PROGRAMME SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme Title & Code	Program Specification for MD Degree of Neurology
(2) Final award/degree	MD Degree of Neurology
(3) Department (s)	Neurology
(4) Coordinator	Ahmed Hamdy
(5) External evaluator (s)	
(6) Date of approval by the Department`s council	**27/4/2016**
(7) Date of last approval of programme specification by Faculty council	**9/8/2016**

(B) Professional information

(1) Programme Aims:

The broad aims of the Programme are to provide the candidate with the following:

1- Detailed anatomy and physiology of various nervous system structures.
2- Ability to identify the relationship between various nervous system structures.
3- Detailed study of the diseases of the nervous system as regarding the pathogenesis, possible etiologies, clinical presentation, differential diagnosis, best investigations & the most recent lines of treatment.
4- Ability to understand the different radiological tools of diagnosis.
5- Ability to interpret different neurophysiological traces.
6- Ability to understand interaction between the immune and nervous systems at molecular, cellular and systems levels.
7- Detailed genetic basis of the different neurological disorders.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the program a student should be able to recognize and explain the following

A- Knowledge and Understanding

A1. Developmental and congenital anomalies of the nervous system.
A2. Various diseases affecting the nervous system.
A3. Differential diagnosis of different diseases affecting the nervous system.
A4. Radiological studies (CT and MRI studies of the CNS)
A5. Electrophysiological studies of nervous system. (Including EEG, NCS, EMG and Evoked Potentials)
A6. Up-to-date management of nervous system diseases.
A7. Recent researches involving the nervous system.
A8. The core content of cellular and molecular immunology at a level sufficient to practice the common neurological problems
A9. The genetic basis of the different neurological diseases

Objective	A1	A2	A3	A4	A5	A6	A7	A8	A9
1	•	•	•	•	•				
2		•	•			•	•		
3	•	•	•	•	•	•	•	•	•
4	•	•	•	•					
5		•	•		•		•		
6		•	•			•	•	•	
7		•	•				•		•

1- **B- Intellectual skills :** The Postgraduate Degree provides opportunities for candidates to achieve the following intellectual qualities:

B1. identify processes of affection of nervous system by different disease and its implication on the human health, social activity, occupational affection and financial impacts.
B2. interview and to be trusted by his patient.
B3. Observe and to detect the early signs of the disease.
B4. use investigation tool accurately & wisely.
B5. Conduct differential diagnosis of various diseases
B6. Predict the appropriate and recent line of management.
B7. Prediction of the indications and value of genetic studies.
B8. Efficient analysis of the mechanisms of neuroimmunology of various neurological diseases.

objective	B1	B2	B3	B4	B5	B6	B7	B8
1	•	•	•		•			
2		•	•			•		
3	•	•	•	•	•		•	•
4	•	•	•	•				
5		•	•	•	•			
6	•			•	•			•
7	•			•	•		•	

C- Professional/practical skills : The Postgraduate Degree provides opportunities for candidates to possess the following professional/practical skills:

C1. Take a thorough history of appropriate depth and detail to reach a diagnosis.

C2. Perform a complete and problem focused neurological examination.

C3. Studying variable sections of the nervous system through radiological studies.

C4. Developing skills of neuroelectrophysiology interpretation.

C5. Ability to use immunological studies to reach a definite diagnosis.

C6. Ability to use genetic analysis and to apply gene therapy in management of neurological diseases.

C7. Writing a scientific literature which is legible for publishing.

objective	C1	C2	C3	C4	C5	C6	C7
1	•	•		•			•
2	•	•					•
3	•		•	•			•
4			•				•
5				•			•
6					•		•
7						•	•

D- Communication & Transferable skills : The Postgraduate Degree provides the opportunity to demonstrate the following skills:

D1. Effective interaction and communication with other health care professionals.

D2. Development of communication and interpersonal skills necessary to deal effectively with teachers, colleagues, other medical members.

D3. Working within the organizational, interpersonal and inter-professional dynamics of the clinical team.

D4. Effective response to a patient's emotional and psychosocial concerns and allay patient anxiety regarding procedures.

D5. Understanding the importance of life-long self-learning.

(3) Academic standards:

Academic standards for the programme are attached in Appendix I. in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used. External reference points/Benchmarks are attached in Appendix II.

3.a- External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme:

1. *Adams and Victor`s principles of neurology.(Book)*
2. *Essential neurology. .(Book)*
3. *Fundamentals of neurology an illustrated guide. .(Book)*
4. *Handbook of epilepsy treatmen. .(Book)*
5. *Neurological examination made easy. .(Book)*
6. *Neurology and neurosurgery illustrated. .(Book)*
7. *Neurology in clinical practice. .(Book)*
8. *Stroke practical management. .(Book)*
9. *Textbook of clinical neurology. .(Book)*
10. *Journal of neurology. (Journal)*
11. *Lancet Neurology. (Journal)*
12. *Current opinion on neurology. (Journal)*
13. *Archive of neurology. (Journal)*
14. *Practical neurology. (Journal)*

15. Continuum lifelong education in neurolog. (Journal)
16. Neurology (American academy of neurology). (Journal)

3.b- Comparison of the specification to the selected external reference/ benchmark:

(E.g. all programme aims of the Benchmark are covered by the current programme)

(4) Curriculum structure and contents:

4.a- Duration of the programme (in years or months): 4 semesters

4.b- programme structure:

Candidates should fulfill a total of 60 credit hours

●4.b.1: Number of credit hours:

First part 5, Second part 25, Thesis 15, pracitcal training 15

(5) Programme courses:

First part

a- Compulsory courses:

Course Title	Course Code	NO. of hours per week					Total teaching hours	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	Field	Total		
		Lectures	seminars					
1. Applied physiology of the nervous system	NRL 603	3 hours				3 hours	45 hours	A3, A7, B2, B3, B4, B5
2. Applied pathology of the nervous system	NRL 605	2 hours				2 hours	30 hours	A1,A2,A3,A7 B1.B2,B3,B5

Second part

a- Compulsory courses (thesis will be included in this table):

Course Title	Course Code	NO. of hours per week					Total teaching hours	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	Field	Total		
		Lectures	seminars					
Neurology	NRL 612	24 hours		15 hours		39 hours	360 hours lectures 450 hours clinical	A1,A2,A3,A4, A5,A6 A7, B1,B2,B3,B4 B5,B6, C1,C2,C3, C4,C7 D1,D2, D3,D4 D5
Thesis		15 hours				15 hours		
Clinical training	NRL 612 C	15 hours				15 hours		

b- Elective courses:

Course Title	Course Code	NO. of hours per week					Total teaching hours	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	Field	Total		
		Lectures	seminars					
Advanced molecular neurology	NRL 612 AMN	1 hours				1 hours	15 hours	A1,A2,A6, A7,A9 B1,B2, B3,B4 B6,B7, C7
Advances In neuroimmunology	NRL 612 AMN	1 hours				1 hours	15 hours	A1,A2,A3, A7,A8 B1,B2,B3, B4,B8 C7

Programme-Courses ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2……etc), then the course titles or codes are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

Course Title/Code	Programme ILOs																																										
	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17	a18	a19	a20	a21	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10	b11	b12	b13	b14	b15	b16	b17	b18	b19	b20
Physiology			•				•																•	•	•	•																
Pathology	•	•	•				•															•	•	•		•																
Neurology	•	•	•	•	•	•	•															•	•	•	•	•	•															
Advances in molecular neurology	•	•				•	•		•													•	•	•	•		•	•														
Advances in neuro-immunology	•	•	•				•	•														•	•	•	•				•													

Course Title/Code	Programme ILOs																													
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11	d12	d13	d14	d15
Physiology																														
Pathology																														
Neurology	•	•	•	•			•									•	•	•	•	•										
Advances in molecular neurology							•																							
Advances -in neuro immunology							•																							

(6) Programme admission requirements:

According to the bylaws of the faculty of medicine Mansoura University applicants should have master degree of neurology and psychological medicine. Admission to the program is open during March and September.

(7) Regulations for progression and programme completion:

After finishing the first part, and collecting the required credit hours, the student should pass part I examination including the basic sciences before proceeding to the second part. In case the student fails to pass the examination, he may proceed in the clinical training and can re-sit for the next examination. After passing the first part, the student submits a protocol for MD thesis at the beginning of second part. The candidate will receive his degree after passing this final examination. MD.

(8) Evaluation of Programme's intended learning outcomes (ILOs):

Evaluator	Tools*	Sample size
Internal evaluator **(s)**		
External Evaluator **(s)**		
Senior student **(s)**		
Alumni		
Stakeholder **(s)**		
Others		

* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E_MAIL

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.	
Programme coordinator: Name: . Ahmed Hamdy	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date:

P.S. The programme specification should have attached to it all courses specifications for all courses listed in the matrix.