COURSE SPECIFICATION

Pharmacological basics for Anesthesia & Intensive Care

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Program offering the course:	**Postgraduate master degree of Anesthesia and Surgical Intensive Care**
(2) Final award / degree	**MSc**
(3) Department offering the program:	**Anesthesia** and Surgical Intensive Care department
(4) Department responsible for teaching the course:	**Anesthesia** and Surgical Intensive Care 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:	**Pharmacological basics for Anesthesia & Intensive Care**
(9) Course code:	**ANET 528 PHAI**
(10) Credit hours	**One hour**
(11) Total teaching hours:	15 lecture

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- To educate students about a detailed study pharmacology of drugs in relation to anesthesia.
- To provide the students the relationship of basic pharmacology with anesthetic management for different body systems
- The possible application during practice in Intensive Care
- The possible application during practice in injection during pain management

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

A1	Discuss classification, pharmacokinetic, pharmacodynamic, MAC, metabolism ,excretion, action, contraindication, drug interaction & toxicity of inhalational anesthetics.
A2	List indications, methods of adminstration & adverse effect of oxygen.
A3	Discuss structure activity relationship of barbiturates, pharmacokinetic, dose, distribution, metabolism ,excretion, action, indications, contraindication of intravenous anesthetics anesthetics.
A4	Define structure activity relationship, pharmacokinetic, classification, toxicity, prevention of toxicity & treatment of toxicity.
A5	Identifies mechanism of action, reversal of block, onset of action, duration

	of action, dose, metabolism, excretion, side effect of skeletal muscle relaxant.
A6	Discuss classification, pharmacokinetic, action, dose, side effect, contraindication of opioid & opioid antagonist.
A7	Define dose & clinical consideration of (neostigmine, atropine, glycopyrolate, propranolol, Na nitroprosside, nitroglycerin, hydralazine, metaclopromide, naloxone & flumazinil

B- Intellectual skills

B1	Integrate the properties of different drugs in preoperative preparation, intraoperative & postoperative management of different patients.
B2	Construct appropriate management strategies for patients with common diseases, both acute and chronic of all body system during anesthesia.

(3) Course content:

Subjects	Lectures
Inhalation Anesthetics	2
Nonvolatile Anesthetic Agents	2
Neuromuscular Blocking Agents	2
Cholinesterase Inhibitors	2
Anti-cholinergic Drugs	2
Adrenergic Agonists & Antagonists	2
Hypertensive Agents	1
Adjuncts to Anesthesia	2
Total teaching hours	15

(4) Teaching methods:

4.1: Lectures

4.2: Power point presentation

(5) Assessment methods:

5.1:Written exam for one & half hour including MCQ after 36 month of date of registration for graduate studies for MSc.

Percentage of each Assessment to the total mark:
Written exam: 80%: 80 Marks
MCQ exam: 20%: 20 Marks

(6) References of the course:

6.1: Miller's anesthesia

(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: 04/04/2016