



**Mansoura University**  
**Faculty of Medicine**  
**Neurosurgery Department**

**(M.D)**

**Neurosurgery**

**Log Book**

**Personal Data:**

**Name:**.....  
**Address:**.....  
**Mobile number:** .....  
**E-mail:**.....  
**Date of Birth:**.....

**Graduation:**

**Faculty:** .....  
**Date:**.....  
**Score:**.....

**Master Degree:**

**Degree:**.....  
**Faculty:**.....  
**Date of approval:**     /     /  
**Score:** .....

**M.D Degree:**

**Date of registration**     /     /

**Residency:**

**Start:**.....  
**End:** .....

**Departments (from -- / to --)**

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.....  
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**Signature,  
Head of the Department**

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محاضرات الفصل الدراسي الأول

**Pathology**

محاضرة كل منها ساعتين لمدة فصل دراسي (١٥ أسبوع)

(Credit hours = 2)

Lecture topic	Lecturer	Date	Signature
1- Infections of the brain.			
2- Infections of the spine.			
3- Brain tumors in adults.			
4- Pediatric brain tumors.			
5- Skull base tumors.			
6- Molecular biology and brain tumors.			
7- Skull and spine tumors.			
8- Spinal cord tumors.			
9- Peripheral nerve tumors.			
10-Head injuries.			
11-Intervertebral disc and spinal injuries.			
12-Cerebrovascular diseases.			
13-Developmental anomalies.			
14-Movement disorders.			
15-Neurocutaneous syndromes.			

محاضرات الفصل الدراسي الأول

**Anatomy**

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

(Credit hours = 2)

Lecture topic	Lecturer	Date	Signature
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 arachnoid 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.			

محاضرات الفصل الدراسي الأول

**Physiology**

محاضرة كل منها ساعة أسبوعيا لمدة فصل دراسي (١٥ أسبوع)

(Credit hours = 1)

Lecture topic	Lecturer	Date	Signature
1-Blood brain barrier and cerebral oedema.			
2-Cerebral blood flow.			
3-Cerebrospinal fluid.			
4-Intracranial pressure.			
5-Micturition and neuro-urology.			
6-Pain.			
7-Neurotransmitters and synaptic transmission.			
8-Neuro-endocrinology.			
9-Motor system, muscle tone and deep reflexes.			
10-Thalamus and hypothalamus.			
11-Equilibrium (cerebellar and vestibular).			
12-Special senses.			
13-Speech, memory, behaviour & wakefulness.			
14-Nerve action potential and neuromuscular transmission.			
15-Electrophysiological studies.			

محاضرات الفصل الدراسي الثالث

**I- General Neurosurgery**

١٥ أسبوع

Credit hours = 4 hours

**Module (I):** الفصل الدراسي الثالث

Lecture topic	Lecturer	Date	Signature
1- General care			
2- Neurocritical care			
3- Neuro-ophthalmology			
4- Neuro-otology			
5- Neuro-urology			
6- Radiology of the brain			
7- Radiology of the spine			
8- Principles of radiotherapy			
9- Principles of chemotherapy			
10- Hydrocephalus in infants and children			
11- Adult hydrocephalus			
12- CSF shunting procedures			
13- Pseudotumor cerebri			
14- CSF fistulas			
15- Syringomyelia			
16- Neurocutaneous syndromes			
17- Brain death			
18- Infections of the brain			
19- Infections of the spine			

20- Acquired immune deficiency syndrome			
21- Neurosurgical problems during pregnancy			
22- Cranial developmental anomalies			
23- Spinal dysraphism			
24- Spontaneous intracerebral hemorrhage			
25- Spinal haematoma			
26- Subarachnoid hemorrhage			

محاضرات الفصل الدراسي الرابع

**I- General Neurosurgery**

١٥ أسبوع

Credit hours = 4 hours

**Module (II):** الفصل الدراسي الرابع

Lecture topic	Lecturer	Date	Signature
27- Brain gliomas			
28- Brain meningiomas			
29- Pituitary tumors			
30- Schwannomas			
31- Haemangioblastoma			
32- Dermoid epidermoid tumors			
33- Ventricular tumors			
34- CNS lymphomas			
35- Metastatic brain tumors			
36- Scalp and skull tumors			



37- Tumors of the spine			
38- Spinal cord tumors			
39- Peripheral nerve tumors			
40- Management of traumatic brain injury			
41- Sequelae & outcome of traumatic brain injury			
42- Cranioplasty			
43- Peripheral nerve injuries			
44- Neural entrapment syndromes			
45- Vertebral column and spinal cord injuries			
46- Brachial plexus injuries			
47- Non-discogenic low backache			
48- Lumbar disc disease			
49- Cervical disc disease			
50- Thoracic disc disease			
51- Spondylolisthesis			

## II- Special Neurosurgery

الفصل الدراسي الخامس والسادس مدة كل منهما ١٥ أسبوع

Credit hours: Lectures 7 hours + clinical teaching 2 hours + operative training 2 hours

(Total = 11 hours).

**Module (III):** الفصل الدراسي الخامس

Lecture topic	Lecturer	Date	Signature
1- Neurophysiologic monitoring			
2- ICP monitoring			
3- Intraoperative localization of brain lesions			
4- Intraoperative localization of spinal lesions			
5- Frame based stereotaxy			
6- Frameless stereotaxy			
7- Neuroendoscopy			
8- Radiosurgery			
9- Functional MRI			
10-Neurotransplantation (including stem cells) in the CNS			
11- The osteoporotic spine			
12- Craniovertebral junction anomalies			
13- Spinal deformities			
14- Instrumentation in spinal surgery			
15- Spinal surgery: complications & revision surgery			
16- Minimally invasive approaches to the spine			
17- Motion preservation in spinal surgery			
18- Sympathectomy			

19- Surgery for cerebral aneurysms			
20- Surgery for arteriovenous malformations			
21- Surgery for arteriovenous fistulas & cavernomas			
21- Cerebral protection			
23- Carotid endarterectomy, angioplasty and stenting			
24- Surgery for occlusive cerebrovascular disease			
25- Cerebral venous and sinus thrombosis			
26- Endovascular surgery			

**Module (IV):** الفصل الدراسي السادس

Lecture topic	Lecturer	Date	Signature
27- Pediatric brain tumors			
28- Pediatric spinal tumors			
29- Pediatric head injury			
30- Pediatric spinal injury			
31- Craniosynostosis			
32- Cerebrovascular diseases in infants and children			
33- Intracerebral hemorrhage in the newborn			
34- Treatment of torticollis			
35- Treatment of spasticity			
36- Cerebral palsy: spasticity and dystonia			
37- Awake craniotomy			
38- Deep brain stimulation			
39- Preoperative evaluation for epilepsy surgery			
40-Intraoperative mapping & monitoring for cortical			

resections			
41-Epilepsy surgery: techniques, outcome and complications			
42- Surgery for movement disorders: rationale			
43- Surgery for movement disorders: techniques			
44- Psychosurgery			
45- Microneurovascular compression syndromes			
46- Neurostimulation for intractable pain			
47- Destructive procedures for intractable pain			
48- Advances in adjuvant treatment of gliomas			
49- Orbital tumors			
50- Skull base tumors			
51- Skull base techniques			

## المقررات الإختبارية

مقرر إختبارى واحد يشمل ١٥ محاضرة كل منها ساعتين

Credit hours = 2

### A- Innovative Spinal Surgery

Lecture topic	Lecturer	Date	Signature
1- Spinal arthroplasty.			
2- Future direction of management of spinal cord injury.			
3- Innovative approaches to spinal deformities.			
4- Ossification of the posterior longitudinal ligament.			
5- Posterior dynamic stabilization systems.			
6- Interbody fusion techniques.			
7- Management of fractures at the craniocervical junction.			
8- Approaches to the cervicothoracic junction.			
9- Surgery of sacral lesions.			
10- Intradiscal electrothermy.			
11- Spondylectomy for spinal tumors.			
12- Thoracoscopic surgery of the dorsal spine.			
13- Rheumatoid arthritis and ankylosing spondylitis.			
14- Advanced spinal instrumentation techniques.			
15- Vertebroplasty and kyphoplasty.			

## المقررات الإختبارية

### B- Innovative Vascular Neurosurgery

Lecture topic	Lecturer	Date	Signature
1- Neurovascular imaging.			
2-Transcranial Doppler ultrasonography and neurosonology.			
3-Microsurgical management of individual cerebral aneurysms.			
4-Microsurgical management of giant cerebral aneurysms.			
5-Recent advances in endovascular surgery for haemorrhagic strokes.			
6- Recent advances in endovascular surgery for ischemic strokes.			
7- Infectious and traumatic cerebral aneurysms.			
8- Comprehensive management of AVM.			
9- Carotid cavernous and other dural AV fistulas.			
10-AVM and fistulas of the spine.			
11-Management of unruptured, multiple and familial aneurysms.			
12- Vein of Galen malformation.			
13- Moyamoya disease.			
14-Management of dissections of the carotid and vertebral arteries.			
15-Multimodality management of complex cerebrovascular lesions.			

## المقررات الإختبارية

### C- Innovative Skull Base Surgery

Lecture topic	Lecturer	Date	Signature
1- Chondroma and chondrosarcoma.			
2- Glomus tumors.			
3- Neoplasms of the paranasal sinuses.			
4- Esthesioneuroblastoma.			
5- Juvenile nasal angiofibroma.			
6- Osseous skull base tumors.			
7- Skull base meningiomas.			
8- Skull base schwannomas.			
9- Sellar-suprasellar tumors.			
10- Approaches to the anterior cranial fossa.			
11- Approaches to the middle cranial fossa.			
12- Approaches to the posterior cranial fossa.			
13- Technical and instrumental facilities assisting skull base surgery.			
14- Complications of skull base surgery, their avoidance and management.			
15- Skull base reconstruction.			

التدريس الإكلينيكي الفصل الدراسي الثالث والرابع

Clinical teaching 60 hours

4 hours weekly including:

- Grand round.
- Preoperative case discussions.
- Morbidity mortality meeting.

Date	Coordinator signature	Date	Coordinator signature
1-		1-	
2-		2-	
3-		3-	
4-		4-	
5-		5-	
6-		6-	
7-		7-	
8-		8-	
9-		9-	
10-		10-	
11-		11-	
12-		12-	
13-		13-	
14-		14-	
15-		15-	



التدريس الإكلينيكي الفصل الدراسي الخامس والسادس

Clinical teaching 60 hours

4 hours weekly including:

- Grand round.
- Preoperative case discussions.
- Morbidity mortality meeting.

Date	Coordinator signature	Date	Coordinator signature
1-		1-	
2-		2-	
3-		3-	
4-		4-	
5-		5-	
6-		6-	
7-		7-	
8-		8-	
9-		9-	
10-		10-	
11-		11-	
12-		12-	
13-		13-	
14-		14-	
15-		15-	

**Operative Training as a First Assistant to a Neurosurgical Tutor**  
**60 operations (15 / trimester) Credit hours = 4**

<b>Operation</b>	<b>Patient name</b>	<b>Admission No.</b>	<b>Date</b>	<b>Hospital</b>	<b>Prof. signature</b>
<b>Repair of CSF fistula (1)</b> 1-					
<b>Syringomyelia (1)</b> 1-					
<b>Surgery of spinal infection (2)</b> 1-  2-					
<b>Pituitary tumor:</b> • Craniotomy (2) 1-  2-  • Trans-sphenoidal (2) 1-  2-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>CPA tumor (2)</b> 1-  2-					
<b>Ventricular tumor:</b> <ul style="list-style-type: none"> <li>• Trans-cortical (1) 1-</li>   <li>• Trans-callosal (1) 1-</li> </ul>					
<b>Craniopharyngioma (2)</b> 1-  2-					
<b>Cerebellar midline tumor (2)</b> 1-  2-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Cerebellar hemispheric tumor (1)</b> 1-					
<b>Pineal tumor (1)</b> 1-					
<b>Dermoid epidermoid tumor (1)</b> 1-					
<b>Skull tumor (1)</b> 1-					
<b>Tumors of the spine:</b> <ul style="list-style-type: none"> <li data-bbox="347 1023 663 1086">• Posterior approach (1) 1-</li>   <li data-bbox="347 1171 857 1235">• Anterior or anterolateral approach (1) 1-</li> </ul>					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Spinal cord tumors:</b> <ul style="list-style-type: none"> <li>• Extramedullary (2) 1-</li>   <li>2-</li>   <li>• Intramedullary (1) 1-</li> </ul>					
<b>Brachial plexus injuries (2)</b> 1-  2-					
<b>Vertebroplasty (1)</b> 1-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Cervical disc prolapse:</b> <ul style="list-style-type: none"> <li>• Laminoplasty (1) 1-</li>   <li>• Anterior discectomy with fusion (2) 1-  2-</li>   <li>• Corpectomy with anterior plating (1) 1-</li> </ul>					
<b>Thoracic disc prolapse (1)</b> 1-					
<b>Untethering in spinal dysraphism (2)</b> 1-  2-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Brain arachnoid cyst (1)</b> 1-					
<b>Stereotactic biopsy (2)</b> 1-  2-					
<b>Neuroendoscopy (2)</b> 1-  2-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Craniovertebral junction anomalies:</b> <ul style="list-style-type: none"> <li>• Gardner operation (1) 1-</li>   <li>• Odontoidectomy (1) 1-</li>   <li>• Fixation (1) 1-</li>   <li>• Foramen magnum tumor (1) 1-</li> </ul>					
<b>Exophytic brainstem glioma (1)</b> 1-					
<b>Pediatric spinal tumor (1)</b> 1-					



Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Craniosynostosis (1)</b> 1-					
<b>Trigeminal microvascular decompression (1)</b> 1-					
<b>Orbital tumor (1)</b> 1-					
<b>Skull base tumor:</b> <ul style="list-style-type: none"> <li data-bbox="347 837 696 901">• Frontobasal approach (1) 1-</li> <li data-bbox="347 986 730 1050">• Frontoorbital zygomatic (1) 1-</li> <li data-bbox="347 1134 651 1198">• Petrosal approach (1) 1-</li> </ul>					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Clipping of cerebral aneurysm (3)</b> 1-  2-  3-					
<b>Cerebrovascular malformation (2)</b> 1-  2-					
<b>Endovascular surgery (2)</b> 1-  2-					

**Operations Performed by the Candidate as a Principal Surgeon**

**90 operations (15 / trimester) Credit hours = 6**

<b>Operation</b>	<b>Patient name</b>	<b>Admission No.</b>	<b>Date</b>	<b>Hospital</b>	<b>Prof. signature</b>
<b>External ventricular drainage (4)</b> 1-  2-  3-  4-					
<b>V.P. shunt (4)</b> 1-  2-  3-  4-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>L.P. shunt (2)</b> 1-  2-					
<b>Revision of CSF shunt (2)</b> 1-  2-					
<b>Taping of brain abscess (2)</b> 1-  2-					
<b>Subfrontal craniotomy (3)</b> 1-  2-  3-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Pterional craniotomy (2)</b> 1-  2-					
<b>Parasagittal craniotomy (2)</b> 1-  2-					
<b>Midline posterior fossa craniotomy (2)</b> 1-  2-					
<b>Lateral posterior fossa craniotomy (2)</b> 1-  2-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Brain glioma (2)</b> 1-  2-					
<b>Convexity meningioma (1)</b> 1-					
<b>Tumor of the spine (3):</b> <ul style="list-style-type: none"> <li>• Decompressive laminectomy alone (2)                1-</li> <li>2-</li> <li>• With posterior spinal stabilization (1)                1-</li> </ul>					
<b>Intradural extramedullary tumor (1)</b> 1-					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Depressed skull fracture (4)</b> 1-  2-  3-  4-					
<b>Extradural haematoma (3)</b> 1-  2-  3-					
<b>Acute subdural haematoma (2)</b> 1-  2-					

Operation	Patient name	Admission No.	Date	Hospital	Staff signature
<b>Post-traumatic intracerebral haematoma (2)</b> 1-  2-					
<b>Chronic subdural haematoma (4)</b> 1-  2-  3-  4-					
<b>Decompressive craniectomy (2)</b> 1-  2-					
<b>Cranioplasty (1)</b> 1-					



Operation	Patient name	Admission No.	Date	Hospital	Staff signature
<p><b>Peripheral nerve surgery (7)</b>  Suture (4):  1-   2-   3-   4-</p> <p>Grafting (1)  1-</p> <p>Transposition (1)  1-</p> <p>Biopsy (1)  1-</p>					

Operation	Patient name	Admission No.	Date	Hospital	Staff signature
<b>Carpal tunnel decompression (4)</b> 1-  2-  3-  4-					
<b>Spinal injuries:</b> <ul style="list-style-type: none"> <li>• Anterior approach (2)</li> </ul> 1-  2-  <ul style="list-style-type: none"> <li>• Posterior approach (3)</li> </ul> 1-  2-  3-					

Operation	Patient name	Admission No.	Date	Hospital	Staff signature
<p><b>Lumbar disc disease:</b></p> <ul style="list-style-type: none"> <li>• Fenestration (4)               <ul style="list-style-type: none"> <li>1-</li> <li>2-</li> <li>3-</li> <li>4-</li> </ul> </li> <li>• Laminectomy (3)               <ul style="list-style-type: none"> <li>1-</li> <li>2-</li> <li>3-</li> </ul> </li> </ul>					

Operation	Patient name	Admission No.	Date	Hospital	Staff signature
<b>Spondylolisthesis (4)</b> 1-  2-  3-  4-					
<b>Cervical disc disease:</b> <ul style="list-style-type: none"> <li>• Anterior discectomy with fusion (2)                1-                 2-</li> <li>• Posterior laminectomy (<u>±</u>fixation) (1)                1-</li> </ul>					

Operation	Patient name	Admission No.	Date	Hospital	Staff signature
<b>Closure of myelomeningocele (4)</b> 1-  2-  3-  4-					
<b>Spontaneous intracerebral haematoma:</b> <ul style="list-style-type: none"> <li>• Supratentorial (2)</li> <li>1-</li> <li>2-</li> <li>• Infratentorial (1)</li> <li>1-</li> </ul>					

Operation	Patient name	Admission No.	Date	Hospital	Prof. signature
<b>Revision spinal surgery (2)</b> 1-  2-					
<b>Cerebral haemorrhage newborn (1)</b> 1-					

**Journal Club**  
**Credit hours = 2**

Theme	Presenter	Date	Coordinator signature
1-			
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## Departmental Meetings with Other Specialties

Credit hours = 1

Meeting	Place	Date	Coordinator signature
1-			
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7-			
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9-			
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12-			

## Thesis Discussion

Credit hours = 1

Title	Candidate	Date	Referee Signature
1-			
2-			
3-			
4-			

## National Conferences

Credit hours = 1

Conference	Place	Date	Course Director
1-			
2-			
3-			
4-			

## Workshops

Credit hours = 1

Workshop	Place	Date	Course Director
1-			
2-			