



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

ANET234 Anesthesia Equipment And Supplies I Lab - JNQF Level: 7

Second Semester 2022-2023

Course Catalog

1 Credit Hours. This course provides training in handling the equipment and supplies covered in the theoretical aspect of the curriculum. It focuses on practical application in clinical settings, including addressing equipment failure during work and ensuring patient safety at all times. The course offers both classroom instruction and hands-on laboratory sessions to equip students with cognitive, psychomotor, and affective learning experiences relevant to basic instrumentation in anesthesia technology. Training is conducted in a realistic environment using high-fidelity mannequins to simulate real-life scenarios.

Teaching Method: On Campus

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: Sun : 08:30 - 10:30

Room: LAB

Section 2:

Lecture Time: Sun : 10:30 - 12:30

Room: LAB

Section 3:

Lecture Time: Sun : 12:30 - 14:30

Room: LAB

Section 4:

Lecture Time: Sun : 14:30 - 16:30

Room: LAB

Section 5:

Lecture Time: Tue : 08:30 - 10:30

Room: LAB

Section 6:

Lecture Time: Tue : 10:30 - 12:30

Room: LAB

Section 7:

Lecture Time: Tue : 12:30 - 14:30

Room: LAB

Section 8:

Lecture Time: Tue : 14:30 - 16:30

Room: LAB

Section 9:

Lecture Time: Thu : 08:30 - 10:30

Room: LAB

Section 11:

Lecture Time: Thu : 14:30 - 16:30

Room: LAB

Prerequisites

Line Number	Course Name	Prerequisite Type
1171060	ANET106 Introduction To Anesthesia Technology Lab	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2, 3	Anesthesia Machine Setup and Operation: Hands-on training in the setup, calibration, and operation of anesthesia machines. Participants will learn to perform pre-use checks, adjust gas flow rates, select appropriate vaporizer settings, and monitor alarm systems for safety assurance.	From 1

Weeks 4, 5	Monitoring Device Utilization: Practical sessions focused on the use of physiological monitoring devices commonly employed in anesthesia practice. Participants will practice attaching and interpreting data from pulse oximeters, capnography monitors, blood pressure cuffs, ECG machines, and temperature probes.	From 1
Weeks 6, 7	Airway Management Techniques: Interactive demonstrations and practice sessions on airway management devices, including endotracheal tubes, laryngeal mask airways (LMAs), and video laryngoscopes. Participants will practice airway assessment, device insertion, and confirmation of proper placement on airway manikins.	From 1
Weeks 8, 9	Intravenous Access and Medication Administration: Hands-on training in intravenous catheter insertion techniques and medication administration protocols. Participants will practice venipuncture skills using task trainers and learn to set up infusion pumps, calculate medication dosages, and administer drugs safely.	From 1
Weeks 10, 11	Emergency Equipment Simulation: Simulation-based scenarios simulating perioperative emergencies requiring rapid access and utilization of emergency equipment and supplies. Participants will practice responding to scenarios such as cardiac arrest, difficult airway situations, and anaphylactic reactions using emergency drugs, defibrillators, and airway adjuncts.	From 1
Weeks 12, 13	Equipment Maintenance and Troubleshooting: Guidance on routine maintenance procedures and troubleshooting techniques for anesthesia equipment and supplies. Participants will learn to identify common equipment malfunctions, perform basic repairs, and escalate issues to appropriate personnel.	From 1
Week 14	Final Exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Develop proficiency in handling the equipment and supplies discussed in the theoretical aspect of the curriculum related to anesthesia technology. [1PLO 5] [1L7C4]	20%	Participation, Quizzes
Acquire practical skills for applying theoretical knowledge in clinical settings, including effectively managing equipment failures during work and prioritizing patient safety. [1PLO 4] [1L7C1]	20%	Quizzes, Midterm exam
Participate in classroom instruction and hands-on laboratory sessions to enhance cognitive understanding, psychomotor skills, and affective learning related to basic instrumentation in anesthesia technology. [1PLO 3] [1L7S3]	10%	Midterm exam
Gain experience in a realistic environment through training with high-fidelity mannequins, simulating authentic clinical scenarios. [1PLO 6] [1L7S1]	10%	Midterm exam
Demonstrate competency in recognizing, troubleshooting, and resolving equipment-related issues to ensure uninterrupted patient care. [1PLO 5] [1L7S1]	10%	Final exam
Develop a thorough understanding of safety protocols and procedures to maintain patient well-being during anesthesia procedures. [1PLO 2] [1L7S2]	15%	Final exam
Enhance critical thinking and decision-making abilities necessary for efficient equipment management and patient care in anesthesia technology practice. [1PLO 4] [1L7S1]	15%	Final exam

Relationship to Program Student Outcomes (Out of 100%)					
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
	15	10	35	30	10

Relationship to NQF Outcomes (Out of 100%)				
L7S1	L7S2	L7S3	L7C1	L7C4
35	15	10	20	20

Evaluation	
Assessment Tool	Weight
Participation	10%
Quizzes	20%
Midterm exam	30%
Final exam	40%

Policy	
Code of Conduct and Academic Integrity Guidelines	<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>