



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Anesthesia Technology Department

ANET232 Anesthesia Equipment And Supplies I - JNQF Level: 7

Second Semester 2022-2023

Course Catalog

3 Credit Hours. This course focuses on the equipment and tools employed in administering anesthesia and familiarizes students with the general equipment, supplies, and surgical instruments commonly found in various hospital areas such as the operating room, recovery room, and intensive care unit. It imparts technical knowledge and safety protocols concerning the utilization, operation, and upkeep of patient monitoring devices. Students delve into the principles of operation, calibration, and data interpretation of monitors and devices used during surgical procedures. Designed to introduce fundamental concepts in Anesthesia Technology, the course familiarizes students with the operation, maintenance, and resolution of issues related to anesthesia machines, ventilators, and their accompanying accessories.

Teaching Method: Blended

Text Book

Title	Morgan and Mikhail's Clinical Anesthesiology
Author(s)	Butterworth, John, et al.
Edition	6th Edition
Short Name	1
Other Information	

Instructor

Name	Dr. Eihab Khasawneh
Office Location	-
Office Hours	Sun : 13:30 - 15:30 Mon : 13:15 - 14:45 Wed : 08:30 - 09:30 Thu : 14:30 - 16:30
Email	eakhasawneh1@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Mon : 13:00 - 14:30

Room: SB19

Prerequisites

Line Number	Course Name	Prerequisite Type
1171040	ANET104 Introduction To Anesthesia Technology	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2, 3	Anesthesia Machines: Introduction to the components, functions, and safety features of anesthesia machines. Participants will learn about gas delivery systems, vaporizers, ventilators, scavenging systems, and alarm systems, with hands-on practice in machine setup and calibration.	From 1
Weeks 4, 5, 6	Monitoring Devices: Overview of physiological monitoring devices used in anesthesia practice, including pulse oximeters, capnography monitors, electrocardiography (ECG) machines, non-invasive blood pressure monitors, and temperature probes. Participants will learn to interpret monitoring data and recognize abnormal findings.	From 1
Weeks 7, 8	Airway Management Tools: Instruction in airway management techniques and devices, including endotracheal tubes, laryngeal mask airways (LMAs), oral airways, and video laryngoscopes. Participants will practice airway assessment, device selection, and insertion techniques on airway manikins.	From 1
Weeks 9, 10	Intravenous Access Equipment: Training in intravenous catheter insertion techniques, infusion pump operation, and administration set setup. Participants will practice venipuncture skills on task trainers and learn infusion rate calculations and medication administration protocols.	From 1
Weeks 11, 12	Emergency Supplies: Overview of emergency equipment and supplies essential for managing perioperative emergencies, including defibrillators, emergency drugs, difficult airway equipment, and oxygen delivery devices. Participants will practice rapid access and deployment of emergency resources.	From 1
Weeks 13, 14, 15	Equipment Maintenance and Troubleshooting: Guidance on routine maintenance procedures and troubleshooting techniques for anesthesia equipment and supplies. Students will learn to identify common equipment malfunctions and perform basic repairs or escalate issues to appropriate personnel.	From 1
Week 16	Final Exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Gain comprehensive knowledge of the equipment and tools utilized in anesthesia administration. [1PLO 1] [1L7S1]	20%	Participation, First exam

Familiarize oneself with the general equipment, supplies, and surgical instruments commonly found in hospital settings, including the operating room, recovery room, and intensive care unit. [1PLO 2] [1L7S2]	20%	First exam, Second exam
Acquire technical expertise and safety protocols related to the utilization, operation, and maintenance of patient monitoring devices. [1PLO 5] [1L7S1]	15%	Second exam, Final exam
Develop a deep understanding of the principles of operation, calibration, and data interpretation of monitors and devices used in surgical procedures. [1PLO 4] [1L7K1]	15%	Second exam, Final exam
Understand the importance of adhering to safety standards and protocols in the use of anesthesia equipment and tools. [1PLO 5] [1L7K1]	10%	Final exam
Gain practical skills in handling and caring for anesthesia equipment to ensure optimal performance and patient safety. [1PLO 6] [1L7C1]	10%	Final exam

Relationship to Program Student Outcomes (Out of 100%)					
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
20	20		15	25	10

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S1	L7S2	L7C1
25	35	20	10

Evaluation	
Assessment Tool	Weight
Participation	10%
First exam	25%
Second exam	25%
Final exam	40%

Policy

<p>Code of Conduct and Academic Integrity Guidelines</p>	<p>Statement on Professionalism: Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during lecture, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.</p> <p>Cheating: University regulations will be applied on cases of cheating and/or plagiarism</p> <p>Cell phone: The use of cellular phone is prohibited in class rooms and during exams. The cellular phone must be switched off in class rooms and during exams.</p> <p>Attendance: No points will be count for points attendance of this class, however attending the lectures will greatly enhance your grade. The student is responsible for any information discussed in lecture sessions. It is imperative to attend all classes!</p> <p>Absences: University regulations will be applied. Students are not allowed to be absent for more than 20% of lectures for any reason or excuse. If a student exceeds the absence limit, he or she will not be allowed to sit for future course exams. (Please review university regulation for more details)</p> <p>Make-up Exam: is entitled for students who miss the exam with accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulation for more details)</p> <p>Feedback: Concerns, complaints, questions, and/or feedback are appreciated and will be important for the instructor. You can contact your instructor using the e-mail or during office hours.</p>
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