

## Course Overview

### Pharmacology

<b>Course code :</b>	LMT506
<b>Course title:</b>	Pharmacology
<b>Level/semester:</b>	<b>Fifth Semester</b>
<b>Credit hours:4</b>	<b>Theoretical:3</b>
	<b>Practical: 1</b>

#### 3- Course content:

Course Titles	Content	Hrs
<b>Introduction to pharmacology:</b>	<ol style="list-style-type: none"> <li>1. History .</li> <li>2. Definition, scope and branches of pharmacology.</li> <li>3. Source of drugs</li> <li>4. Routes of administration of drugs.</li> </ol>	4
<b>General pharmacology</b>	Pharmacokinetics: <ol style="list-style-type: none"> <li>1. Absorption of drugs.</li> <li>2. Distribution of drugs</li> <li>3. Biotransformation of drugs</li> <li>4. Excretion of drugs</li> </ol> Pharmacodynamics: <ol style="list-style-type: none"> <li>1. Mechanisms of drug action, Factors modifying the drug action</li> <li>2. Receptors and types of ligands : agonist, antagonist and partial agonist.</li> <li>3. Drug receptors interactions.</li> <li>4. Drug-response relationship.</li> </ol>	6
<b>Drugs acting on autonomic nervous system</b>	<ol style="list-style-type: none"> <li>1. Cholinergic drugs (parasympathomimetics, cholinomimetics, anticholinesterases).</li> <li>2. Anticholinergic drugs.</li> <li>3. Drugs action on autonomic ganglia (ganglionic stimulants, ganglion blocking agents).</li> <li>4. Neuromuscular blocking agents and centrally acting muscle relaxants.</li> <li>5. Sympathomimetics, adrenoceptors blockers.</li> </ol>	8
<b>Chemotherapy:</b>	<ol style="list-style-type: none"> <li>1. Principles of antimicrobial therapy</li> <li>2. Sulfonamides and quinolones</li> <li>3. Cell wall inhibitors</li> <li>4. Protein synthesis inhibitors</li> <li>5. Antimycobacterial drugs</li> <li>6. Antifungal drugs</li> <li>7. Antiviral drugs</li> <li>8. Anticancer</li> </ol>	6

## **Practical /**

1. Introduction to experimental pharmacology and Lab safety..... (1 hour).
2. Sources of drugs.....( 1hour)
3. Routes of drug administration.....(1hour)
4. Dose response curve of carbachol .....(2hours)
5. Effects of drugs on isolated animal tissues .....(2hours)