

## Planning and Quality Assurance Affairs

Form (A)

### Course Specifications

#### General Information

<b>Course name</b>	Neurology & Clinical Neuroscience
<b>Course number</b>	MEDI6401
<b>Faculty</b>	
<b>Department</b>	
<b>Course type</b>	College Needs
<b>Course level</b>	6
<b>Credit hours (theoretical)</b>	4
<b>Credit hours (practical)</b>	0
<b>Course Prerequisites</b>	

#### Course Objectives

1	- To familiarize the student with the clinical presentation of common neurological disorders
2	- History taking skills to elicit precise symptoms and to distinguish clinical syndromes will be emphasized
3	- To develop in the student a facility with the neurologic exam. Both the detailed neurological examination and features of the neurological examination for practical application in general medical practice and allied neurological specialties such as orthopedics, and physical medicine will be taught
4	- To have the student acquire a sound knowledge of the differential diagnosis of common neurologic disorders, the laboratory evaluation and clinical management of these diseases. Categorically included are: stroke, seizure disorders, headache, movement disorders, multiple sclerosis, stupor and coma, diseases of muscle and nerve, dizziness, and dementia
5	- To introduce the student to the diagnostic evaluation and management of urgent neurological or neurosurgical illness
6	- To convey the indications for and to acquire skills in performing lumbar puncture and to appreciate both the clinical value and the limitations of technologies such as: electroencephalography, evoked potentials, computerized axial tomography (CT), magnetic resonance imaging (MRI), arteriography, myelography, and radionuclide imaging
7	- To acquaint the student with the new frontiers in neurology and many of the cuttingedge issues in neuroscience
8	- To introduce the concepts of neurologic consultation and an understanding of the role of the consultant in clinical problem solving

## Intended Learning Outcomes

<b>Knowledge and Understanding</b>	<ul style="list-style-type: none"> <li>* Acquire knowledge of the differential diagnosis of neurologic disorders, the laboratory evaluation and management of these disorders</li> <li>* Demonstrate knowledge of work up of a patient with mental status changes</li> <li>* Demonstrate knowledge of evaluation of a patient with a stroke</li> <li>* Familiarize the student with clinical presentation and treatment of common neurological disorders</li> <li>* Appreciate the clinical value and limitations of technologies such as: EEG, EMG/NCV, CT scan and MRI/MRA</li> <li>* Demonstrate ability to follow patients in an inpatient setting and plan appropriate discharge</li> <li>* Learn about community resources for patients and families of patients with dementia</li> </ul>
<b>Intellectual Skills</b>	<ul style="list-style-type: none"> <li>* Recognize symptoms that may signify neurologic disease (including disturbances of consciousness, cognition, language, vision, hearing, equilibrium, motor function, somatic sensation, and autonomic function)</li> <li>* Distinguish normal from abnormal findings on a neurologic examination</li> <li>* Localize the likely site or sites in the nervous system where a lesion could produce a patients symptoms and signs</li> <li>* Formulate a differential diagnosis based on lesion localization, time course, and relevant historical and demographic features</li> <li>* Acquire an awareness of the use and interpretation of common tests used in diagnosing neurologic disease</li> <li>* Acquire an awareness of the principles underlying a systematic approach to the management of common neurologic diseases (including the recognition and management of situations that are potential emergencies)</li> <li>* Acquire an awareness of situations in which it is appropriate to request neurologic consultation</li> <li>* Review and interpret the medical literature (including electronic databases) pertinent to specific issues of patient care</li> </ul>
<b>Professional Skills</b>	<ul style="list-style-type: none"> <li>* Obtain a complete and reliable history</li> <li>* Perform a comprehensive neurologic examination</li> <li>* Perform a brief, screening neurologic examination</li> <li>* Examine patients with altered level of consciousness or abnormal mental status</li> <li>* Deliver a clear, concise, and thorough oral presentation of a patients history and</li> <li>* Prepare a clear, concise, and thorough written presentation of a patients history and examination</li> </ul>
<b>General Skill</b>	<ul style="list-style-type: none"> <li>* Develop knowledge, skills, attitudes and behaviors toward learning, which perpetuate lifelong learning, inquisitiveness and evidenced-based practice</li> <li>* Demonstrate professional appearance, attendance and behavior consistent with that expected of a physician-in-training</li> <li>* Conduct a clinical evaluation, including history and physical examination, in a professional manner with respect to attitude and behavior during the clinical encounter</li> <li>* Begin to learn the roles of various health professionals in the patient care team</li> <li>* Make positive contributions to patient care by working collaboratively with members of a multidisciplinary health care team</li> </ul>

## Course Contents

- 1 - Vascular disorders
- 2 - Epilepsy and epilepsy syndromes
- 3 - Headache disorders
- 4 - Cranial neuropathies
- 5 - Movement disorders esp. Parkinsons and variants
- 6 - Neuromuscular disorders
- 7 - Ischemic cerebrovascular disease
- 8 - Hemorrhagic cerebrovascular disease
- 9 - Demyelinating disorders
- 10 - Peripheral neuropathies
- 11 - Dementia
- 12 - Role of surgery in the therapy of neurological disorders including indications and contraindications for its use
- 13 - Indications for, side effects, dosages, and mechanisms of action of the major agents used in neurologic therapeutics
- 14 - Teratogenic effects of the major drugs used in neurological therapeutics
- 15 - Neurological manifestations of major systemic disorders

## Teaching and Learning Methods

- 1 - Clinical Conferences
- 2 - Teaching Sessions
- 3 - Outpatient Clinics
- 4 - Inpatient Service

## Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
According to groups distribution. All the year	All the year	100%
Theoretical assesment	At the end of the year (may)	Theoretical 50
Clinical exam	At the end of the year (may)	.Clinical 50

## Books and References

Course note	Neurology syllabus
Essential books	Aminoff, Simon, Greenberg. Clinical Neurology. 2005
Recommended books	Biller. Practical Neurology. 2008
	Ropper and Brown. Adam's and Victor's Principles of Neurology. 2005
	Rowland. Merritt's Neurology. 2005
	Wiener and Goetz. Neurology for the Non-Neurologist. 2004
Other References (Periodical, web sites, .... etc.)	www.medlink.com – UpToDate specific to neurology
	www.aan.com – American Academy of Neurology website o Education site has practice parameters

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**Knowledge and Skills Matrix**

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill