

# Para-Medical Program

<b>Specialization</b>	التخدير والانعاش
<b>Course Number</b>	020801161
<b>Course Title</b>	علم ادوية التخدير 1
<b>Credit Hours</b>	(3)
<b>Theoretical Hours</b>	(2)
<b>Practical Hours</b>	(3)

**Course description:**

This course provides the anesthesia assistant technician student with basic information regarding the anesthetic drugs starting from a brief historical back ground then defining the drugs, their pharmacokinetics and pharmacodynamics. It also touches the various groups of anesthetics, their mechanism of action and their side effects and the role of the anesthesia assistant technician in the process of medication administration. It also provides the anesthesia assistant technician student with basic information regarding the anesthetic drugs given pre, intra and postoperatively. It explains why such drugs are given and their mode of actions plus their side effects. It also clarifies the role of the anesthesia assistant technician in the process of medication administration..

**Course outline:**

Unit No.	Unit name	Unit Content	Time Needed
1	<b>Introduction</b>	<ul style="list-style-type: none"><li>• Drug name</li><li>• Pharmacokinetics &amp; pharmacodynamics</li><li>• Drug receptor</li><li>• Toxicity and effect on the body system</li><li>• Rout of drug administration</li><li>• Doses and factor affecting dosing of drug</li></ul>	
2	<b>Group 1 anesthetic</b>	<ul style="list-style-type: none"><li>• Intravenous anesthesia:<ul style="list-style-type: none"><li>- Induction agent</li><li>- Maintenance drugs</li></ul></li></ul>	
3	<b>Group 2 anesthetic</b>	<ul style="list-style-type: none"><li>• Inhalation anesthesia:<ul style="list-style-type: none"><li>- Old inhalation anesthesia<ol style="list-style-type: none"><li>1. Ether</li><li>2. Chloroform</li><li>3. Halothan</li></ol></li><li>- new inhalation anesthesia<ol style="list-style-type: none"><li>1. isoflurane</li><li>2. seroflurane</li><li>3. desflurane</li></ol></li></ul></li></ul>	
4	<b>Group 3 anesthetic</b>	<ul style="list-style-type: none"><li>• pre medication drug</li><li>• local anesthesia drug</li><li>• opioids drug<ol style="list-style-type: none"><li>1. natural</li><li>2. synthetic</li></ol></li><li>• muscle relaxant :<ol style="list-style-type: none"><li>1. depolarizing drug</li><li>2. non depolarizing drug</li></ol></li><li>• adjuvant:<ol style="list-style-type: none"><li>1. antacids</li><li>2. antiemetic</li></ol></li></ul>	

**Teaching Methodology:**

Lectures. Group discussion.

**References:**

1. smith and aitkenheads text book of anesthesia by Alan R. , Aiteenheads and Graham smith 2013
2. pharmacology for anesthesia and intensive care by T.E Peck 2014