Cairo University
Faculty of Medicine

Program Specification
for Master Degree in: Neurology & Psychiatry

Program type: Single
Department offering the program: Department of Neurology
Total credit points: 169
Academic year: 2009/2010
Program Coordinators: Dr. Marwa Farghaly
Dr. Mohamed Hegazy
External evaluators:

I. Program aims

The program is a professional degree that enables candidates to specialize in the area of Neurology and Psychiatry. The candidates should achieve satisfactory levels of basic knowledge and clinical skills in all aspects of Neurology and Psychiatry practice, interact with community problems, respect ethical values according to community culture, and promote their medical standards through engaging in continuing medical education. The program also aims to introduce the candidate to the basics of scientific medical research.

II. Intended learning outcomes of program (ILOs)

1. **Knowledge and understanding: By the end of the program the candidate should;**

   a) Recognize the basic scientific knowledge related to Neurological and Psychiatric disorders.

   b) Identify and discuss common Neurological and Psychiatric problems.

   c) Distinguish the basic pathology underlying different Neurological and Psychiatric disorders.

   d) Understand basic concepts of Neurological laboratory procedures related to different Neurological disorders.

   e) Describe different management modalities for common Neurological and Psychiatric problems.

2. **Intellectual skills: By the end of the program the candidate should be able to;**

   a) Analyze symptoms & signs and construct a differential diagnosis for common Neurological and Psychiatric complaints.

   b) Design an appropriate diagnostic plan for evaluation of common Neurological and Psychiatric complaints taking into consideration the nature of the clinical situation and the risks, benefits and costs to the patient.

c) Interpret the results of different investigations related to Neurological and Psychiatric disorders.

d) Set up treatment plans for common and rare Neurological and Psychiatric problems taking into account the cultural and individual needs.

3. **Professional and practical skills: By the end of the program the candidates should be able to;**

a) Collect clinical data.

b) Examine and identify signs of common and rare Neurological disorders.

c) Perform office clinical procedures related to different Nerological and Psychiatric disorders.

d) Offer proper medical treatment for different Neurological and Psychiatric disorders.

e) Manage all Neurologic and Psychiatric emergencies properly.

4. **General and transferable skills: By the end of the program the candidates should be able to;**

a) Communicate with the patients to gain their confidence.

b) Respond effectively to a patient's emotional and psychosocial concerns.

c) Communicate with other health care providers.

d) Appreciate team working.

e) Achieve Computer skills necessary to make use of medical data bases and use the internet for communication.

f) Show administrative skills that enables him to fulfill the paper work needed.

g) Show leadership skills that enable him to organize work and lead the junior sand paramedical staff.

h) Understand different scientific methodologies and have critical reading abilities.

i) Write scientific article according to the basics of scientific research.

III. Academic standards.

1. Academic reference standers: The academic standers of anatomy program is adopted and accredited by the departmental council
2. **External References for Standards:**

- Speciality training curriculum for Neurology set by the Joint Royal Colleges of Physicians Training Board – United Kingdom.
- Curriculum of The European Board of Neurology Examination set by The European Union of Medical Specialities – Section of Neurology.
- The Residency Training Program in General Psychiatry of The Department of Psychiatry at Harvard Medical School - USA.

IV. Program structure and contents.

Program admission requirements

According to the bylaws of the faculty of medicine Cairo University applicants should have MBBCh or equivalent degree. According to Cairo University requirements, all applicants for postgraduate studies should fulfill preliminary courses on the following subjects; Medical statistics I – English language (TOEFL or equivalent degree) – Computer skills (ISDL). Admission to the program is open during July. Training prior to registration may be accredited according to departmental evaluation. Admission for the program is open during July.

Program duration: Three years.

Program structure: Total Credit points 169

- **First part: 1.5 years - (table 1) 59 credit points**
  - Compulsory courses; one academic year (30 weeks)
    - Basic sciences courses 9 credit points
    - General internal medicine course 1 credit points
  - Elective courses 1 credit points
  - Scientific activities 3 credit points
  - Residency training program Part 1: 45 credit points

    "General Internal Medicine" for 6 months

    "Emergency & Critical Care Medicine" for 9 months

    "Psychiatry" for 3 months
- **Second part: 1.5 years - (table 2) 90 credit points**
  - Compulsory course 16 credit points
    (Neurology & Psychiatry course)
    one academic year (30 weeks)
  - Scientific activities 4 credit points
  - Residency training program Part 2: 70 credit points

    "Neurology" for 15 months

    "Psychiatry" for 3 months
- **Master Thesis:** completed during second part **20 credit points.**

Table 1: First part

Courses	Course modules	Credit points	total	ILOs
Compulsory courses (One academic year)				
Anatomy	• Basic embryology • Anatomy of the central and peripheral nervous system	0.5 1.5	2	1-a
Physiology	• General Physiology • Physiology of the nervous system	0.5 1.5	2	1-a
Biochemistry	• General biochemistry • Biochemistry of the nervous system • Basics of human genetics	0.25 0.5 0.25	1	1-a
Histology	• General Histology • Histology of the nervous system	0.25 0.75	1	1-a
Clinical Pharmacology	• General Pharmacology • Neuro and Psychopharmacology	0.25 0.75	1	1-e 2-d 3-d
Psychology			2	1-a
Internal Medicine			1	2-a 3-a
Elective Courses (MEDC) choose 2 courses				
○ Critical Reading ○ Scientific writing ○ EBM ○ Medical statistics II ○ Medical ethics ○ Communication Skills		0.5 0.5 0.5 0.5 0.5 0.5	1	4-c,e,f,h,i
Scientific activities			3	4-c,d,e,h,i
Residency training program (General Internal Medicine, Critical Care Medicine & Psychiatry)			45	4-a,b,c,d,e,f,g

Table 2: Part 2

item	Credit points	ILOs.
Neurology & Psychiatry course o Neurology o Psychiatry o Clinical Neurophysiology o Psychopathology o Neuropathology	 8 4 2 1 1	1-a,c 2-a,b,c,d 3-a,b,c 4-a,b,c,d.
Scientific activities	4	4-c,d,e,h,i
Master thesis	20	4-h,i
Residency training program (Neurology and Psychiatry)	70	2-a,b,c,d 3-a,b,c 4-a,b,c,d,e,f,g

Residency Training Program

- **Basic Training:**

  According to the new bylaws for postgraduate programs (effective since July 2009), all the students should have a basic training course for 18 months [General Internal Medicine (6 months), Emergency & Critical Care Medicine (9 months) and Psychiatry (3 months)]. During this period the students will attend the basic sciences courses as well as the general internal medicine course. They also should complete the elective courses.

- **Special Training:**

  All students should complete the special part of the residency-training program in the Neurology and Psychiatry department. They should spend 18 months (15+3) in order to acquire the needed credit hours. The student is expected to attend the outpatient clinics, inpatient section, the clinical neurophysiology unit to share in patients care under the supervision of senior staff members**.** During this period the students will attend the Neurology & Psychiatry course and will participate in the scientific activities of the department.

NB: The details of the training program are illustrated in separate document

Master Thesis

All master-degree students should prepare a thesis in Neurology or Psychiatry. The department and the ethical committees must approve the protocol of the research. The thesis should include a review part and a research part. The Thesis is supervised by one or more senior staff members from the Neurology department and may include other specialties according to the nature of the

research. The thesis should be evaluated and approved by a committee of three professors including one of the supervisors and an external professor.

Scientific Activities:

The students should participate in the scientific activities of the departments such as:

- *Journal club (presenting scientific articles).*
- *Seminars (including recent topics and controversial issues). Students are expected to participate in the discussions.*
- *Scientific meetings arranged by the department.*

Each activity will be monitored and given credit points registered in a scientific activities logbook. The student should collect the required points before allowed to sit for final exam

V. Regulations for progression and program completion

After finishing the first part of resident training, attending the specified courses and collecting the required credit points, the student should pass the first part exam including the basic sciences and general internal medicine before proceeding to the second part. In case the student fails to pass the exam, he may proceed in the clinical training and can resubmit for the next exam. After passing the first part, the student submits a protocol for master thesis at the beginning of second part. Before submitting to the final exam, he should finish the thesis and get approval, complete the residency Neurology training program, and collect the required credit points. The candidate will receive his degree after passing this final exam. In case the student fails to pass the exam, he can resubmit for the next exam. The student should finish his master degree within a maximum of 5 years.

VI. Evaluation

According to the bylaws of the residency, professors carry continuous assessment during the program. A residency training logbook and scientific activities logbook will be kept for each student to document all his/her clinical, laboratory and operative activities as well as his/her participation in different scientific activities. The head of the department should allow the students to undergo the final examination when they complete their training program and collect the credit points needed.

Final Exam Part I

Basic sciences

- Anatomy: Two -hours written exam (including short assay and multiple choice questions) + oral exam + practical exam
- Physiology: one-hour written exam (including short assay and multiple choice questions) + oral exam
- Biochemistry: one-hour written exam (including short assay and multiple choice questions) + oral exam
- Histology: one-hour written exam (including short assay and multiple choice questions) + oral exam
- Clinical Pharmacology: one-hour written exam (including short assay and multiple choice questions) + oral exam
- Psychology: Three-hour written exam (including short assay and multiple choice questions) + oral exam

General Internal Medicine

- Three-hours written exam (including short essay and multiple choice questions) + oral exam + clinical exam

The written exam will be held in four days:
Day one: Physiology, Biochemistry & Clinical Pharmacology (3 hours)
Day two: Anatomy and Histology (3 hours)
Day three: Psychology (3 hours)
Day four: Internal Medicine (3 hours)
This will be followed by the clinical, practical and oral exams in separate days

Final Exam Part 2

Neurology & Psychiatry: Five written exams including short assay questions, and MCQ (including problem solving)+ oral exams + clinical exam + Practical exams

The written exam will be held in five days:
Day one: Neurology I (3 hours)
Day two: Neurology II (3 hours)
Day three: Clinical Neurophysiology, Psychopathology & Neuropathology (3 hours-one hour each)
Day four: Psychiatry I (2 hours)
Day five: Psychiatry II (2 hours)

This will be followed by the clinical, practical and oral exams in separate days.

Marks allocated to courses (Each credit point = 50 marks)

Course	Written	Oral	Clinical/practical	Total
First part				**500**
Physiology	60	40		200
Biochemistry	+ 30	+ 20		
Clinical Pharmacology	+ 30	+ 20		
Anatomy	60	20	20	150
Histology	+ 20	+ 15	+ 15	
Psychology	80	20		100
Internal Medicine	30	10	10	50
Second part				**800**
Neurology & Psychiatry				
○ Neurology	(110+110)	90	90	400
○ Psychiatry	(60+60)	40	40	200
○ Clinical Neurophysiology	70			200
○ Psychopathology	+ 40	25		
○ Neuropathology	+ 40	+ 25		

Remarks

- Passing mark for Physiology, Biochemistry and Clinical Pharmacology is calculated collectively for the 3 courses.
- Passing mark for Anatomy and Histology is calculated collectively for the two courses.
- Passing mark for Clinical Neurophysiology, Psychopathology and Neuropathology is calculated collectively for the three courses.
- Clinical Neurophysiology practical examination and its mark are incorporated in the practical examination of the Neurology course.
- Passing mark in a written exam is ≥ 60%.

VII. Evaluation of program intended learning outcomes:

Evaluator	Tool	Sample
1. Senior Students	Questionnaire at the end of the program	All the PG students
2. Alumni	The faculty is currently developing an Alumni office for postgraduates	Not yet determined
3. Stakeholders	A meeting will be arranged during the annual conference of the department	Available representatives from: • Army hospitals • National medical insurance • Medical syndicate • Ministry of health
4. External Evaluators	Review the program and courses Attending the final exam.	Once before implementation Bi-annual report
5. College Quality Assurance committee	Annual program review	

Date of approval by department council

Program Coordinators ***Head of Department***

Dr. Marwa Farghaly ***Prof. Mohamed S. El-Tamawy***

Dr. Mohamed Hegazy