's Clinical Neurology; Ed. Aminoff MJ, Greenberg DA, Simon RP. 6th ed.
Blueprints in Neurology (Blueprints Series), by Frank Drislane et al.

Brief review of neurology as part of USMLE review series.

Weiner and Levitt's *Neurology* (Neurology for the House Officer); Rae-Grant, A.

Comprehensive textbooks of Neurology, useful for reference purposes:

Harrison's Neurology in Clinical Medicine; Ed. Hauser S..
Merritt's Textbook of Neurology. Rowland, L.P. 11th ed.
Adams and Victor's Principles of Neurology. Ropper AH, Brown R. Eighth Ed.
Neurology in Clinical Practice. Bradley, Daroff, Fenichel, Jankovic. 5th Ed.