

## Course Specification Card for Anesthesia

College	College of Medicine	Department	Medical Education		
Course Name (English)	Anesthesia	Course Name (Arabic)	التخدير		
Course Number	1000511	Course Code	1000511		
Credit Hrs.	1.5	Contact Hrs.	Theoretical	Practical	T
Teaching Language	English <input checked="" type="checkbox"/> Arabic <input type="checkbox"/>			45	45
Teaching Method	<input checked="" type="checkbox"/> Face-to-Face <input type="checkbox"/> Online <input type="checkbox"/> Blended				
Course Nature	<input checked="" type="checkbox"/> Compulsory <input type="checkbox"/> Elective				
Course Type	<input type="checkbox"/> University Requirement <input checked="" type="checkbox"/> College Requirement <input type="checkbox"/> Program Requirement				
Level	Year 5	Pre-Requisite(s)	Block 4.2		

### Course Description

By the end of this integrated course, students should have the necessary knowledge, skills and attitudes that will enable them to function effectively as members of an interdisciplinary healthcare team capable to: Acquire the basic knowledge of ANAESTHESIA to secure foundation in the subject on which they can subsequently build, whether for general practice, or further specialization. Use and apply 'evidence based medicine' in order that they can update and choose best options for patient management. Function appropriately in operation theater setting as a member of Anaesthesia care team .Examine the patient preoperatively in an organized and appropriate manner. Formulate a plan for Anaesthetic management of routine surgical procedure. Knows the indications and interpretations of standard intraoperative monitors. Describe the drugs used in Anaesthesia practice. Demonstrate the basics of airway management. Describe the techniques of regional blocks i-e subarachnoid and epidural. Describe the basic principles of blood transfusion and its complications. Formulate a plan for perioperative fluid management. Recognize the complications in post-operative period.

### Topics

Management of general Anesthesia/  
Pre Anesthesia Assessment  
Anesthetic drugs  
Local Anesthetics and Regional Anesthetic Technique  
Intraoperative Monitoring  
Airway assessment and its Management /practicing endotracheal intubation in simulation lab  
Blood transfusion and complications  
Perioperative Fluid Management

### Learning Outcomes

- Describe the Anaesthetic drugs including intravenous induction agents, inhalational induction agents, muscle relaxants, benzodiazepines, opioids, reversing agents with special attention to mechanism of action, indications, contraindication and, side effects
- Describe the most common side effects of anaesthetic agents
- Describe intraoperative awareness and management
- Describe Malignant hyperthermia and its management
- Describe succinyle apnea and its management
- Describe the use of succinyle choline in rapid sequence induction technique and in difficult airway
- Describe the technique Regional Anaesthesia i-e subarachnoid block and epidural block.
- List the indications, contraindications, complications of Regional blocks.
- Describe the technique of spinal anaesthesia
- List the complications of regional block and their management
- Describe local anaesthetics with reference to mechanism of action, types, uses, side effects ant toxicity
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- Describe the routine preparations and basic conduct of general and regional Anaesthesia
- Describe the pre anaesthesia assessment with special attention to history, examination, laboratory investigations.
- Describe the ASA physical status classification
- Describe the adult and pediatric patients fasting guidelines

Postoperative Pain Management Post Anesthesia Complications Anesthesia skills /for practicing spinal block	<ul style="list-style-type: none"> <li>• Describe the components of consent</li> <li>• Describe the principles related to perioperative fluid management.</li> <li>• List the different types of colloid and crystalloid solutions ,their perioperative use and significance</li> <li>• Describe the fluid management according to the physical status of the patient.</li> <li>• Describe the perioperative fluid therapy</li> <li>• Describe the principles related to blood transfusion.</li> <li>• Describe massive blood transfusion and complications related to blood transfusion</li> <li>• Describe the component therapy</li> <li>• Describe blood storage/changes occurs in stored blood</li> <li>• Describe the management of massive hemorrhage</li> <li>• Describe the safe blood transfusion guidelines</li> <li>• Describe the alternative blood transfusion strategies for blood transfusion</li> <li>• Outline the physiological effects of postoperative pain, methods of pain assessment, routs of analgesic administration and principles of its management.</li> <li>• List the complications observed in post anaesthesia period and management of these complications</li> <li>• Describe the basic ASA intraoperative monitors i-e</li> <li>• Blood pressure, ECG, ETCO2, SpO2, Temperature, Urine output and significance of each monitor.</li> <li>• Describe the anatomy of airway</li> <li>• Describe the different tests for the Assessment of airway</li> <li>• Describe in detail the equipment used in management of airway i.e. ETT, oropharyngeal airway, nasopharyngeal airway, LMA, face masks, ,stylet, laryngoscope , Ambu bag</li> <li>• Describe the role of cricoid pressure in rapid sequence induction technique</li> <li>• Describe the role of pre-oxygenation</li> <li>• List the causes of difficult airway</li> <li>• List the complications of endotracheal intubation and management</li> <li>• Describe the routine preparations and basic conduct of general and regional Anaesthesia</li> <li>• Show skills of consultation with other physicians and other health care professionals with team work spirit .</li> <li>• Show respect for patient rights and principles of ethics</li> <li>• Demonstrate professional, respectable attitude at hospital with colleagues and staff</li> <li>• Perform evaluation of patient pre operatively with respect to history, examination and laboratory investigations</li> <li>• Preform intubation on mannequins</li> <li>• Perform spinal anaesthesia on mannequins</li> </ul>					
Assessment Tools	<input type="checkbox"/>	%	<input checked="" type="checkbox"/> OSCE	30%	<input checked="" type="checkbox"/> Final Exam	40%
	<input type="checkbox"/> Assignments	%	<input checked="" type="checkbox"/> Continuous Assessment	30%	<input type="checkbox"/> Oral Participations	%
Main Reference	<ul style="list-style-type: none"> <li>▪ 1 .Smith and Aitkenheads Textbook of Anaesthesia 8th edition</li> <li>▪ 2.Clinical Anaesthesiology Morgan &amp; Mikhail’s 5th edition</li> </ul>					
Supporting References	<ul style="list-style-type: none"> <li>▪ The British Journal of Anaesthesia</li> </ul>					

