



## **COURSE SPECIFICATION**

# Faculty of Medicine - Mansoura University

# (A) Administrative information

(1) Programme offering the course.	Postgraduate Msc Programme of Neurology
(2) Department offering the programme:	Neurology department-Psychiatric department
(3) Department responsible for teaching the course.	Neur <mark>olog</mark> y department
(4) Part of the programme.	2 <sup>nd</sup> part
(5) Date of approval by the Department's council	17-5-2016
(6) Date of last approval of programme specification by Faculty council	8-9-2016
(7) Course title:	Neurology
(8) Course code:	NPSYC 512
(9) Total credit hours.	7lectures- 5 clinical
(10) Teaching hours	105 lectures- 150 clinical

### (B) Professional information

#### (1) Course Aims:

The broad aims of the course are as follows:

- 1-To provide specialized training in the clinical and scientific basis of a wide range of neurological disorders.
- 2- Equip students with a deep understanding of disorders of the nervous system and which will be of benefit to their future careers.
- 3- Provide Skills necessary for proper diagnosis and management of patients in the field of neurology including diagnostic, problem solving and decision making.
- 4- To facilitate active learning of the various diseases affecting the nervous system regarding the possible pathophysiology, pathogenesis, clinical presentation, differential diagnosis & investigations.
- 5- To produce graduates able to acquire the competency and experience to provide a high standard patient care that is compassionate and effective for the management of patients with different neurologic diseases with practices that are safe, scientifically based, effective, efficient, timely, and cost effective as well as evidence-based.
- 6-To produce graduates who are better prepared to understand, reflect and meet the needs of our local community and respond appropriately to cultural and medical needs.
- 7- To develop competency in applying the principles, methodology and various tools of scientific research in neurology.
- 8- To provide continuous self-development and transfer of knowledge and skills to others.
- 9- To act with integrity, honesty and respecting medical ethics.

#### (2) Intended Learning Outcomes (ILOs):

#### A- Knowledge and Understanding

**A1** Describe the definition, neuropidemiology, etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:

- Cerebrovascular disorders.
- Central nervous system infection
- Epilepsy
- Other Paroxysmal disorders (migraine-trigeminal neuralgia).
- Headache & pain.
- Movement disorders.
- Brain and spinal cord tumors.
- Spinal cord Diseases
- Peripheral neuropathy
- Muscles diseases
- Neuromuscular disorders
- Motor neuron diseases
- Cerebellar diseases
- Demyelinating diseases
- Neuroimmunology
- Child Neurology
- Geriatric disorders (Dementia-Memory impairment-Delirium)
- Neuro-Oncology
- Sleep disorders
- Neuroradiology
- Critical care neurology & emergencies
- Neurology of systemic diseases

#### **A2** Outline the updated principles of the following:

- Pathophysiological neurological symptoms and sign and related neuroimaging, laboratory, neuroeletrophysiology and functional assessment diagnostic tools related to different situations and conditions.
- Clinical Approach to neurological situations; coma, delirium, speech disorders, seizures, and mimic picture, gait disorders, visual, hearing, involuntary movement and cognitive symptoms.
- The updated management and preventive tools of the following:
  - Recurrence for CVS,
  - Comorbidity and complication of epilepsy and CNS infection.

#### A3 State update and evidence based knowledge of

- Cerebrovascular stroke.
- Epilepsy
- Headache
- Autoimmune disease of Nervous system
- CNS infection
- CVS and Epilepsy in pregnancy
- **A4** Memorize the facts and principles of the relevant basic and clinically supportive sciences related to Neurological disorders
- **A5** Memorize the basic ethical and medicolegal principles revenant to the neurological disorder
- A6 Mention the basics of quality assurance to ensure good clinical care in his field
- A7 Mention the ethical and scientific principles of medical research
- A8 State the impact of common health problems in the field of specialty on the society.

#### B- Intellectual skills.

On successful completion of the course, the candidate will be able to:

- **B1** Interpret data acquired through history taking to reach a provisional diagnosis in neurological disorders
- **B2** Select from different diagnostic alternatives the one that help reaching a final diagnosis in neurological problems
- **B3** Create a link between knowledge and the Professional problems' solving.
- **B4** Assess risk in professional practice in the field of neurology.
- **B5** Plan to improve performance in the field of neurology and psychological medicine.
- **B6** Identify neurological problems and find solutions.
- **B7** Analyze researches and issues related to the Neurology.

#### C- Professional/practical skills:

On successful completion of the course, the candidate will be able to:

- C1 Take a thorough history of appropriate depth and details.
- C2 Perform a complete and problem focused neurological examination.
- C3 Write and evaluate medical reports.
- C4 Evaluate and develop methods and tools existing in the area of neurology and psychological medicine.
- C5 Perform different neurophysiological methods (e.g. NCS, EMG, EEG and evoked potentials) and psychometric assessment.
- C6 Design new methods, tools and ways of professional practice.

#### D- Communication & Transferable skills.

On successful completion of the course, the candidate will be able to:

- **D1** Respond effectively to a patient's emotional and psychosocial concerns and allay patient anxiety regarding procedures.
- D2 Interact and communicate effectively with other health care professionals.
- D3 Manage time effectively and demonstrate skills needed for lifelong learning.
- **D4** use different sources to obtain information and knowledge.

# (3) Course content: Module 1

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
Introduction to the function of the nervous system	3	4		7
neuroanatomical-functional localization	3	4		7
Level of consciousness-attention	3	4		7
Epilepsy	3	4		7
Lower cranial nerves, dysphagia	3	4		7
Polyneuropathy	3	4		7
Motor neuron disease	2	4		6
Muscle disease	3	4		7
Multiple sclerosis & other demyelinating disease	3	5		8
Tremors, ataxia & cerebellar disorders	3	5		5
Cerebrovascular diseases	3	4		7
Headache & facial pain	3	4		7
Total Teaching Hours	35	50		

# Module 2

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
Movement disorders	4	6		10
Brainstem syndromes & cerebral regional syndromes	4	6		10
Brain tumors & paraneoplastic syndromes	4	6		10
Raised intracranial pressure, cerebral edema, hydrocephalus	4	6		10
Spinal cord diseases	4	6		10
Special senses disorders	4	5		9
Pediatric neurology	4	5		9
Sleep disorders	3	5		8
Higher cortical function disturbances	4	5		9
<b>Total Teaching Hours</b>	35	50		

## Module 3

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
Neurourological diseases	3	4		7
Medical neurology (systemic diseases & CNS)	3	4		7
Neurotoxology & drug induced neurological disorders	3	4		7
Traumatic disorders	3	4		7
Endogenous metabolic disorders	3	4		7
Nutritional deficiency & related syndromes	3	4		7
Developmental structure disorders	3	4		7
Chromosomal disorders & neurocutanous diseases	3	4		7
Storage diseases	3	4		7
Degenerative, compressive structural disorders	3	4		7
Clinical neurophysiology	3	5		8
Neuroradiology	2	5		7
Total Teaching Hours	35	50		•

#### (5) Teaching methods.

- **5.1.** Lectures & Seminars, power point aided.
- 5.2. Conferences
- **5.3.** Interactive bedside teaching with clinical case presentations of difficult and interesting cases and group discussion.
- 5.4. Training on examination of neurologic patients in grand rounds
- 5.5. Training in neurophysiology Unit
- **5.6.** Attendance of department activities (Thesis Discussion, invasive procedures with senior staffs, outpatient clinic, workshops and training courses...)
- 5.7: Problem solving case scenario (Commentary)

#### (6) Assessment methods.

Assessment method	Intended learning Outcomes
Written Exam	A1,2,3,4,5,6,7,8, B1,2,3,4,5,6,7,8
MCQ	A1,2,3,4,5,6,7,8, B1,2,3,4,5,6,7,8
Oral Exam	A1,2,3,4,5,6,7,8, B1,2,3,4,5,6, C1,2,3,4,5,D1,2,3,4
OSCE Clinical Exam	A1,2,3,4,5,6,7,8, B1,2,3,4,5,6, C1,2,3,4,5,D1,2,3,4

#### Assessment schedule.

Final exam after 30 months from admission to Msc degree or 36 months from the date of receipt of the work for residents with total of 600 marks

Percentage of each Assessment to the total mark:

Written exam: 240 marks

MCQ: 60 marks

Structured Oral exam: 100 marks

OSCE Clinical Exam. 100 marks

Practical exam: 100 marks

#### Other assessment without marks.

- **1-** Presentation and open discussion seminars.
- **2-** Presentation and open discussion of MD thesis
- **3-** Log book for assessment of the attendance and activities throughout the course (Minimum acceptance attendance is 75 %), it should be fulfilled and signed by Head of the department.

#### (7) References of the course.

- **7.1. Hand books.** Book authorized by department of Neurology, Handbook of Epilepsy treatment, Handbook of neurology (series), Neurological examination: made easy
- 7.2. Text books. Neurology in clinical practice, Textbook of clinical neurology, Adams and Victor's principles of neurology, neurology and neurosurgery illustrated, Essential neurology, and Stroke practical management.
- 7.3. Journals: Clinical Neurology, Journal of neurology, Archives of Neurology, CONTINUUM: Lifelong Learning in Neurology, Current Opinion in Neurology, Nature Clinical Practice Neurology, Neurology, The Neurologist, Practical Neurology, Stroke
- 7.4: Websites: <a href="http://emedicine.medscape.com/">http://emedicine.medscape.com/</a>

http://neuromuscular.wustl.edu/
http://www.neuroland.com/
http://www.neurophys.com/

(8) Facilities and resources mandatory for course completion:
Candidates and their learning are supported in a number of ways
□ Candidates logbook
□ Programme Specification and Handbooks
□ Lecture hall, extensive library and other learning resources
□ Computer laboratories with a wide range of software
□Internet with a wide range of learning support material
Course coordinator, Dr. Ahmed Hamdy

Head of the department: Prof. Dr. Ahmed Gamal Azab.

Date: / / 2016