



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

ANET214 Investigation Procedure And Techniques - JNQF Level: 7

Second Semester 2022-2023

Course Catalog

3 Credit Hours. This course revisits fundamental investigative methods covered in prior courses and delves deeply into advanced investigation procedures, integrating them with patient assessments. Students will explore physiological principles concerning the cardiovascular, pulmonary, and central nervous systems, understanding their implications on overall bodily function. The training aims to equip students with the skills necessary for conducting thorough patient assessments, including pre-operative visits, history-taking, and physical examinations. Additionally, the course covers topics such as drugs and premedication (including analgesics and sedatives), various techniques (including inhalation and total intravenous anesthesia), and emergency procedures.

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: Mon, Wed : 11:30 - 13:00

Room: NG55

Section 2:

Lecture Time: Mon, Wed : 10:00 - 11:30

Room: M4201

Prerequisites

Line Number	Course Name	Prerequisite Type
1172110	ANET211 Preoperative Assessment And Basic Investigation	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Ultrasound-Guided Regional Anesthesia: Introduction to advanced ultrasound-guided techniques for regional anesthesia, including nerve localization, needle visualization, and real-time nerve block performance. Participants will learn to optimize ultrasound settings, identify anatomical structures, and achieve precise nerve blockade for improved efficacy and safety.	From 1
Weeks 3, 4	Enhanced Recovery After Surgery (ERAS) Protocols: Exploration of multimodal perioperative care pathways designed to optimize patient outcomes and accelerate postoperative recovery. Participants will learn about evidence-based interventions, including preoperative fasting protocols, pain management strategies, and early mobilization initiatives.	From 1
Weeks 5, 6, 7	Transesophageal Echocardiography (TEE): Overview of transesophageal echocardiography as a diagnostic and monitoring tool in cardiac anesthesia and critical care settings. Participants will learn TEE probe insertion techniques, image acquisition protocols, and interpretation skills for assessing cardiac function and hemodynamics.	From 1
Weeks 8, 9, 10, 11	Simulation-Based Training: Utilization of high-fidelity simulation technology to replicate complex clinical scenarios and facilitate experiential learning in a risk-free environment. Students will engage in simulated patient care scenarios, including crisis management, team communication, and technical skill assessment.	From 1
Weeks 12, 13, 14, 15	Emerging Technologies: Exploration of novel technologies and devices in anesthesia practice, such as closed-loop anesthesia delivery systems, robotic-assisted anesthesia administration, and virtual reality-based training platforms. Participants will discuss the potential applications, limitations, and future directions of emerging technologies in anesthesia care.	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 and skills in advanced investigation procedures, integrating them with patient assessments. [1PLO 1] [1L7K1]	25%	Participation, First exam

Explore physiological principles related to the cardiovascular, pulmonary, and central nervous systems, and their impact on overall bodily function. [1PLO 1] [1L7K1]	25%	First exam, Second exam
Acquire knowledge about drugs and premedication, including analgesics and sedatives, and their application in anesthesia practice. [1PLO 3] [1L7S1]	25%	Second exam, Final exam
Learn emergency procedures relevant to anesthesia practice, ensuring readiness to respond effectively in critical situations. [1PLO 4] [1L7C1]	25%	Final exam

Relationship to Program Student Outcomes (Out of 100%)					
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
50		25	25		

Relationship to NQF Outcomes (Out of 100%)		
L7K1	L7S1	L7C1
50	25	25

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>
--	--

Date Printed: 2024-03-25