

**Course title:****Integrated Therapeutics II**

Course code:

Phar4162

Course ECTS: 7 ECTS (189 hours)

- Lecture: 64 hours
- Ward attachment : 30 hours
- Tutorial: 32 hours
- Home study: 43 hours
  - Project work/presentation : 12 hours
  - Assessment : 8 hours

Contact hours/ week:

- 9 cr.hrs/week

Pre-requisite if any:

Integrated Therapeutics I

Course description:

This course is a continuation of Integrated therapeutics-I. The purpose of this course is to provide didactic framework for the therapeutic management of a number of common diseases, including renal diseases, cardiovascular diseases, pulmonary diseases, musculoskeletal diseases, and Eye and ENT. With a thorough background established in physiology, pharmacology, pharmacokinetics and other courses in the curriculum, the goal of this course is to prepare students to develop rational drug therapy plans for patients, identify conditions for monitoring pharmacotherapy in patients, and identify conditions associated with these common diseases that require referral.

Course objectives:

After completion of this course, students will be able to explain, practice and choose appropriate treatment strategies for cardiovascular, respiratory, musculoskeletal, and eye and ENT diseases so as to improve patient outcomes.

**Specific Objectives**

To meet this objective students will:

- Describe the pathophysiologic processes underlying the diseases
- Analyze and interpret diagnostic findings
- Recommend appropriate treatment regimen
- Provide follow up and monitor outcome

Delivery mode/methodology:

During this course the following mode of teaching can be used:

- Illustrated lectures and group discussions
- Individual and group exercise and assignments
- Role plays and case studies
- Simulation
- Audiovisuals
- Clinical scenarios
- Tutorials
- Demonstration
- Hospital attachment

Assessment mechanisms:

Continuous assessment & summative assessment

- Test: 10%
- Quizzes: 15%
- Seminar presentations: 10%
- Case presentations: 10%
- Journal club presentation: 5%
- Assignments (5%)
- Pharmacy Patient profile (5 %)
- Final Exam (40%)

References:

Your Reading Materials for the Course:

1. Dipiro JT, Talbert RL, Yee GC, et.al. Pharmacotherapy, a Pathophysiologic Approach. 7<sup>th</sup> or later edition.
2. A Practical Guide to Pharmaceutical Care, American Pharmacists Association, 3<sup>rd</sup> edition.
3. Koda - Kimble MA, Young LY , Kradjan WA, et.al. Applied Therapeutics, The Clinical Use of Drugs. 9<sup>th</sup> or later edition.
4. Walker R and Edwards C. Clinical Pharmacy and Therapeutics. 3<sup>rd</sup> or later edition.
5. Atkinson A, Daniels C, Dedrick R, et.al. Principles of Clinical Pharmacology. 1<sup>st</sup> or later edition.
6. Kasper, Braunwald, et al. Harrison's Principles of Internal Medicine, 16<sup>th</sup> or later edition
7. Tierney, McPhee, Papadakis. Current Medical Diagnosis and Treatment 2008 or later edition

8. Conn's Current therapy 2008
9. Washington Manual of Medical Therapeutics 32<sup>nd</sup> edition
10. Jacobs & DeMott Laboratory Test Handbook, 5th edition
11. Handouts including copies of PowerPoint slides from lectures
12. Guidelines and articles as specified by the instructor

### Course Outline

Week #	Lect. #	Topics	Reading Material
1	1	Renal disorders Pharmacotherapy: Acute Renal failure	Reference No. 1,3
	2	Renal disorders Pharmacotherapy: Chronic Renal Failure	Reference No. 1, 3
2	3	Renal disorders Pharmacotherapy: Drug induced Renal Disease	Reference No. 1, 3
	4	Renal disorders Pharmacotherapy: Glomerulonephritis	Reference No. 1, 3,6
3	5	Renal disorders Pharmacotherapy: Acid-base disorders	
	6	Renal disorders Pharmacotherapy: Disorders of fluid and electrolyte homeostasis	
		Renal disorders Pharmacotherapy: Hemodialysis and peritoneal dialysis	Reference No.1, 3
4	7	Case studies on acute renal failure, chronic renal failure, drug induced kidney disease , glomerulonephritis, acid-base disorders and Disorders of fluid and electrolyte homeostasis	Reference 1,3, 6
	8	Cardiovascular disorders Pharmacotherapy: Cardiovascular testing	Reference No. 1, 3, 6
5	9	Cardiovascular disorders Pharmacotherapy: Cardiopulmonary Resuscitation	
	10	Cardiovascular disorders Pharmacotherapy: Hypertension	
6	11	Cardiovascular disorders Pharmacotherapy: Heart failure	
	12	Cardiovascular disorders Pharmacotherapy: Acute coronary syndromes	
7	13	Cardiovascular disorders Pharmacotherapy: Acute coronary syndromes	

	14	Cardiovascular disorders Pharmacotherapy: Coronary heart disease	
8	15	Cardiovascular disorders Pharmacotherapy: Cardiac arrhythmia	
	16	Cardiovascular disorders Pharmacotherapy: VTE	
9	17	Cardiovascular disorders Pharmacotherapy: Hyperlipidemia	
	18	Cardiovascular disorders Pharmacotherapy: peripheral Arterial Disease	
10	19	Cardiovascular disorders Pharmacotherapy: Stroke	
		50% continuous assessment report	
	20	Cardiovascular disorders Pharmacotherapy: Shock	Reference No. 1, 3, 5
		Case studies on selected cardiovascular disorders Pharmacotherapy	
11	21	Respiratory disorders Pharmacotherapy: Asthma	
	22	Respiratory disorders Pharmacotherapy: COPD	
	23	Respiratory disorders Pharmacotherapy: ARDs & Neonatal Respiratory distress syndrome	Reference No. 1, 3, 6
12		Respiratory disorders Pharmacotherapy: Drug-induced pulmonary diseases and Cystic fibrosis	
	24	Case studies on Asthma, COPD	
13	25	Musculoskeletal disorders Pharmacotherapy: Osteoporosis/osteomalacia	
	26	Musculoskeletal disorders Pharmacotherapy: Osteoarthritis	
14	27	Musculoskeletal disorders Pharmacotherapy: Rheumatoid Arthritis	
	28	Musculoskeletal disorders Pharmacotherapy: Gout and Hyperuricemia	
15	29	Eye & ENT disorders Pharmacotherapy: Glaucoma	
	30	Eye & ENT disorders Pharmacotherapy: Allergic Rhinitis	