



Course Detailed Description – Procedures of the Course Plan Committee /Faculty of Pharmacy

QF02/0408–1.0

Department	Pharmacy
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Course Name	Clinical Toxicology	Course No.	201553
Prerequisite	(201434) Toxicology	Credit Hours	3
Number & date of course plan approval		Brief Description	See form QF02/0409

Intended Learning Outcomes	At the end of this course, the student should be able to: 1. know mechanisms of toxicity for common drugs, chemicals and household products in humans 2. know the mechanism of action of poison treatments. 3. differentiate poisonings by clinical presentation. 4. select appropriate laboratory tests to determine the identity and severity of poisoning. 5. properly counsel patients in order to prevent poisoning.		
Course Topics	1.The Pharmacology of Human Poisonings 2.The General Management of the Poisoned Patient 3. Antidotes 4. Reproductive and Perinatal Toxicology 5.The clinical basis of drug toxicity 6.The clinical basis of plant toxicity 7.The clinical basis of radiation toxicity		
Text Books	Goldfrank's Toxicologic Emergencies, 8th Edition / Editors: Flomenbaum, Neal E.; Goldfrank, Lewis R.; Hoffman, Robert S.; Howland, Mary Ann; Lewin, Neal A.; Nelson, Lewis S. / 2006 McGraw-Hill		
References	Color Atlas of Human Poisoning / James Diaz / Published in 2006 by CRC Press Taylor & Francis Group		
Grade Determination	1 st Exam = 25% 2 nd Exam = 25% Final Exam = 50%	<input type="checkbox"/> Practical Course Grade Determination	Course Work = 50% (Reports, Term Papers, Quizes) Final Exam = 50%

Course Outline				
Week	Hours	Subjects	Chapters in Textbook	Notes
1	1 1 1	The Pharmacology of Human Poisonings: -Definitions -Absorption, Distribution, Metabolism, & Excretion -Poisoning in the elderly & Poisoning in children	9	
2	1 1 1	The General Management of the Poisoned Patient: -Preventing GI absorption of the toxin -Preventing GI absorption of the toxin -Enhancing elimination of the toxin	4	
3	1 1 1	Physical, Diagnostic, and Laboratory Evaluation of the Poisoned Patient -Physical assessment of the poisoned patient -Laboratory assessment of the poisoned patient -Radiographic evaluation	6	
4	1 1 1	Antidotes -Toxidromes and antidotes -Specific antidotes, Nonspecific antidotes, Metal chelators -Antivenins and antitoxins, Specific antagonists, Vitamins	8	
5	1 1 1	Poisonings with Over-the-Counter and Opioid Analgesics: -Acetaminophen (APAP) vs. aspirin (ASA) -Nonsteroidal anti-inflammatory drugs -Opioids	34 - 38	
6	1 1 1	Poisonings with Pharmaceutical Additives: -Glycols, Benzyl alcohol, Phenol - Bromides, Chlorobutanol, Thimerosal -Benzalkonium chloride, Parabens	53	
7	1 1 1	Poisonings with Vitamins, Minerals, Herbal Agents: -Toxicology of herbal poisonings -Toxicology of fat soluble vitamin poisonings -Toxicology of water soluble vitamin poisonings	39, 41, 43	
8	1 1 1	Reproductive and Perinatal Toxicology: -Toxins affecting fertility, potency, gestation -Specific poisonings in pregnancy -Substance abuse in pregnancy	30	



9	1 1 1	Poisonings with Analgesic Adjuvants, Psychotropics, Sedative-Hypnotics: -Caffeine, Ergotamines, Cyclic antidepressants -Monoamine oxidase inhibitors, Neuroleptics -Lithium Anticonvulsants, Sedative-hypnotics	47, 68, 69	
10	1 1 1	Poisonings with Illicit Substances: -Cocaine -Amphetamines, Phencyclidine (PCP) -Lysergic acid diethylamide (LSD), Marijuana	73, 74	
11	1 1 1	Poisonings with Cardiovascular Medications: -Cardiac glycosides -Beta-blockers, Calcium channel blockers -Sympatholytics, Diuretics, Vasodilators, Angiotensin blockers	58, 59	
12	1 1 1	Poisonings with Commonly Prescribed Drugs: -Antibiotics -Hypoglycemics -Cancer Chemotherapeutics	54, 48, 52	
13	1 1 1	Food Poisonings -Introduction, Clinical manifestations, Etiologic agents -Bacterial diseases -Viral diseases, Protozoal diseases	45	
14	1 1 1	Mushroom Poisonings -Cyclopeptide-containing mushrooms, Monomethylhydrazine-containing mushrooms, Muscarine-containing mushrooms -Coprine-containing mushrooms, Ibotenic acid–muscimol-containing mushrooms, Psilocybin-containing mushrooms -Orellanine-containing mushrooms, Miscellaneous gastrointestinal toxin-containing mushrooms	114	
15	1 1 1	Poisonous Plants: -Cardiovascular toxicity, Neurotoxicity group -Hepatotoxicity group, Cyanogenic group -Gastrointestinal toxicity, Dermatotoxicity group	114	
16	1 1 1	Radiation Toxicology: -Types of radiation, Units of measure, Sources -Preparing for arrival of victims, Diagnosis, External & Internal contamination -Whole body radiation/acute radiation syndrome (ARS)	128	



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Approved by Dept. Chair		Date of Approval	
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Extra Information: (Updated every semester and filled by course instructor)

Course Instructor	Dr. Suhair Hikmat
Office No.	
Extension	
Email	
Office hours	