

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Anesthesia
Course number	MDCN6223
Faculty	
Department	
Course type	Major Needs
Course level	6
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

- 1 - Understanding the principles of anesthesia: Developing a comprehensive understanding of the basic principles and concepts of anesthesia, including the pharmacology, physiology, and biochemistry involved in anesthetic management.
- 2 - Patient assessment and preparation: Gaining the knowledge and skills required to assess patients before anesthesia, including their medical history, physical examination, and relevant diagnostic investigations. Additionally, understanding the concept of preoperative fasting and the preparation of patients for anesthesia.
- 3 - Anesthetic techniques: Learning about the different types of anesthetic techniques and their appropriate applications, including general anesthesia, regional anesthesia, and sedation. Understanding the indications, contraindications, and potential complications associated with each technique
- 4 - Anesthesia equipment and monitoring: Acquiring knowledge and hands-on experience in using and maintaining anesthesia equipment, such as anesthesia machines, monitors, and airway management devices. Understanding the importance of monitoring vital signs, anesthesia depth, and other physiological parameters during anesthesia.
- 5 - Anesthetic drugs and their administration: Gaining familiarity with different anesthetic drugs, including their indications, pharmacokinetics, doses, and potential adverse effects. Learning various routes of drug administration, including intravenous, inhalational, and regional techniques.
- 6 - Perioperative care and management: Understanding the principles of perioperative care and management, including intraoperative fluid therapy, blood transfusion, pain management, and prevention and management of complications related to anesthesia.
- 7 - Anesthetic emergencies and crisis management: Developing knowledge and skills to recognize and manage common anesthetic emergencies, such as anaphylaxis, malignant hyperthermia, and cardiovascular collapse. Understanding the principles of crisis resource management and effective communication in emergency situations.
- 8 - Ethical and legal considerations: Discussing ethical principles related to anesthesia practice, including patient autonomy, informed consent, and professional codes of conduct. Understanding the legal aspects of anesthesia, including liability and malpractice issues.
- 9 - Professionalism and communication: Promoting professional behavior and effective communication skills with patients, families, and other healthcare professionals. Understanding the importance of teamwork and collaboration in the perioperative setting.

Intended Learning Outcomes

Knowledge and Understanding	<ul style="list-style-type: none">* Recognize the necessary medical information that relates to the conduct of Anesthesia* Understand how the specialty of anesthesia relates to other medical specialties and the necessity and ways of good communication with them* Be aware of different types of anesthesia available, and their case-matching* Be aware of the pharmacologic knowledge of drugs used during anesthesia* Understand the structure, function, and multidisciplinary role of Intensive care unit* Understand the basic scientific concepts underlying airway management and cardiopulmonary resuscitation.* Understand the basic concepts and aspects of intravascular access insertion
Intellectual Skills	<ul style="list-style-type: none">* 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.* Be able to provide counselling to patients regarding their anesthetic care* Be able to communicate with other specialties involved in the total care of patients* Be able to apply, read and analyze data from monitoring equipment.* Be able to communicate with other specialties involved in the total care of patients.
Professional Skills	<ul style="list-style-type: none">* Have acquired adequate competency in securing vascular access* Have acquired competency in safe drug preparation and administration* Have acquired adequate competency of airway management skills.* Have acquired adequate competency of airway management skills.
General Skill	<ul style="list-style-type: none">* Be able to prioritize management issues in their plan* Be good at verbal and written communication about patients.* Be able to deal with technology of monitoring equipment* Be able to assume leadership roles in critical medical conditions.

Course Contents

1 - Airway Management
2 - Intravenous , Arterial and Central Lines
3 - Regional anesthesia
4 - Introduction to Anesthesia?Understanding the Concept First week Dr Ibraheem Qudaisat Building Knowledge and transferrable skills Assessment of attendance and participation + written
5 - Pre-Operative patient Assessment. Preparation and Premedication
6 - Fluid Management and Blood Transfusion
7 - General anesthesia
8 - Anesthesia Equipment
9 - Monitoring in Anesthesia and Intensive Care
10 - Emergency Anesthesia
11 - Shock
12 - Post operative assessment

Teaching and Learning Methods

1 - Lectures
2 - Hand on training in operating theaters

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Practical exam		20
Final exam		80

Books and References

Essential books	Textbook of Anaesthesia: Aitkenhead et al Clinical Anesthesiology : G. Edward Morgani jr et al
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