

Gujarat Technological University

M. Pharm. Syllabus

Semester I

Paper Code 910106

CLINICAL PHARMACY SPECIALISATION

CLINICAL PHARMACY PRACTICE

Theory

(Four hours per week, 6 Credits)

Course Content:		Hours
1	Definitions, development and scope of clinical pharmacy	02
2	Pharmaceutical care concept	02
3	Role of clinical Pharmacist in the health care system	02
4	Routine activities of clinical Pharmacist	
	a) Drug Therapy monitoring: Medication chart review, Clinical review, Pharmacist interventions.	
	b) Ward round participation	
	c) Recording of Medical History	
	d) Adverse drug reaction monitoring	
	e) Communication skills including patient counseling techniques	
	f) Drug utilization evaluation and review	
5	Quality assurance of clinical pharmacy services	02
6	Concept of essential drugs and rational drug usage	04
7	Self-medication and non-prescription drug usage	02
8	Prescription monitoring and medication errors	03
9	Patient Compliance	02
10	Interpretation of clinical laboratory tests	08
	Hematological, liver function, renal function, thyroid function tests	
	Tests associated with cardiac disorders	
	Fluid and electrolyte balance	
	Micorbiological culture sensitivity tests	
	Pulmonary function tests	
11	Patient data analysis and Case presentation	02
12	Drug induced diseases	02
13	Drug interactions	05
	Documentation and other methods for minimizing clinically relevant drug interactions	
14	Pharmacovigilance	07
	Scope, definition and aims of pharmacovigilance	
	Adverse drug reactions – Classification, mechanism, predisposing factors and causality assessment.	
	Role of clinical pharmacist in Reporting, evaluation, monitoring, prevention and management of ADR	
15	Pharmacoeconomics	07
	Definition, history, needs of pharmacoeconomic evaluations	
	Outcome assessment and types of phamacoeconomic evaluations: cost-minimization, cost-benefit, cost-effectiveness, cost utility.	
	Applications of pharmacoeconomics: case study	
16	Critical evaluation of biomedical literature	02

**CLINICAL PHARMACY PRACTICE
PRACTICAL
(Four hours per week, 6 Credits)**

In order to gain practice in clinical setting, students have to undergo compulsory postings in clinical settings, utilizing prior understanding and knowledge attained in identifying and resolving the pharmaceutical care issues.

It is mandatory that each student has to complete and maintain a record of at least 15 case studies based on the following theory topics;

*Patient medication history interview

Case studies related to laboratory investigations (Haematological, Bio-chemical, Pathological and Diagnostic Tests)

Patient medication counseling

Pharmacoeconomics : case study

Pharmacovigilance : case study

Medication and administration record review

ADR/Medication error identification and documentation

Assignments

The students are required to submit a minimum of two written assignments selected from the topics given to them.

Reference Books:

- 1 Ronald D. Mann, Elizabeth B. Andrews. Pharmacovigilance. John Wiley & Sons Ltd, 2002
- 2 Text Book of Therapeutics: Drug and Disease Management. 7th Edition. Editors: Eric T. Herfindal and Dick R. Gourley, Williams and Wilkins
- 3 Clinical Pharmacy and Therapeutics. Roger Walker and Clive Edwards, Churchill Livingstone publication
- 4 Applied Therapeutics: The Clinical Use of Drugs Eds. Brian S.Katcher, Lloyd Yee Young, Marry Anne Koda-Kimble, Applied Therapeutics Inc. Spokane. Latest Edition.
- 5 Practice Standards and Definitions – The Society of Hospital Pharmacists of Australia.
- 6 Basic Skills in interpreting laboratory data – Scott LT, American Society of Health System Pharmacists Inc.
- 7 Biopharmaceutics and Applied Pharmacokinetics – Leon Shargel, Prentice Hall Publication.
- 8 A textbook of Clinical Pharmacy Practice; Essential concepts and skills, Dr. G. Parthasarathi et al.
- 9 Australian drug information- Procedure manual. The Society of Hospital Pharmacists of Australia.
- 10 Textbook of Medical laboratory Technology. Praful B. Godkar, Darshan P.Godkar, Bhalani Publication House, Mumbai. 2nd edition.
- 11 Clinical Pharmacokinetics- Rowland Tozer, Williams and Wilkins Publication.
- 12 Pharmaceutical Statistics. Practical and clinical applications. Sanford Bolton, Marcel Dekker Inc.
- 13 Drug Interaction Facts, 2003. David S. Tatro.
- 14 Hand Book of Pharmacy Health Care. The Pharmaceutical Press
- 15 Manual of basis techniques for a health laboratory, 2nd edition, World Health Organization, Geneva.