COURSE SPECIFICATION

Applied Pharmacology related to Anesthesia & Intensive Care

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Program offering the course:	**Postgraduate** Doctorate **degree of Anesthesia** and Surgical Intensive Care
(2) Final award / degree	**MD**
(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:	**Applied Pharmacology related to Anesthesia & Intensive Care**
(9) Course code:	**ANET 628 PHA**
(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 anesthesia, 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, glycopyrrolate, propranolol, Na nitroprusside, nitroglycerin, hydralazine, metoclopramide, naloxone & flumazenil

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.
B3	Design an initial course of management for stabilization of patients with serious illnesses in ICU.

(3) Course content:

Subjects	Lectures
Inhalation Anesthetics	2
Nonvolatile Anesthetic Agents	2
Neuromuscular Blocking Agents	1
Cholinesterase Inhibitors	1
Anti-cholinergic Drugs	1
Adrenergic Agonists & Antagonists	1
Drugs acting on cardiovascular system	1
Drugs acting on central nervous system	2
Drugs acting on gastrointestinal system	1
Anticoagulant	1
Adjuncts to Anesthesia	2
Total teaching hours	15

(4) Teaching methods:

4.1: Lecture

4.2: Power point presentation

4.3: Small group discussion with case study and problem solving

(5) Assessment methods:

5.1: Written exam for one & half hour including MCQ after 6 semesters of date of registration for graduate studies for M.D.

Assessment to the total mark:

Written exam: 64 Marks

MCQ exam: 16 Marks

(6) References of the course:

6.1: Miller's anesthesia

6.2: Clinical anesthesiology 4th ed

(7) Facilities and resources mandatory for course completion:

Lecture halls, clinical rounds and data show.

Course coordinator: Dr. Maged Talaat Salama

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

Date: 20/4/2016