



The University of Jordan

Accreditation & Quality Assurance Center

Course Syllabus

Course Name: Anesthesia and Intensive Care

1	Course title	Anesthesia and Intensive Care
2	Course number	0538411
	Credit hours (theory, practical)	4.5
3	Contact hours (theory, practical)	Theory: 12:30 MD – 01:30 PM/ Practical: 09:00AM-12:30 MD and 01:30 PM – 04:00 PM
4	Prerequisites/co -requisites	Successfully passing third year.
5	Program title	Doctor of Medicine
6	Program code	Awaiting assignment.
7	Awarding institution	University of Jordan
8	Faculty	School of Medicine
9	Department	Department of Anesthesia and Intensive Care
10	Level of course	Fourth undergraduate Year
11	Year of study and semester (s)	Fourth Year: First or second semester as per distribution.
12	Final Qualification	Successful completion of the course
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	December 26 th , 2016 / September 17 th , 2023

16. Course Coordinator:

Dr_Ibraheem QUDAISAT Office: Department of Anesthesia and Intensive Care – Jordan University Hospital Office hours: 08:00 – 04:00 PM by prearrangement, due to ongoing clinical work. *Office phone:* 5353666 x 2394 E-mail: qudaisat@ju.edu.jo

17. Other instructors:

- Prof. Sami ABO-HALAWEH /Work Phone 06 5353666 ext 2389 / 2390 / Office Location Jordan University Hospital/ Operating Theatres Floor/ Office Hours: Can be easily arranged subject to clinical workload/ Email: <u>sami_halaweh@yahoo.com</u>.
- Prof. Sobhi AL-GHANEM / Work Phone: 06 5353666 ext 2382 / 2390/ Office Location Jordan university Hospital/ Office Hours: Can be easily arranged subject to clinical workload E-mail: <u>alghanem@ju.edu.jo</u>
- Dr Bashir ATYAT/ Work Phone: 06 5353666 ext / 2390: Office Location: Jordan University Hospital Operating Theatres Floor/ Office Hours: Can be easily arranged subject to clinical workload/Email: rawyan@yahoo.com
- 4. Prof. Islam Massad/ Work phone: 06 5353666 ext / 2390/ Office Location: Jordan university Hospital/ Office Hours: Can be easily arranged subject to clinical workload/ E-mail: <u>islam_wafa@yahoo.com</u>
- Prof. Khalid AL-ZABIN/ Work Phone: 06-5353666 EXT 2389 / 2390/ Office Location: Jordan University Hospital Operating Theatres Floor/ Office Hours: Can be easily arranged subject to clinical workload/ Email: <u>khalidalzabin@yahoo.com</u>
- 6. Prof. Abdel Kareem AL_ABBADI/ Work Phone 06 5353666 ext 2389 / 2390 Office Location Jordan University Hospital Operating Theatres Floor/ office Hours Can be easily arranged subject

to clinical work load/ E-mail: <u>akaloweidi@hotmail.com</u>

- Dr Mahmoud ALMUSTAFA/ Work phone: 06 5353666 ext / 2390 Office Location Jordan university Hospital Office Hours Can be easily arranged subject to clinical workload/ E-mail: <u>mahmoud_juh@hotmail.com</u>
- Omar Ababneh/ Work Phone 06 5353666 ext 2389 / 2390 Office Location Jordan University Hospital Operating Theatres Floor/ office Hours Can be easily arranged subject to clinical workload/ E-mail: <u>omar.ababneh@ju.edu.jo</u>
- 9. Dr Mustafa Rabay'ah/ Work Phone: 06 5353666 ext. 2390: Office Location: Jordan University Hospital Operating Theatres Floor/ Office Hours: Can be easily arranged subject to clinical work load /Email:
- 10. **Dr. Ahmad Shahin:** 06 5353666 ext / 2390: **Office Location**: Jordan University Hospital Operating Theatres Floor/ **Office Hours**: Can be easily arranged subject to clinical work load /**Email**:

18. Course Description:

The Anesthesia Course for undergraduate medical students at Jordan University is a one -month Course in the department of Anesthesia at Jordan University Hospital. It is a separate Minor course for medical students with 4.5 credit hours weight.

Students join this course in their Fourth undergraduate year. In the first week, students attend lectures and training in the skills lab in Building- 1 / School of Medicine where they receive training about essential lifesaving procedures. In the next three weeks, students will be weekly assigned to an operating room with the concept that each student will go through different surgical specialties and be familiarized with the different anesthetic care plans and service areas. Students will spend one day in the Intensive Care Unit.

Twenty seminars that cover the most important topics in anesthesia relevant to undergraduate medical students are conducted by teaching staff members.

During the in-theatre time, students will be introduced to the practice of Anesthesia. They will be familiarized with anesthesia machines, equipment, drugs, and procedures. Each Operating theatre is covered by an anesthesia team consisting of a consultant anesthetist (who is a teaching staff member), a senior anesthesia resident doctor, a junior anesthesia resident doctor, and an anesthesia technician.

1. 19. Course aims and outcomes:

2.

A- Aims:

The aims of the Anesthesia and Intensive care course for undergraduate medical student are:

- 1- The medical graduate will be educated about the technical aspects of Anesthesia.
- 2- The medical graduate will be aware of the role of Anesthesia as a perioperative medical care specialty.
- 3- The medical graduate will be aware of how anesthesia relates to other specialties in the multidisciplinary care plan of patients.
- 4- The medical graduate will be fit enough to deal confidently with cardiopulmonary resuscitation scenarios.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...

A. Knowledge and Understanding: Student is expected to:				
1.	Recognize the necessary medical information that relates to the conduct of Anesthesia.			
2.	Understand how the specialty of anesthesia relates to other medical specialties and the			
	necessity and ways of good communication with them.			
3.	Be aware of different types of anesthesia available, and their case-matching.			

4.	Be aware of the pharmacologic knowledge of drugs used during anesthesia.						
5.	Understand the structure, function, and multidisciplinary role of Intensive care unit.						
6.	Understand the basic scientific concepts underlying airway management and cardiopulmonary resuscitation.						
7.	Understand the basic concepts and aspects of intravascular access insertion.						
B. Int	ellectual Analytical and Cognitive Skills: Student is expected to:						
1.	Be able to integrate his knowledge from patient assessment and anesthetic drugs and procedures for the best safe match of care and creation of a management plan.						
2.	Be able to provide counselling to patients regarding their anesthetic care.						
3.	Be able to communicate with other specialties involved in the total care of patients.						
4.							
5.	Be able to assume a leadership role during cardiopulmonary resuscitation.						
C. Su	bject- Specific Skills: Students is expected to:						
1.	Have acquired adequate competency in securing vascular access.						
2.	Have acquired competency in safe drug preparation and administration.						
3.	Have acquired adequate competency of airway management skills.						
4.	Have acquired adequate competency in cardiopulmonary resuscitation skills.						
5.	Have acquired adequate competency of airway management skills.						
D. Transfe	rable Key Skills: Students is expected to						
1.	Be a good and efficient team member.						
2.	Be able to assume leadership roles in critical medical conditions.						
3.							
4.	Be good at verbal and written communication about patients.						
5.	Be able to deal with technology of monitoring equipment						

20. Topic Outline and Schedule:

Торіс	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Airway Management	First week	Dr Ibraheem Qudaisat	Building Knowledge and skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Intravenous, Arterial and Central Lines	First week	Dr. Ahmad Shahin	Building Knowledge and skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Cardiopulmonary Resuscitation 1	First week	Prof. Sami Abo Halaweh	Building Knowledge and skills in the subject	Assessment of attendance and participation	Seminars, assigned reference

				+ written Exam	books
Cardiopulmonary Resuscitation 2	First week	Prof. Islam Massad	Building Knowledge and skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Introduction to Anesthesia- Understanding the Concept	First week	Dr Ibraheem Qudaisat	Building Knowledge and transferrable skills	Assessment of attendance and participation + written Exam	Lecturer and assigned reference books
Pre-Operative patient Assessment. Preparation and Premedication	2 nd Week	Dr. Ahmad Shahin	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Fluid Management and Blood Transfusion	2 nd Week	Dr Mahmoud Al- Mustafa	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Intravenous Anesthetic Drugs	2 nd Week	Dr Mustafa Rabay'ah	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Inhalational anesthetic Drugs	2 nd Week	Dr. Ahmad Shahin	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Pain and Narcotic Drugs	2 nd Week	Dr Abdel Kareem AL- Oweidi	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Neuromuscular Blocking Drugs	3 rd Week	Prof Subhi AL- Ghanem	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Regional Anesthesia	3 rd Week	Dr Mahmoud Al- Mustafa	Regional anesthesia	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Hypoxia and Oxygen Therapy	3 rd Week	Prof. Sobhi Al- Ghanem	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation	Seminars, assigned reference

				+ written Exam	books
Respiratory failure	3 rd Week	Prof. Abdel Kareem AL- Oweidi	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Anesthesia Equipment	3 rd Week	Prof. Sobhi Al- Ghanem	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Monitoring in Anesthesia and Intensive Care	4 th week	Mustafa Rabab'ah	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Shock	4 th week	Prof. Khaled Al-Zaben	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Anesthesia for Trauma & Emergency Anesthesia	4 th week	Prof. Sobhi Al- Ghanem	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Pediatric anesthesia	4 th week	Prof. Khaled Al-Zaben	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Review and Feedback	4 th week	Dr Ibraheem Qudaisat & Head of Departme nt	Building Knowledge and cognitive skills in the subject	Assessment of attendance and participation + written Exam	Seminars, assigned reference books
Hands on training in theater	2 nd -4 th weeks	All staff	Building practical skills in anesthesia	Assessment of commitment and skills, OSCE Exam	Staff members, Residents

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

- 1. Skills Lab training using Manikins.
- 2. Lecture hall with audiovisual facilities.
- 3. Hands-on teaching in operating theatre.

Assignments

- 1- Airway management: students are asked to Participate in at least 10 Airway Management processes during your Anesthesia Rotation.
- 2- Intra-venous access: Students are asked to insert at least 5 intravenous canulas during your Anesthesia Rotation.
- 3- Preparation of intravenous drugs: Students are asked to take part in the preparation of intravenous drugs at least four times during your rotation to develop the skills of:
 - a. Doing the proper check of drugs (Scientific name, amount/concentration, correct route of administration, and expiry date.
 - b. Preparing required dilutions of drugs accurately.
 - c. ALWAYS checking FUNCTION OF I.V lines before administration of drugs.
- 4- Applying Monitoring Equipment: Students are asked to take part in applying monitoring equipment and analyzing their readings under guidance from anesthetists.

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Asses	sment	Point %	Date	
Evaluation of performance	Attendance Participation Progress	20%	End of rotation	
OSCE exam		30%	End Rotation	
Final	Exam	50%	End of Academic year	

23. Course Policies:

A- Attendance policies: As per university Regulations: Absence should not exceed 15% of rotation days. Attendance grades are put by exams office based on special charts.

B- Absences from exams and handing in assignments on time: As per university Regulations: only legal excuses accepted after review by faculty administration.

C- Health and safety procedures: As per hospital policies and requirements: immunizations, scrubs, etc

D- Honesty policy regarding cheating, plagiarism, misbehavior: Those captured will be withdrawn from exam and referred to faculty's relevant disciplinary committee.

E- Grading policy: letter system as per university regulations.

F- Available university services that support achievement in the course: Lecture halls with audiovisual facilities, Skills Lab/ Library/ related hospital facilities.

24. Required equipment:

- 1. Skills lab manikins and equipment
- 2. Full Operating theatre scrubs
- 3. Operating theatre clog/ Overshoes.
- 4. Operating theatre equipment.

25. References:

- A- Required book (s), assigned reading and audio-visuals:
 - 1. Lecture notes: Clinical Anesthesia. Carl L. Gwinnutt, Blackwell publishing
 - 2. Perioperative Care, Anesthesia, pain Management, and Intensive Care. Michael Avidan,

Andrea M. R. Harvey, Jose Ponte, Julia Wendon, Robert Ginsburg. CHURCHILL

LIVINGSTONE

- B- Recommended books, materials, and media:
 - 1. Textbook of Anaesthesia: Aitkenhead et al
 - 2. Clinical Anesthesiology : G. Edward Morgani jr et al

8

26. Additional information:

Course is available online on the university's e-learning site for health schools.

https://elearning-med.ju.edu.jo/med/

Name of Course Coordinator: Dr Ibraheem Qudaisat Signature: Date: 17/9/2023.
Head of curriculum committee/Department:Signature:
Head of Department:
Head of curriculum committee/Faculty: Signature:
Dean: