

# Para-Medical Program

<b>Specialization</b>	التخدير والانعاش
<b>Course Number</b>	020801162
<b>Course Title</b>	علم ادوية التخدير 2
<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 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>Autonomic nervous system</b>	<ul style="list-style-type: none"> <li>• Sympathetic nervous system:               <ol style="list-style-type: none"> <li>1. Neurotransmitters</li> <li>2. receptors</li> <li>3. agonists and antagonists</li> </ol> </li> <li>• paraSympathetic nervous system :               <ol style="list-style-type: none"> <li>1. Neurotransmitters</li> <li>2. receptors</li> <li>3. agonists and antagonists</li> </ol> </li> </ul>	
2	<b>Cardiovascular system</b>	<ul style="list-style-type: none"> <li>• drug used in treatment of heart failure.</li> <li>• Antihypertensive drug:               <ol style="list-style-type: none"> <li>1. Calcium Chanel blocker</li> <li>2. Acting on alpha and beta receptor</li> </ol> </li> <li>• Antiarrythemic drug</li> <li>• Anticoagulants drug:               <ol style="list-style-type: none"> <li>1. Heparin</li> <li>2. Low molecular heparin</li> <li>3. warfarin</li> </ol> </li> </ul>	
3	<b>miscellaneous</b>	<ul style="list-style-type: none"> <li>• diuretics</li> <li>• antidiabetics               <ul style="list-style-type: none"> <li>- injections</li> <li>- oral antihyperglycemic</li> </ul> </li> <li>• antibiotics               <ul style="list-style-type: none"> <li>- 1<sup>st</sup> &amp; 2<sup>nd</sup> &amp; 3<sup>rd</sup> generation</li> <li>- Aminoglycosids</li> <li>- Bacteriostatic</li> <li>- bacteriocidal</li> </ul> </li> </ul>	
4	<b>Medical gases</b>	<ul style="list-style-type: none"> <li>• oxygen</li> <li>• air</li> <li>• nitrous oxide</li> <li>• Co2</li> <li>• Intravenous fluid:               <ol style="list-style-type: none"> <li>1. crystaloids</li> <li>2. colloids</li> <li>3. blood products:                   <ul style="list-style-type: none"> <li>- packed cell</li> <li>- platlets</li> <li>- fresh frozen</li> <li>- cryoprecipitate</li> </ul> </li> </ol> </li> </ul>	

5	<b>addiction</b>	<ul style="list-style-type: none"><li>• physical</li><li>• psychological</li></ul>	
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**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