COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate **MD** Programme of Neurology
(2) Department offering the programme:	Neurology department
(3) Department responsible for teaching the course:	Neurology department
(4) Part of the programme:	Second part
(5) Date of approval by the Department`s council	**27/4/2016**
(6) Date of last approval of programme specification by Faculty council	**9/8/2016**
(7) Course title:	Neurology (Advanced course)
(8) Course code:	NRL 612
(9) Total teaching hours:	360 hours lectures 450 hours clinical
(10) Total credit hours:	24 hours lectures 15 hours clinical

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

1- Provide graduates with a sufficient amount of knowledge, skills and positive attitudes necessary to make an advanced neurologic framework.

2- Make graduates capable of making decisions and dealing with all neurologic emergencies.

3- Facilitate active learning of the various diseases affecting the nervous system regarding the possible etiologies, pathophysiology, pathogenesis, clinical presentation, differential diagnosis & investigations.

4- Enable graduates 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.

5- Facilitate training on the professional skills required by the neurologist and use of various suitable new technologies in the practice of neurology

6- Enable graduates to understand, reflect and meet the needs of our local community and respond appropriately to cultural and medical needs.

7- Develop competency in applying the principles, methodology and various tools of scientific research in neurology.

8- Teach candidates how to make continuous self development and how to transfer knowledge and skills to others.

9- Educate the candidates how to act with integrity, honesty and respecting medical ethics.

10- Teach the candidates how to do effectively work within a team and implement liaison with members of the other medical specialties.

11- Provide the candidate with the capacity for life-long independent learning.

(2) Intended Learning Outcomes (ILOs):

A- Knowledge and Understanding

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

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
- Muscle diseases
- Polyneuropathies
- Sleep disorders

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 ethical and scientific principles of medical research

A7. 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 Analyze efficiently and construct the most appropriate diagnosis and possible differential diagnosis and to achieve clinical decisions in different situations

B2 Interpret accurately the results of commonly used clinical tests and advanced diagnostic procedures as well as obscure findings to solve clinical problems.

B3 Demonstrate the talent for differential diagnosis from non neurologic mimickers

B4 Design the treatment plan of neurological diseases.

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 Perform and interpret diagnostic (laboratory, electrophysiological and radiological) and therapeutic procedures required by the neurologist including: EEG, EMG, NCV, Evoked potential.

C4 Recognize urgent life-threatening conditions and institute appropriate initial management.

C5 Provide basic preventive care and counseling.

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 Adopt principal of scientific methods in Neurological examination

D5 Use computer skills to review the recent medical literature worldwide in order to improve clinical practice.

D6 Search for scientific information and use the medical literature to improve clinical practice.

D7 Transfer medical knowledge to the junior colleagues and other medical members in a competent and simplified way, through bedside and didactic teaching.

(3) Course content:

Module 1

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
History taking and localization	10	15		25
Neurological examination	10	15		25
Introduction to the nervous system function	10	15		25
Neuroanatomical & functional localization	10	15		25
Level of consciousness and attention	10	10		20
Epilepsy, seizures and other paroxysmal or episodic disorders in adult	10	10		20
Polyneuropathy & Focal peripheral neuropathy	10	15		25
Motor neuron diseases	10	10		20
Muscle diseases	10	10		20
Multiple sclerosis and other demyelinating diseases	10	10		20
Cerebrovascular diseases	10	10		20
Spinal cord diseases	10	10		20
Total Hours	120	145		265

Module 2

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
Lower cranial nerves and dysphagia	10	15		25
Medical neurology (systemic diseases and CNS)	10	15		25
Movement disorders	10	15		25
Tremors, ataxia & cerebellar disorders.	10	15		25
Neurological infections	10	10		20
Brain tumors and paraneoplastic syndromes	10	15		25
Headache and facial pain	10	10		20
Raised ICP, cerebral oedema & hydrocephalus.	10	10		20
Nutritional deficiency & related syndromes	10	10		20
Total Hours	90	115		205

Module 3

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
Higher cortical function disturbances	10	15		25
Neuropsychological disorders, dementia & Behavioral neurology.	10	15		25
Pediatric neurology	10	10		20
Special senses disorders	10	15		25
Neuro- urological diseases	10	10		20
Brain stem syndromes & cerebral Regional syndrome	10	15		25
Neuro toxicology and drug induced neurological Disorders	15	15		30
Neuroimmunology	15	10		25
Total Hours	90	105		195

Module 4

Subjects	Lectures	Clinical	Laboratory/ Practical	Total Teaching Hours
Sleep disorder	10	10		20
Traumatic disorders	10	15		25
Endogenous metabolic disorders	10	15		25
Developmental & structural disorder	10	15		25
Advances neuropharmacology	10	15		25
Neurogenetics	10	15		25
Total Hours	60	85		145

(4) Teaching methods:

4.1: Lectures & Seminars, power point aided.

4.2: Conferences

4.3: Interactive bedside teaching with clinical case presentations of difficult and interesting cases and group discussion.

4.4: Training on examination of neurologic patients in grand rounds

4.5: Training in neurophysiology Unit

4.6: Attendance of department activities (Thesis Discussion, invasive procedures with senior staffs, outpatient clinic, workshops and training courses…)

4.7: Problem solving case scenario (Commentary)

(5) Assessment methods:

Final exam after 6 semesters from admission to MD degree with total of 500 marks

MCQ exam: at the end of each semester

Percentage of each Assessment to the total mark (500 marks):

Tools	Mark	Percentage of the total mark
Written exam	180	36%
MCQ	60	12%
Commentary	60	12%
Structured Oral exam	100	20%
OSCE Clinical exam	100	20%
Total marks	500	100%

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.

(6) References of the course:

6.1: **Hand books:** Book authorized by department of Neurology,Handbook of Epilepsy treatment, Handbook of neurology (series), Neurological examination: made easy.

6.2: **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.

6.3: **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

6.4: **Websites:** http://emedicine.medscape.com/
http://neuromuscular.wustl.edu/
http://www.neuroland.com/
http://www.aan.com/
http://www.wfneurology.org/

(7) 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: