

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**PHARM.D**  
 4<sup>th</sup> Year

**Subject Name: Pharmacotherapeutics-III**  
**Subject Code: 848801**

**Scope:** This course is designed to impart knowledge and skills necessary for contribution to quality use of medicines. Chapters dealt cover briefly pathophysiology and mostly therapeutics of various diseases. This will enable the student to understand the pathophysiology of common diseases and their management.

**Objectives:** At completion of this subject it is expected that students will be able to –

- understand the pathophysiology of selected disease states and the rationale for drug therapy;
- understand the therapeutic approach to management of these diseases;
- understand the controversies in drug therapy;
- understand the importance of preparation of individualised therapeutic plans based on diagnosis;
- understand needs to identify the patient-specific parameters relevant in initiating drug therapy, and monitoring therapy (including alternatives, time-course of clinical and laboratory indices of therapeutic response and adverse effects);

Teaching Scheme				Evaluation Scheme				Total Marks
Theory	Tutorial	Practical	Total	Theory		Practical		
				External	Internal	External	Internal	
3	1	3	7	70	30	70	30	200

Sr.	Topic	Hr	% Weightage
<b>Etiopathogenesis and pharmacotherapy of diseases associated with following systems/ diseases:</b>			
1.	<b>Gastrointestinal system:</b> Peptic ulcer disease, Gastro Esophageal Reflux Disease, Inflammatory bowel disease, Liver disorders - Alcoholic liver disease, Viral hepatitis including jaundice, and Drug induced liver disorders.	25	30
2.	<b>Haematological system:</b> Anaemias, Venous thromboembolism, Drug induced blood disorders.	15	15
3.	<b>Nervous system:</b> Epilepsy, Parkinsonism, Stroke, Alzheimer's disease,	10	10
4.	<b>Psychiatry disorders:</b> Schizophrenia, Affective disorders, Anxiety disorders, Sleep disorders, Obsessive Compulsive disorders	20	25
5.	Pain management including Pain pathways, neuralgias, headaches	10	10
6.	Evidence Based Medicine	10	10

**Practicals:** Hospital postings for a period of at least 50 hours is required to understand the principles and practice involved in ward round participation and clinical discussion on selection of drug therapy. Students are required to maintain a record of 15 cases observed in the ward and the same should be submitted at the end of the course for evaluation. Each student should present at least two medical cases they have observed and followed in the wards.

**Etiopathogenesis and pharmacotherapy of diseases associated with following systems/ diseases:**  
**Title of the topic**

- 1 **Gastrointestinal system:** Peptic ulcer disease, Gastro Esophageal Reflux Disease, Inflammatory bowel disease, Liver disorders - Alcoholic liver disease, Viral hepatitis including jaundice, and Drug induced liver disorders.
- 2 **Haematological system:** Anaemias, Venous thromboembolism, Drug induced blood disorders.
- 3 **Nervous system:** Epilepsy, Parkinsonism, Stroke, Alzheimer's disease,
- 4 **Psychiatry disorders:** Schizophrenia, Affective disorders, Anxiety disorders, Sleep disorders, Obsessive Compulsive disorders
- 5 Pain management including Pain pathways, neuralgias, headaches.
- 6 Evidence Based Medicine

**Reference books :**

1. Clinical Pharmacy and Therapeutics - Roger and Walker, Churchill Livingstone publication, Latest Edition
2. Pharmacotherapy: A Pathophysiologic approach - Joseph T. Dipiro et al. Appleton & Lange, Latest Edition
3. Pathologic basis of disease - Robins SL, W.B.Saunders publication, Latest Edition
4. Pathology and therapeutics for Pharmacists: A Basis for Clinical Pharmacy Practice - Green and Harris, Chapman and Hall publication, Latest Edition
5. Clinical Pharmacy and Therapeutics - Eric T. Herfindal, Williams and Wilkins Publication, Latest Edition
6. Applied Therapeutics: The clinical Use of Drugs. Lloyd Young and Koda-Kimble MA, Latest Edition
7. Avery's Drug Treatment, Latest Edition, Adis International Limited
8. Relevant review articles from recent medical and pharmaceutical literature

**Assignments:** Students are required to submit written assignments on the topics given to them. Topics allotted should cover recent developments in drug therapy of various diseases. A minimum of THREE assignments [1500 – 2000 words] should be submitted for evaluation.

**Format of the assignment:** 1. Minimum & Maximum number of pages 2. Reference(s) shall be included at the end. 3. Assignment can be a combined presentation at the end of the academic year 4. It shall be computer draft copy 5. Name and signature of the student 6. Time allocated for presentation may be 8+2 Min.

<b>Scheme of Practical Examination :</b>		<b>Annual</b>
<b>Sessionals</b>		
Synopsis	05	15
Major Experiment	10	25
Minor Experiment	03	15
Viva	02	15
<b>Max Marks</b>	<b>20</b>	<b>70</b>
<b>Duration</b>	<b>03hrs</b>	<b>04hrs</b>