



SILVER OAK UNIVERSITY

Silver Oak College of Pharmacy (067)

Programme Name: D. Pharm (18)

Subject Name: Pharmacotherapeutics

Subject Code: 1180672204

Year: II

Prerequisite:

1. This course is designed to impart basic knowledge on etiopathogenesis of common diseases and their management along with quality use of medicines

Objective: Upon completion of the course student shall be able to

1. Etiopathogenesis of selected common diseases and evidence-based medicine therapy
2. Importance of individualized therapeutic plans based on diagnosis
3. Basic methods for assessing the clinical outcomes of drug therapy

Teaching Scheme				
L	T	P	Contact Hours	Credit
4	1	1	6	6

Content:

Unit No.	Contents	Teaching Hours	Weightage %
1	Pharmacotherapeutics – Introduction, scope and objectives. Rational use of Medicines, Evidence Based Medicine, Essential Medicines List, Standard Treatment Guidelines (STGs)	10	13
2	Definition, etiopathogenesis, clinical manifestations, non-pharmacological and pharmacological management of the diseases associated with		
	(a) Cardiovascular System <ul style="list-style-type: none"> • Hypertension • Angina and Myocardial infarction • Hyperlipidaemia • Congestive Heart Failure 	8	11
	(b) Respiratory System <ul style="list-style-type: none"> • Asthma • COPD 	4	5
	(c) Endocrine System <ul style="list-style-type: none"> • Diabetes • Thyroid disorders- Hypo and Hyperthyroidism 	5	6
	(d) Central Nervous System <ul style="list-style-type: none"> • Epilepsy • Parkinson's disease 	8	11

<ul style="list-style-type: none"> • Alzheimer's disease • Stroke • Migraine 		
<p>(e) Gastro Intestinal Disorders</p> <ul style="list-style-type: none"> • Gastro oesophageal reflux disease • Peptic Ulcer Disease • Alcoholic liver disease • Inflammatory Bowel Diseases (Crohn's Disease and Ulcerative Colitis) 	8	11
<p>(f) Haematological disorders</p> <ul style="list-style-type: none"> • Iron deficiency anaemia • Megaloblastic anaemia 	4	4
<p>(g) Infectious diseases</p> <ul style="list-style-type: none"> • Tuberculosis • Pneumonia • Urinary tract infections • Hepatitis • Gonorrhoea and Syphilis • Malaria • HIV and Opportunistic infections • Viral Infections (SARS, CoV2) 	12	16
<p>(h) Musculoskeletal disorders</p> <ul style="list-style-type: none"> • Rheumatoid arthritis • Osteoarthritis 	3	4
<p>(i) Dermatology</p> <ul style="list-style-type: none"> • Psoriasis • Scabies • Eczema 	3	4
<p>(j) Psychiatric Disorders</p> <ul style="list-style-type: none"> • Depression • Anxiety • Psychosis 	4	4
<p>(k) Ophthalmology</p> <ul style="list-style-type: none"> • Conjunctivitis (bacterial and viral) • Glaucoma 	2	3
<p>(l) Anti-microbial Resistance</p>	2	3
<p>(m) Women's Health</p> <ul style="list-style-type: none"> • Polycystic Ovary Syndrome • Dysmenorrhea 	4	5

Course Outcome:

Sr. No.	CO statement
CO-1	Help assessing the subjective and objective parameters of patients in common disease conditions
CO-2	Assist other healthcare providers to analyse drug related problems and provide therapeutic interventions
CO-3	Participate in planning the rational medicine therapy for common diseases
CO-4	Design and deliver discharge counselling for patients

Teaching & Learning Methodology: -

The various methods or tools follows by the faculties to teach the above subject are:

1. Student-centred learning.
2. Experiential learning.
3. Power Point Presentation

List of Tutorials/Experiments:

Students will perform following Experiments OR

The students will have to solve at least five examples and related theory from each topic as an assignment/tutorial.

I. Preparation and discussion of SOAP (Subjective, Objective, Assessment and Plan) notes for at least SIX clinical cases (real / hypothetical) of the following disease conditions.

1. Hypertension
2. Angina Pectoris
3. Myocardial Infarction
4. Hyperlipidaemia
5. Rheumatoid arthritis
6. Asthma
7. COPD
8. Diabetes
9. Epilepsy
10. Stroke
11. Depression
12. Tuberculosis
13. Anaemia (any one type as covered in theory)
14. Viral infection (any one type as covered in theory)
15. Dermatological conditions (any one condition as covered in theory)

II. Patient counselling exercises using role plays based on the real / hypothetical clinical case scenarios. The students are expected to provide counselling on disease condition, medications, life-style modifications, monitoring parameters, etc. and the same shall be documented. (Minimum 5 cases)

III. Simulated cases to enable dose calculation of selected drugs in paediatrics, and geriatrics

under various pathological conditions. (Minimum 4 cases)

Books Recommended: - (minimum 3 books)

1. Rang H. P., Dale M. M., Ritter J. M., Flower R. J., Rang and Dale's Pharmacology, Churchill Livingstone Elsevier
2. Katzung B. G., Masters S. B., Trevor A. J., Basic and clinical pharmacology, Tata Mc Graw-Hill
3. Goodman and Gilman's, The Pharmacological Basis of Therapeutics 4. Marry Anne K. K., Lloyd Yee Y., Brian K. A., Robbin L.C., Joseph G. B., Wayne A. K., Bradley R.W., Applied Therapeutics, The Clinical use of Drugs, The Point Lippincott Williams & Wilkin
4. Vinay Kumar, Abul K. Abas, Jon C. Aster; Robbins & Cotran Pathologic Basis of Disease; South Asia edition; India; Elsevier; 2014.
5. Harsh Mohan; Text book of Pathology; 6 th edition; India; Jaypee Publications; 2010.
6. Laurence B, Bruce C, Bjorn K. ; Goodman Gilman's The Pharmacological Basis of Therapeutics; 12 th edition; New York; McGraw-Hill; 2011.
7. Best, Charles Herbert 1899-1978; Taylor, Norman Burke 1885-1972; West, John B (John Burnard); Best and Taylor's Physiological basis of medical practice; 12th ed; united states;

Open-Source Software/learning website:

- <http://silveroakuni.ac.in/video-lecture>
- <https://nptel.ac.in/>
- <https://nptel.ac.in/courses/112/105/112105124/>