



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

ANET341 Medical Problems And Their Management - JNQF Level: 7

First Semester 2023-2024

Course Catalog

3 Credit Hours. This course addresses various medical conditions, focusing on their assessment, recognition, and management, particularly in relation to anesthesia and any special considerations that may apply. Additionally, it provides detailed discussions on handling emergency situations, including the recognition and management of difficult airways, malignant hyperthermia, operating room fires, ACLS (Advanced Cardiovascular Life Support), PALS (Pediatric Advanced Life Support), traumatic resuscitation, anaphylaxis, and toxicity related to local anesthesia. Other topics covered include biomedical waste management, adherence to professional and medical ethics, proper documentation of anesthesia procedures, and understanding the consent process between healthcare providers and patients.

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 : 10:30 - 12:00 Mon : 11:00 - 12:30 Tue : 10:30 - 12:00 Thu : 10:30 - 12:30
Email	eakhasawneh1@just.edu.jo

Class Schedule & Room

Section 1:

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

Room: SB13

Prerequisites

Line Number	Course Name	Prerequisite Type
102550	MED255 Pharmacology	Prerequisite / Study
103720	MED372 Pathophysiology	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Cardiovascular Disorders: Comprehensive review of cardiovascular diseases, including hypertension, coronary artery disease, heart failure, arrhythmias, and valvular heart disease, with emphasis on preoperative risk stratification, optimization strategies, and intraoperative hemodynamic management.	From 1
Weeks 3, 4	Respiratory Disorders: Examination of respiratory conditions such as asthma, chronic obstructive pulmonary disease (COPD), obstructive sleep apnea (OSA), and pulmonary hypertension, focusing on preoperative assessment, perioperative respiratory support, and postoperative pulmonary complications prevention.	From 1
Weeks 5, 6	Renal and Hepatic Dysfunction: Discussion of perioperative considerations for patients with renal insufficiency, chronic kidney disease, liver cirrhosis, and hepatic dysfunction, including fluid management, electrolyte balance, and pharmacokinetic adjustments for anesthetic agents.	From 1
Weeks 7, 8	Endocrine Disorders: Overview of perioperative management strategies for patients with diabetes mellitus, thyroid disorders, adrenal insufficiency, and other endocrine conditions, emphasizing glycemic control, hormonal replacement therapy, and adrenal crisis prevention.	From 1
Weeks 9, 10	Hematologic Disorders: Examination of hematologic disorders, including anemia, coagulopathies, thrombocytopenia, and anticoagulant therapy management in the perioperative period, with emphasis on minimizing bleeding risk and optimizing hemostasis.	From 1
Weeks 11, 12	Neurologic Disorders: Review of neurologic conditions such as stroke, epilepsy, Parkinson's disease, and dementia, focusing on perioperative neurological assessment, seizure prophylaxis, and neuroprotective strategies.	From 1
Weeks 13, 14	Infectious Diseases: Considerations for managing patients with infectious diseases, including HIV/AIDS, hepatitis, tuberculosis, and surgical site infections, with emphasis on infection control measures, antimicrobial prophylaxis, and management of immunocompromised patients.	From 1
Weeks 15, 16	Perioperative Pain Management: Strategies for perioperative pain assessment and multimodal analgesic approaches in patients with acute or chronic pain conditions, including opioid-sparing techniques, regional anesthesia, and adjuvant medications.	From 1

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method

Develop proficiency in assessing, recognizing, and managing various medical conditions, with a focus on their implications for anesthesia practice. [1PLO 1] [1L7S2]	25%	First exam
Gain in-depth knowledge and skills in handling emergency situations commonly encountered in anesthesia, such as difficult airways, malignant hyperthermia, and operating room fires. [1PLO 3] [1L7S3]	25%	Second exam
Develop proficiency in accurately documenting anesthesia procedures for patient records and legal purposes. [1PLO 4] [1L7C4]	25%	Final exam
Understand the consent process between healthcare providers and patients, ensuring informed decision-making and patient autonomy. [1PLO 4] [1L7C2]	25%	Final exam

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

Relationship to NQF Outcomes (Out of 100%)			
L7S2	L7S3	L7C2	L7C4
25	25	25	25

Evaluation	
Assessment Tool	Weight
First exam	25%
Second exam	25%
Final exam	50%

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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