COURSE SPECIFICATION

Intensive Care

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:	**Intensive Care**
(9) Course code:	**ANET 628 IC**
(10) Credit hours	**5hours lecture/ 4 hours clinical**
(11) Total teaching hours:	75 lecture/120 clinical

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- To enable the candidates to practice the principles of monitoring of critically ill patients in ICU
- The course aim to prepare physicians as senior practitioners, educators, researchers, and administrators capable of practicing and construction of appropriate, optimal management strategies of complications and critically ill patients on ICU.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

A1	Explain consideration in ICU design
A2	Discuss concept of ICU bundle
A3	Identifies causes, investigation &management of aspiration pneumonitis.
A4	Define causes, clinical picture, investigation & management of pulmonary embolism.
A5	Discuss approach for advanced life support
A6	Define clinical picture, management of intracranial hypertension.
A7	Discuss causes & management of oliguria.
A8	Discuss causes, treatment of electrolyte imbalance (Na+, K+, Ca++, Mg++ & Phosphorus)

A9	Discuss causes, diagnosis & treatment of acid base disturbance.
A10	Describe modes, complication, weaning from mechanical ventilation
A11	Explain criteria, pathogenesis, clinical picture, investigation & management of (ARDS & SIRS) and concept of lung protective strategy.
A12	Discuss strategy for brain protection in cases of intracranial hypertension.
A13	Discuss indication, contraindication, value, technique of insertion & complication of central venous catheterization.
A14	List indication, contraindication, value & complication of invasive & noninvasive blood pressure monitoring.
A15	Mention indication, contraindication, value & precaution for pulmonary artery catheter.
A16	Explain concept of fluid therapy.
A17	Discuss approach for management of acute coronary syndrome.
A18	Discuss approach for management of arrhythmias.
A19	Discuss approach for management of diabetic coma.
A20	Mention causes, clinical picture & management of subarachnoid Hge.
A21	Mention indication, contraindication, components & complication of enteral & parenteral feeding.

B- Intellectual skills

B1	Design an initial course of management for stabilization of patients with serious illnesses.
B2	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).
B3	Collect statistical results of clinical examination from history, physical and laboratory test findings into an appropriate management of critically ill patients.

C-Professional/practical skills

C1	Be able to approach central venous system.
C2	Perform pulmonary artery catheterization
C3	Be able to perform arterial cannulation.
C4	Develop skills in mechanical ventilation.
C5	Evaluate competency in cardiopulmonary resuscitation and advanced life-support.
C6	Setup management plans for common diseases and acute emergencies.
C7	Adjust suitable measures for intracranial pressure monitoring

D- Communication & Transferable skills

D1	Learn & teach in groups during interpretation of X-rays, C.T., ultrasonography & M.R.I. of the critically ill patients in ICU.
D2	Work as a group leader CPR according to advanced life support.
D3	Practice self appraisal in solving problems related to patients, work management, and using computer skills.

(3) Course content:

Subjects	Lectures
ICU design	3
Management of Patients with Fluid & Electrolyte Disturbances	4
Acid–Base Balance	4
Cardiopulmonary Resuscitation	5
Acute coronary syndrome	4
Arrhythmia	5
Central venous catheterization	3
Pulmonary artery catheter	2
Invasive & noninvasive blood pressure monitoring	2
Mechanical ventilation	7
ARDS	3
SIRS	3
Aspiration pneumonitis	2
Pulmonary embolism	4
Intracranial hypertension	5
Subarachnoid He	4
Oliguria	3
Diabetic coma	4
Enteral and parenteral nutrition	4
ICU bundle	4
Total teaching hours	75

Practical:

Subjects	
1- Central venous cannulation	10

2-Pulmonary artery catheterization	10
3- Arterial cannulation	10
3- Cardio pulmonary resuscitation	10
4- Mechanical ventilation	30
5-Postoperative evaluation	10
6-Approach for emergency cases	20
7- Intracranial pressure monitoring	20
Total teaching hours	120 hour

(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: 48 Marks
MCQ exam: 12 Marks
Structured oral exam: 25 Marks
OSCE: 25 Marks

(6) References of the course:

6.1: Miller's anesthesia
6.2: Clinical anesthesiology 4th ed
6.3: ICU Book 3rd ed

(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