COURSE SPECIFICATION

Anesthesia

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Program offering the course:	**Postgraduate Doctorate degree of Anesthesia and Surgical Intensive Care and pain management**
(2) Final award / degree	**MD degree**
(3) Department offering the program:	**Anesthesia** and Surgical Intensive Care and pain management department
(4) Department responsible for teaching the course:	**Anesthesia** and Surgical Intensive Care and pain management department
(5) Part of the program:	Second part
(6) Date of approval by the Department`s council	20/4/2016
(7) Date of last approval of program specification by Faculty council	9-8-2016
(8) Course title:	**Anesthesia**
(9) Course code:	**ANET 628 AN**
(10) Credit hours	**12h lecture/7h clinical**
(11) Total teaching hours	**180lecture/210clinical**

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- To educate candidates management of complicated and high risk cases on evidence base
- To provide the candidates with pharmacological and physiological implementation on anesthetic management of different body systems
- To provide the candidates with updated data and researches concerned with practice of peri operative (pre operative, intra operative and post operative) care.
- Allowing candidates to have the experience in collecting scientific data, how to prepare a research project, writing essays and scientific papers.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

A1	Discuss perioperative assessment and management of patient with (arrhythmias, pulmonary hypertension, heart failure, shock and has pacemaker).
A2	Describe anesthetic complications with cesserian section, there management
A3	Describe anesthetic management in prenatal period.
A4	Discuss principles of myocardial &cerebral protection during cardiothoracic surgery.
A5	Explain important issues to be explored in (pre-eclampsia & eclampsia), pathphysiological changes on different organs.

A6	Explain causes & management of (maternal Hemorrhage during labor & delayed recovery).
A7	Explain anesthetic management for non-obstetric surgery during early pregnancy.
A8	Discuss perioperative anesthetic management (preoperative, intra operative & postoperative) of diabetic patient.
A9	Discuss principles underlying anesthesia of patients with valvular heart diseases.
A10	Discuss perioperative assessment and management of patient with heart block.
A11	Discuss perioperative assessment and management of patient with pacemaker.
A12	Describe peri operative management to reduce complications associated with hypertension and ischemic heart diseases
A13	Discuss factors associated and management of thyroid storm
A14	Explain specific concerns about anesthesia of patient with pheochromocytoma
A15	Explain specific concerns in laparoscopic surgery, day case surgery and ENT surgery
A16	Discuss principles underlying anesthesia of patients with congenital heart diseases.
A17	Describe anesthetic management particular relevance to cardiac tamponade.
A18	Discuss method of anesthesia and postoperative care of patient with obstructive sleep apnea.
A19	Describe neonatal resuscitation and discuss important issues in anesthetic management of (prematurity, congenital diaphragmatic hernia, trachea-esophageal fistula, hypertrophic pyloric stenosis, cleft lip & palate, sickle cell anemia & hemophilia).
A20	Define indication & methods of achievement of hypotensive anesthesia.

A21	Discuss perioperative assessment and management of patient with history of awareness during anesthesia.
A22	Explain specific management strategies for patients with GIT diseases and liver diseases
A23	Define clinical picture & anesthetic management in patients susceptible to malignant hyperthermia).
A24	List different patient position and there effects on anesthesia.
A25	Discuss indication, contraindication, factors affecting & complication of neuroaxial blocks.
A26	Define effects of hypothermia.
A27	Describe peri operative management to reduce complications associated with TURP syndrome
A28	Describe peri operative management to reduce problems associated with craniotomy, head injuries, spinal surgery
A29	Discuss management of patient for radiology.
A30	Explain specific concerns about anesthesia of patient with renal failure
A31	Describe peri operative management to reduce problems associated with respiratory diseases
A32	Explain specific concerns about anesthesia of liver transplantation
A33	Discuss potential problems during anesthesia of renal transplantation
A34	Discuss risk of anesthesia in carotid endartrectomy, aortic surgery
A35	Describe peri operative management to reduce complications associated with myasthenia gravis
A36	Explain principles of thoracic surgery

B- Intellectual skills

B1	Interpret the results of preoperative preparation from ABCDE approach and laboratory test findings into an appropriate intraoperative anesthetic plane.
B2	Use perioperative care for solving critical clinical problems under anesthesia.
B3	Design an initial course of management for stabilization of patients with serious illnesses.
B4	Put an anesthetic plan for patients with comorbidities
B5	Anticipate, avoid and manage problems encountered during patient care
B6	Analyze relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
B7	Collect statistical results of clinical examination from history, physical and laboratory test findings into an appropriate management under anesthesia.

C-Professional/practical skills

C1	Perform full assessment of compromised patients and record patients ' data appropriately for anesthetic plan.
C2	Be able to approach vascular system with different techniques.
C3	Develop skills in fiber-optic, video laryngoscopy and other modalities in difficult airway management.
C4	Evaluate postoperative complications.

C5	Setup management plans for different regional block.
C6	Perform different cerebral and spinal cord monitoring.

D- Communication & Transferable skills

D1	Adopt principles of scientific methods in management of anesthesia in different diseases.
D2	Lead teams in management of complications according to scientific base.
D3	Practice self appraisal in solving problems related to patients, work management, and using computer skills.

(3) Course content:

Subjects	Lectures
1-Anesthesia for Cardiovascular Disease	10
2-Anesthesia for Cardiovascular Surgery	10
3-Anesthesia for Respiratory Disease	10
4-Anesthesia for Thoracic Surgery	9
5-Anesthesia for Neurosurgery	10
6-Anesthesia for Neurological & Psychiatric Diseases	6
7- Anesthesia for Renal Disease	8
8-Anesthesia for Genitourinary Surgery	8
9-Anesthesia for Hepatic Patients	10

10-Anesthesia for Endocrine Disease	8
11-Anesthesia for Neuromuscular Disease	7
12-Anesthesia for Ophthalmic Surgery	7
13-Anesthesia for Otorhinolaryngological Surgery	7
14-Anesthesia for Orthopedic Surgery	6
15-Anesthesia for the Trauma Patient	10
16-Obstetric Anesthesia	8
17-Pediatric Anesthesia	10
18-Geriatric Anesthesia	6
19- Bariatric surgery	8
20- Ambulatory Anesthesia	6
21- Postoperative Complication	6
22-AXIAL BLOCKS: Subarachnoid, epidural and caudal	10
Total teaching hours	180

Practical:

Subjects	Clinical
1-Airway management	15
2- Insertion of central venous catheter	10
3-Insertion of pulmonary artery catheter	10
4-Insertion of arterial catheter	10
5-Insertion of jugular venous bulb	10
6- Awake test	10

7-local anesthesia for eye	15
8-local anesthesia for ear	15
9-Regional anesthesia for upper limb	20
10-Regional anesthesia for lower limb	20
11- Primary survey	20
12- Secondary survey	20
13-Neuroaxial blockade	35
Total teaching hours	**210**

(4) Teaching methods:

4.1: Lectures
4.2: Power point presentation
4.3: Small group discussion with case study and problem solving

(5) Assessment methods:

Written exam: 96 Marks
MCQ exam: 24 Marks
Structured oral exam: 50 Marks
OSCE: 50 Marks

(6) References of the course:

6.1: Miller's anesthesia

6.2: Clinical anesthesiology 4th ed

6.3: Anesthesia & co-existing diseases..

(7) Facilities and resources mandatory for course completion:

Lecture halls and data show.

Course coordinator: Dr. Maged Talaat Salama

Head of the department: Prof.Dr. Mona Abdelglil Hashish

Date: 20/4/2016