



Tanta University Faculty of Medicine

Department of Anesthesiology, Surgical intensive care

**Course Specifications** 

Anesthesia for Anesthesiology, Surgical intensive care for Doctorate degree

2014

Course Specifications of Anesthesia for Anesthesiology, Surgical intensive care for Doctorate degree

University: Tanta

Faculty: Medicine

Department: Anesthesiology, Surgical intensive care

**A- Administrative Information** 

- 1.Course title: Anesthesia for Anesthesiology, Surgical intensive care Doctorate degree
- 2. Department offering the program: Anesthesiology, Surgical intensive care and Pain management
- 3. Department responsible for the course: Anesthesiology, Surgical intensive care and Pain management
- 4.Course code: ANES 9004
- 5. Level: Second part.
- 6. No. of Credit / taught hours:
- credit hours:
  - Theoretical: 4 hours/week X 15 weeks =60 hours (4 credit hour)
  - Practical: 4 hours/week X 15 weeks =60 hours (2 credit hour)
- 7. Authorization date of course specification:

**B- Professional Information** 

#### 1 – Overall Course aims

By the end of the course, the anesthesiologist will be able to:

- Prepare patient for anesthesia in a proper way.
- Conduct anesthesia in a safe manner, with smooth, pain-free post-operative recovery.
- Develop, implement and maintain policies of quality improvement and patients safety
- Solve common and uncommon problems encountered during work in a safe and scientific manner.
- Share and transfer Knowledge and experience to his/her colleagues.
- Capable of updating his/her knowledge and doing his research for improving level of health care in his society.

# 2 - Intended learning outcomes (ILOs):

# A- knowledge and understanding:

By the end of the course, student should be able to:

A.1) Define various anesthetic, surgical intensive care and pain management techniques

A.2) List all anesthetic drugs, equipments, and tools, and discuss its basic pharmacological and physical properties.

A.3) State all methods of invasive and non-invasive patient monitoring.

A.4) Outline the basic physiologic mechanisms for body systems related to anesthetic practice (C.V.S., chest, blood, kidney, liver, endocrines, nervous system).

A.5) Recognize simple, moderate, and major peri-operative problems and how to diagnose it.

A.6) Identify the anatomical description for related body systems (heart, lungs, airway, C.N.S., kidney, liver).

# **B-intellectual skills**

By the end of the course, student should be able to:

B.1) Sketch suitable method of management for different anesthetic problems.

B.2) Design an anesthetic plan for different surgical procedures (simple, mild, up to moderate).

B.3) Plan diagnosis from patient's data measured by all monitoring tools in the perioperative period (relation and correlation of data).

B.4) Practice Proper patient evaluation all through the peri-operative setting

B.5) Manage complicated anesthetic problems in patients with complex health complications

# C-Professional &practical skills

By the end of the course, student should be able to:

C.1) Asses and perform full clinical examination to evaluate the patient's health status.

C.2) Asses and perform vascular access (Insert a peripheral venous line at different sites, insert a central venous line and insert an arterial line).

C.3) Asses and perform Airway management (Insert an endotracheal tube, supra-glottic devices and recent airway devices).

C.4) Asses and perform different regional anesthetic techniques.

C.5) Select and properly use all components of the anesthetic machine; adjust ventilator and vaporizer settings, and use and analyze monitoring parameters.

C.6) Compare and use different anesthetic drugs, fluids and medications in the proper dose and method

C.7) Evaluate and write evaluate a professional medical report related to anesthesia and ICU.

# D-General transferable (attitude and communication) skills

By the end of the course, student should be able to:

D.1) Communicate and deal with patients with the proper ethical manners.

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D.2) Apply and work in a team with his colleagues (the team leader and the assistants), nursing staff and doctors of other specialties in the operating roomD.3) work as a team leader in the setting of O.R., CPR, and trauma careD.4) Supervise a team composed of a number of specialists or residents running more than one O.R. at the same time with maximum safety

#### **3-Course contents**

Topics		lecture	Clinical/lab
•	Anesthesia	30	30

Topics	Lectures	Practical
		/ Clinical
Introduction	3	3
Vascular access: venous cannulation, central line, Swan-Ganz catheter, arterial cannulation, venous cut down	3	3
preoperative assessment	3	3
Preoperative preparation	3	3
Outpatient clinic	2	2
Airway management	1	1
Monitoring	1	1
Respiratory physiology and respiratory functions during anesthesia	2	2
Anesthetic techniques	2	2
Inhaled anesthetics	3	3
IV anesthetics	4	4
Anesthesia delivery systems	2	2
Neuromuscular physiology & Muscle relaxants	3	3
Autonomic nervous system drugs	2	2
Local anesthetics	3	3
Regional anesthesia and nerve blocks	4	4
Peri-operative fluid management and transfusion therapy	3	3

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Post anesthesia care	3	3
Renal physiology & Anesthesia for renal and genitourinary	3	3
systems		
Electrolytes and Acid base balance	2	2
Hepatic physiology and Anesthesia for liver and GIT	2	2
Anesthesia for ENT	2	2
Anesthesia for oro-dental procedures	2	2
Anesthesia for maxillofacial surgery	2	2
Total (Actual hours)	60 h	60h

## 4-Teaching and learning methods

Lectures, seminars, journal clubs, case presentation, assignments, conference participation observation and hands on practice in operating theaters and surgical ICU.

#### **5-Student Assessment**

- 1- MCQ End semester examination: C+ required for final exam attendance
- 2- Final exam included as apart of the 2nd part exam.

#### 6-Weighing of assessments

Included in the end of the 2nd part exam. will be annexed

#### 7- List of references

#### <u>Course notes</u>

Lecture notes from Anesthesiology, Surgical intensive care and Pain management

## <u>Text book</u>

## **Essential Books (Text Books)**

- Anesthesia by Miller RD 6th edition, Elsevier Churcill Livingstone, New York, 2010.
- Lee's Synopsis of Anesthesia by: Davies NJH, Cashman JN, 13th edition, Elsevier, UK 2005.
- The ICU Paul L. Marino, 2<sup>nd</sup> edition, Lippincott Williams & Wilkins, Philadelphia 2012.

# **Recommended Books**

- Stoelting's Anesthesia and Co-existing disease, 6th edition, By: Hines RL, Marschall KE, 2008, Elsevier Churcill Livingstone 2012.
- Anesthesiology: Problem-oriented patient management 7th edition, By: Yao FSN, Artusio JF, Lippincott Williams & Wilkins, Philadelphia 2012.

## <u>Web Sites</u>

• British Journal of Anaesthesia

- ASA Refresher Course Lectures
- Anesthesiology
- Anesthesia Analgesia
- Egyptian journal of anesthesia
- Journal of Anesthesiology.
- American Society of Anesthesiologists.
- European Journal of Anesthesiology.

# 8-Other resources/ facilities required for teaching and learning to achieve the above ILOs

The department has regular daily lists in different operative theaters.

The department has Surgical ICU unit for postoperative care.

Free Internet access for international data bases is available for all doctorate students through the faculty postgraduate library

The essential text books for this course are available either in department or faculty library

9-we certify that all of the information required to deliver this course is contained in the above specifications and will be implemented

We verify that the above Course and the analysis of students and external evaluator opinions are accurate.

Course coordinator and head of department

name.....Date.....Date.....

Head of quality assurance unit: name......Date......