

	Subject Name	Chapters	References
1	Advance Physiology	<ul style="list-style-type: none"> • Muscle contraction • Adaptation • Renal system • Respiratory system • Cardiovascular system 	<p>Guyton and Hall. Textbook of .Medical Physiology</p> <ul style="list-style-type: none"> •Ganong's Review of Medical Physiology, 23rd Edition •Vander's Human Physiology
2	Advance Systemic Toxicology 2	<ul style="list-style-type: none"> • blood toxicity • Nephrotoxicity • CNS toxicity • Hepatotoxicity 	Casarett & Doull's Toxicology: the Basic Science of Poisons, 9th
3	Advance Pharmacology 2	<ul style="list-style-type: none"> • Molecular mechanisms in drug resistance. • Protein phosphatase as therapeutic targets for cancer and Alzheimer disease. • PPAR-γ pathway and development of new drugs • New approaches and strategies in pharmacotherapy. • Drug abuse and dependence 	<p>Goodman and Gilman's The Pharmacological Basis of Therapeutics, 14th Edition</p> <p>Rang & Dale's Pharmacology 10th Edition</p>
4	Mechanistic Toxicology 1	<ul style="list-style-type: none"> • apoptosis • Role of Ca in cell death • Role of transporter in cell death • Role of mitochondria in cell death 	Casarett & Doull's Toxicology: the Basic Science of Poisons, 9th
5	Molecular pharmacology I	<ul style="list-style-type: none"> • Introduction to receptors • G-protein coupled receptors • Tyrosine kinase receptors • Nuclear receptors 	<p>Goodman and Gilman's The Pharmacological Basis of Therapeutics, 14th Edition</p> <p>Rang & Dale's Pharmacology 10th Edition</p>

	Subject Name	Chapters	References
6	Advanced Biopharmaceutics and Pharmacokinetics (مشارك مع الصيدلانيات)	Physiologic Factors Related to Drug Absorption:	<ul style="list-style-type: none"> Reference: Applied Biopharmaceutics & Pharmacokinetics ,Seventh Edition ,EDITORS ,Leon Shargel, PhD, RPh, Andrew B.C. Yu, PhD, RPh, Chapter 14

	Subject Name	Chapters	References
7	Pathophysiology II (مشارك مع العلوم المختبرية)	Definitions and divisions of pathology, The nature and cause of disease, Pathophysiology of cardiovascular disorders, Pathophysiology and diseases of the respiratory system, Pathophysiology & Diseases of the digestive tract, Pathophysiology of hypersensitivity & autoimmune disease, Pathophysiology & diseases of the neurologic system, Pathophysiology of urinary system disorders, Pathophysiology of Endocrine disorders, Pathophysiology of Diseases of the male and female reproductive tracts, Disorders of the musculoskeletal system.	Reference: The Biologic Basis for Disease in Adults And Children by :Kathryn L. McCance, Sue E. Huether 8th edition.