



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	Post graduate M D Neurosurgery
(2) Department offering the programme:	Neurosurgery
(3) Department responsible for teaching the course:	Neurosurgery Human anatomy
(4) Part of the programme:	First part
Date of approval by the Department's council	4-5-2016
Date of last approval of programme specification by Faculty council	9/8/2016
(5) Course title:	Neuroanatomy
(6) Course code:	NSUR601 NSUR632 AN
(7) Total teaching hours:	30
(8) Credit hours	2 hours

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

- 1- Provide the candidate with the anatomy, related to central, peripheral and autonomic nervous system.
- 2- Prepare the candidate to understand the anatomical basis of various clinical neurosurgical diseases.
- 3- Provide the candidate to Utilize this anatomical knowledge for better surgical dissections and exposures.

(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 course, the candidate will be able to:

A- Knowledge and Understanding

- A 1- Identify the surface, regional, functional and applied anatomy of the cranium, spine and peripheral nerves.
- A 2- Recognize the microsurgical anatomy of the brain and spinal cord.
- A 3- Review the embryology related to head and neck and nervous system development.

2- Intellectual activities (I)

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

B1 Correlate the functional anatomy of CNS to clinical neurosurgical problems and
Localization of lesions.

B 2 Interpret and illustrate cut sections of the brain, spinal cord, neck and limbs.

C- Communication & Transferable skills

C 1 Enhance tutorial and research capabilities.

(3) Course content.

الفصل الدراسي الأول

Neuroanatomy

محاضرة كل منها ساعتين أسبوعياً لمدة فصل دراسي (١٥ أسبوع)

(Credit hours = 2)

Lecture topics:

- 1- Anatomy of the skull, skull base and orbit.
- 2- Anatomy of the spine, sacrum and craniovertebral junction.
- 3- Anatomy of the peripheral nerves, nerve plexuses and sympathetic chain.
- 4- Anatomy of the cranial nerves (intra & extra-cranially).
- 5- Regional anatomy related to operative neurosurgical exposures in the head and neck, thorax, abdomen, upper limb and lower limb.
- 6- Embryology related to neural maldevelopment or dysgenesis.
- 7- The cerebrum (hemispheric surfaces, sulci and gyri and functional cortical areas).
- 8- The cerebrum (central core, white matter fibres and grey matter: regional and functional).
- 9- Anatomy of the arachnoidal cisterns, fissures and surfaces.
- 10- Blood supply of the brain and spinal cord (arterial, venous and collateral).
- 11- Anatomy of the ventricular system.
- 12- Tentorium cerebelli and dural folds.
- 13- Regional and functional anatomy of the brainstem and cerebellum.
- 14- Tractology of the spinal cord.
- 15- Cut sectional anatomy of the brain, spinal cord, neck and limbs.

(4) Teaching methods.

- 4.1: Power point presentations.
4. 2: Microteaching and self learning.

4. 3: Jar demonstrations.

4. 4: Video presentation of micro neurosurgical dissection.

(5) Assessment methods:

5. 1: Written exam. for assessment of A1, A2, A3, B1, B2

5. 2: M C Q exam. for assessment of A1, A2, A3, B1, B2

Assessment schedule:

Assessment 1: FINAL EX. Week/month: 6 MONTHS

Written exam: 80 marks

MCQ exam. 20 marks

(6) References of the course:

6.1: Gray's anatomy

6.2: Text books: Youman's Neurosurgery and Wilkin's Neurosurgery.

6.3: Rhoton microneurosurgical anatomy series

6.4: Journals: Journal of neurosurgery, Neurosurgery and Journal of Neuroanatomy

6.5: Websites: [www.neurosurgery on line .com](http://www.neurosurgeryonline.com)

(7) Facilities and resources mandatory for course completion:

- lectures
- library
- internet
- anatomy museum

Course coordinator: PROF. DR. Nabil Mansour Ali

PROF. DR. MOHAMED ALI KASSEM

Head of the department: PROF. DR. Nabil Mansour Ali

Date OF REVISION 4-5-2016