



Quality Assurance Unit



**Tanta University
Faculty of Medicine**

**Department of Anesthesiology, Surgical
intensive care**

Course Specifications

**Pharmacology for Anesthesiology,
Surgical intensive care
Master degree**

2014

University: Tanta

Faculty: Medicine

Department:
Anesthesiology,
Surgical intensive
care

A- Administrative Information

1. course title: pharmacology for Master of Anesthesiology, Surgical intensive care
2. Department offering the program: Anesthesiology, Surgical intensive care
3. Department responsible for the course: Anesthesiology, Surgical intensive care
4. Course code: ANES 8001
5. Level: First part (pharmacology)
6. No. of Credit / taught hours:
 - credit hours:
 - Theoretical: 1 hours/week X 15 weeks =15 hours (1 credit hour)
7. Authorization date of course specification:

B- Professional Information

1 – Overall Course aims

By the end of the course, the student should become fully acquainted with:

- The pharmacokinetics and pharmacodynamics of anaesthetic agents.
- Side effects of commonly used anaesthetic agents
- Drugs commonly used as adjuncts for anaesthesia.
- Orient the usage of resuscitation drugs that can be needed in anesthetic practice.

2 – Intended learning outcomes (ILOs):

A. Knowledge and understanding:

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

- A.1) Recognize pharmacokinetics and pharmacodynamics of anaesthetic agents used in anesthetic practice.
- A.2) Express the safety, side effects and drug interactions of commonly used anaesthetic agents used in aesthetic practice.
- A.3) Discuss the principles of resuscitation drugs used for critically ill patients.

B-intellectual skills

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

- B.1) demonstrate selection of anesthetic agent suitable for different co-morbid conditions

B.2) interpretation of drug dosages and side effects.

B.3) Demonstrate detection of any anesthetic drug side effects or toxicity.

C-Professional & practical skills

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

C.1) Estimate the efficacy of anesthetic agents.

C.2) Evaluate and deal with troubleshooting of different anesthetic drugs.

D-General transferable (attitude and communication) skills

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

D.1) Solve Problems

D.2) Decision making.

3-Course contents

| Topics | No. of hours lecture | No. of hours Clinical/ lab | total credit |
|--|----------------------|----------------------------|--------------|
| Pharmacology For Anesthesiology, Surgical intensive care | 15 | 0 | 1 |

Detailed curriculum and log book is annexed

The course topics

| Topics | total credit |
|---|--------------|
| 1. Introduction to Pharmacokinetics | 1 |
| 2. Antibacterial agents | 1 |
| 3. Antiemetic drugs | 0.5 |
| 4. Analgesic drugs | 1 |
| 5. Corticosteroids | 0.5 |
| 6. Drug dosage in the ICU | 1 |
| 9. Electrolytes and acid base balance | 1 |
| 10. Endocrinal emergencies | 0.5 |
| 11. drug therapy of heart failure | 1 |
| 12. Drug therapy of ischemic heart diseases and dyslipidemias | 1 |
| 13. Drug therapy of dysrhythmias | 1 |

**Pharmacology For Pain management Master and Master degree Course
Specification 2014**

| | |
|--|-----|
| 14. Drug therapy of hypertension | 1 |
| 15. Diuretics | 0.5 |
| 16. Drug therapy of shock | 0.5 |
| 17. Drug therapy of hemostatic disorders | 0.5 |
| 18. Drug therapy of diabetes mellitus | 0.5 |
| 19. Drug therapy of bronchial asthma | 0.5 |
| 20. Drug therapy of epilepsy | 0.5 |
| 21. General and Local Anesthesia | 1 |
| 22. Muscle relaxants | 0.5 |
| total | 15 |

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

5.1 MCQ end semester exam

5.1 written examination to assess (a1,2,3-b1,2,3)

5.2 oral examination. One sitting (3 staff members included in this sitting) To assess (a1,2,3-b1,2,3-c1,2-d1,2)

6- Weighing of assessments

| | |
|--------------------------------|--|
| End semester exam | C+ required for attendance of final exam |
| Final term written examination | 60% (15 degree) |
| Oral examination | 40% (10 degree) |
| Total | 100% (25 degree) |

7- List of references

Course notes

Lecture notes from Anesthesiology, Surgical intensive care and Pain management

Text book

Essential Books (Text Books)

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

Recommended Books

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

Web Sites

- 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.....signature.....Date.....

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