Basic and Clinical Pharmacology

Course Title	: Basic and Clinical Pharmacology
Course Units	: 3 Credit hours (per semester)
Student level	: 3ed grade students
Course Duration	: 16 weeks (per semester)

Course Overview 1st Semester Topics 2nd Semester Topics

Course Overview

We aim at introducing Medical Pharmacology and Therapeutics through a course of 78 lecture hours (3 credit hours), Practical classes, and problem solving cessions, seminars and case discussion. The objectives are to give specific body knowledge, acquire experimental skills, develop self learning attitude, and improve student's ability to apply knowledge to problem solving and rational drug prescription. The course content includes: general Pharmacology (Pharmacokinetics, Pharmacodynamics and Pharmacotherapeutics), Pharmacology of Autonomic N.S., CNS, CVS, and Pharmacology of almost all other body systems, beside the treatment of infectious diseases and chemotherapy of malignant diseases.

First Semester course (1001310)

week	Lecture Title	Practical
		Sessions(2)
1	General Pharmacology	Sources of drugs
	- introduction	
	- Pharmacokinetics	
	- Pharmacokinetics	
2	General Pharmacology	Forms of drugs
	- Pharmacokinetics	
	- Pharmacokinetics	
	- Pharmacodynamics	
3	General Pharmacology	Routs of drug
	- Pharmacodynamics	administration
	- Pharmacodynamics	
	- Pharmacodynamics	
4	Autonomic Pharmacology	Effect of solubilit
	- Introduction	on drug absorptio
	- Sympathetic	
	- Sympathetic	
5	Autonomic Pharmacology	Effect of rout of
	- Sympathetic	administration on
	- Sympathetic	drug action
	- Sympathetic	
6	Autonomic Pharmacology	Practical results
	- Sympathetic	Discussion
	- Sympathetic	

	- Sympathetic	
7	Autonomic Pharmacology	Effect of drugs on
	- Parasympathetic	rabbit jejunum
	- Parasympathetic	
	- Parasympathetic	
8	Autonomic Pharmacology	Practical results
	- Parasympathetic	Discussion
	- Parasympathetic	
	- Parasympathetic	
9	Autonomic Pharmacology	Rabbit eye
	- Parasympathetic	
	- Eye Pharmacology	
	- Eye Pharmacology and Ganglia	
10	Cardiovascular Pharmacology	Practical results
	- Introduction	Discussion
	- Anti-arrhythmic drugs	
	- Anti-arrhythmic drugs	
11	Cardiovascular Pharmacology	Dose Response
	- Anti-arrhythmic drugs	Curve
	- Anti-anginal drugs	
	- Anti-anginal drugs	
12	Cardiovascular Pharmacology	Practical results
	- Anti-Hypertensive drugs	Discussion
	- Anti-Hypertensive drugs	
	- Anti-Hypertensive drugs	
13	Cardiovascular Pharmacology	tutorial
	- Heart Failure and Management	
	- Heart Failure and Management	

	- Heart Failure and Management	
14	Autacoids	Effect of histamine
	- Histamine and anti-histaminics	and anti-histaminics
	- 5-HT and other amines	on guinea pig ileum
	- Ecosanoides	
15	Respiratory system	Practical results
	- Bronchial Asthma	Discussion
	- Bronchial Asthma	
	- Expectorants	
16	Respiratory system	tutorial
	- Mucolytics	
	Treatment of anaphylactic shock and allergy	
17	Gastro Intestinal System	tutorial
	- Acid-Peptic Disease	
	- Peptic ulcer	
	- Anti-Emetics	

Second Semester course (1001310)

week	Lecture Title	Practical
		Sessions(2)
1	Endocrine Pharmacology	Introduction to
	- introduction	problem based ca
	- Pituitary hormones	study
	- Thyroid hormones	
2	Endocrine Pharmacology	Rational drug use
	- Anti-thyroid	
	- Adrenocortical hormones	
	- Adrenocortical hormones	
3	Endocrine Pharmacology	Rational drug use
	- Pancreatic hormones	
	- D M1	
	- D M2	
4	Central Nervous System	Bronchial Asthma
	- Introduction and	
	- Central transmitters	
	- Sedatives	
5	Central Nervous System	Discussion
	- CNS depressants	
	- Hypnotics	
	- Hypnotics	
6	Central Nervous System	Peptic Ulcer
	- Sedatives	

	- Anti psychotics	
	- Anti psychotics	
7	Central Nervous System	Discussion
	- Anti depressants	
	- Anti depressants	
	- Parkinson's	
8	Central Nervous System	Hypertension
	- Parkinson's Disease	
	- Epilepsy	
	- Epilepsy	
9	Central Nervous System	Discussion
	- NSAIDs	
	- NSAIDs and gout	
	- Narcotic analgesic	
10	Chemotherapy	Heart Failure
	- Introduction, mechanism of action	
	- mechanism of resistance	
	O_{1}	
	- Classification	
11	- Classification Chemotherapy	Discussion
11	- Classification Chemotherapy - B-Lactam antibiotics	Discussion
11	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics 	Discussion
11	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics Macloloids 	Discussion
11	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics Macloloids 	Discussion Parkinson's Disease
11	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics Macloloids Chemotherapy Aminoglcosides 	Discussion Parkinson's Disease
11	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics Macloloids Chemotherapy Aminoglcosides Tetracycline, chloramph. 	Discussion Parkinson's Disease
11	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics Macloloids Chemotherapy Aminoglcosides Tetracycline, chloramph. Anaerobics 	Discussion Parkinson's Disease
11 12 13	 Classification Chemotherapy B-Lactam antibiotics B-Lactam antibiotics Macloloids Chemotherapy Aminoglcosides Tetracycline, chloramph. Anaerobics Chemotherapy 	Discussion Parkinson's Disease Discussion

	- Sulphonamides	
	- Quinolones	
14	Chemotherapy	Epilepsy
	- T B	
	- T B	
	- Leprosy	
15	Chemotherapy	Discussion
	- Anti protozoal	
	- Anti protozoal	
	- Anti protozoal	
16	Chemotherapy	tutorial
	- Anti fungal	
	- Anti fungal	
	- Anti fungal	
17	Blood	tutorial
	- Anticoagulants	
	- Anaemia	
	- Anaemia	