

## SEMESTER I & II

### LSM3211 FUNDAMENTAL PHARMACOLOGY

**Prerequisite:** LSM2211 or LSM2233

**Workload:** 24 lecture hours + 6 tutorial hours + 12 laboratory hours

**Course description:**

*This module aims to provide basic principles of receptor pharmacology and of pharmacokinetics with emphasis on molecular and cellular mechanisms of action, clinical uses and adverse effects using lectures, tutorials and practicals. The lecture topics will start with the classical drug receptor theory followed by pharmacokinetics and molecular pharmacology of drug receptors and their regulation including receptor-mediated signal transduction and membrane ion channel function. Autonomic pharmacology (adrenergic and cholinergic) will be introduced. The module also focuses on the pharmacology of autacoids, non-steroidal anti-inflammatory agents, corticosteroids, immunosuppressants, anti-asthma drugs, and anti-arthritic drugs.*

S/N	Topics	Lecture hours	
		Semester I	Semester II
1	<b>Introduction to Pharmacology</b>	1 – FW	1 – FW
2	<b>Fundamental Pharmacokinetics</b>	2 – PW	2 – PW
3	<b>Mechanism of Drug Action:</b> Principles of Drug Actions Adverse Effects G Protein-coupled Receptors Nuclear Receptors Transmembrane Receptor Enzymes Cytokine Receptors Ion Channels Vasoactive Peptides	5 – FW 4 – PW	5 – FW 4 – PW
4	<b>Autonomic Pharmacology:</b> Adrenergic & Cholinergic	4-IRI	4 - IRI
5	<b>Inflammation Pharmacology:</b> Anti-histamines NSAIDs Corticosteroids Immunosuppressants Anti-asthma drugs Anti-arthritic drugs	1– PW 5 – FW	1– PW 5– FW
		Total Lectures : 22h Tutorials: 6h Practicals: 3X4= 12h	
<b>Total hours:</b>		40h	

**TEXTBOOK:** **Pharmacology** by HP Rang, MM Dale, JM Ritter & RJ Flower, Churchill Livingstone, 8<sup>th</sup> Edition, 2016

**MODE OF ASSESSMENT:** MCQ/Long Essay (25% CA, 75% Final Examination)

**MODULE CO-ORDINATORS AND LECTURERS:**

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