

STUDY GUIDE

Anesthesia and Critical Care Course
1200501 (ANS-531)



Course Coordinators

Male & Female section: **Dr Muhammad Omer Afzal Bhatti** (Muhammad.Afzal@nbu.edu.sa)

Course Identification

1. Credit hours	1
2. Level/year at which this course is offered	5 th Year / Semester IX & X
3. Pre-requisites for this course	Surgery-I

Course Contributors

No	Specialty	Name of the contributor	Email ID
1.	Surgery	Dr Riyadh Dr Haider Dr Ayub	rylaham@hotmail.com haidermisbah2002@yahoo.com dr.ayubjat@yahoo.com
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7.	ENT	Dr. Yahya	yahia910@hotmail.com

Actual Learning Hours

No	Activity	Learning Hours
Contact Hours		
1	Lecture	10
2	Skill Lab	4
3	Tutorial	3
Total		17
Other Learning Hours*		
1	Study	19
2	Assignments	
3	Library	
4	Projects/Research Essays/Theses	
5	Others(specify)	
Total		40

A. Course Objectives

B. Course Learning Outcomes

A. Course Objectives and Learning Outcomes

1. Course Description

This course aims to develop health professionals who are competent to work in healthcare settings with skills specific to anesthesia. This course gives knowledge to the students about basic principles and ethics of Anesthesia, history taking, monitoring devices, airway and pain management. The course will include interactive lectures, tutorials and hands-on practical sessions.

2. Course Main Objective

By the end of this course the student should achieve the following objectives:

- a) Taking a tactful, accurate and organized medical history
- b) Performing a gentle and accurate physical and mental examination
- c) Integrating history and physical examination to prepare patient for surgery
- d) Selecting the most appropriate and cost effective investigations
- e) Proper airway management
- f) Establishing intravenous access.
- g) Applying various monitoring tools
- h) Communicating clearly and considerately with other health professionals.

B. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Identify methods and stages of anesthesia, preoperative assessment, monitoring tools, and postoperative pain management for surgery cases.	K1
1.2	Outline the principles of intensive care, brain death as well as the related ethical issues	K2
2	Skills :	
2.1	Integrate history and physical examination to prepare patient for surgery and apply the various monitoring tools and cost effective investigations	S2
3	Competence:	
3.1	Analyse the clinical and laboratory data to assess patient fitness for surgery.	C3

Course Content

A. LECTURES

No	List of Topics	Contact Hours
1	ARDS	1
2	Management of shock	1
3	Acid – base balance and fluid therapy	1
4	Indications for ICU admission	1
5	ICU service	1
6	Principles and ethics related to anesthesia	1
7	Complications of anesthesia	1
8	Brain death	1
9	Pain management	1
10	Critically ill patient	1
Total		10

B. TUTORIALS

No	List of Topics	Contact Hours
1	Nutrition in ICU	1
2	Electrolyte imbalance and its management	1
3	Approach to unconscious patient	1
Total		3

C. Skill Lab

No	List of Topics	Contact Hours
1	Ventilators , CPR, Air way management	1

2	Anesthetic drugs	2
3	Anesthesia instruments ,CVP LINE .ABGs	1
	Total	4

Teaching strategies and Assessment Methods for Students

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Identify methods and stages of anesthesia, preoperative assessment, monitoring tools, and postoperative pain management for surgery cases.	Direct instruction (Lectures), Interactive (tutorials)	Written exam
1.2	Outline the principles of intensive care, brain death as well as the related ethical issues	Direct instruction (Lectures), Interactive (tutorials)	Written exam
2.0	Skills		
2.1	Integrate history and physical examination to prepare patient for surgery and apply the various monitoring tools and cost-effective investigations	Experiential learning (Skill lab)	OSCE
3.0	Competence		
3.1	Analyze the clinical and laboratory data to assess patient fitness for surgery.	Interactive (tutorials) Experiential learning (Skill lab)	OSCE

Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	WRITTEN EXAM	Last Week	70%
2	OSCE	Last Week	30%

Course Teaching and Assessment Blueprint

Topics	Teaching strategies	Assessment methods	Knowledge			Skill			Competency			% of total contact hours	% of total summative marks
			K1	K2	...	S1	S2	...	C1	C2	...		
ARDS	Lecture	Written exams	√	√								6.4	5.3
Management of shock	Lecture	Written exams	√	√								6.4	5.3
Acid – base balance and fluid therapy	Lecture	Written exams	√	√								6.4	5.3
Indications for ICU admission	Lecture	Written exams	√	√								6.4	5.3
ICU service	Lecture	Written exams	√	√								6.4	5.3
Principles and ethics related to anesthesia	Lecture	Written exams	√	√								6.4	5.3

Topics	Teaching strategies	Assessment methods	Knowledge			Skill			Competency			% of total contact hours	% of total summative marks
			K1	K2	...	S1	S2	...	C1	C2	...		
Complications of anesthesia	Lecture	Written exams	√	√								6.4	5.3
Brain death	Lecture	Written exams	√	√								6.4	5.3
Pain management	Lecture	Written exams	√	√								6.4	5.3
Critically ill patient	Lecture	Written exams	√	√								6.4	5.3
Nutrition in ICU	Tutorial	Written exams	√	√								3.2	5.3
Electrolyte imbalance and its management	Tutorial	Written exams	√	√								3.2	5.3
Approach to unconscious patient	Tutorial	Written exams	√	√								3.2	5.3
Ventilators , CPR, Air way management	Skill lab	OSCE	√	√			√	√				6.4	7.5
Anesthetic drugs	Skill lab	OSCE	√	√			√	√				12.8	15
Anesthesia instruments ,CVP LINE .ABGs	Skill lab	OSCE	√	√			√	√				6.4	7.5

Learning Resources

Required Textbooks	Clinical Anesthesiology; 4 th Edition; G. Edward Morgan, Jr.; McGraw-Hill Education; 2006 Manual of Anesthesia; C.Y.Lee; McGraw Hill Education; 2006
Essential References Materials	Oxford Handbook of Anesthesia; 2 nd Edition; Keith G. Allman; Oxford University Press; 2006
Electronic Materials	https://www.lecturio.com/medical-courses/anesthesiology.course#/

Course quality evaluation

After the end of the course, please give your **FEEDBACK** through the following QR code:

