

TOXICOLOGY PHL 471 (2 + 0)

Prerequisite: PHL 451

Course Description:

The course includes the study of the mechanism(s) of toxicity of the drugs commonly used, the commonly encountered chemicals, radiation and radioactive materials and drugs affecting maternal, foetal and neonatal health. Signs and symptoms of toxicity and managements of the cases are stressed.

Course Contents:

Hours

I. General Principles of Toxicology:	5
- Toxicity, hazard, risk.	
- Branches of toxicology:	
- Occupational, Environmental, Ecotoxicology, Analytical and Clinical.	
- Types of exposure and toxic responses	
- Spectrum of toxicity.	
- Evaluation of safety of chemicals and drugs.	
II. Prevention and Management of Poisoning:	5
- Poisoning episodes:	
- Accidental, Suicidal, Homicidal, Non-accidental	
- Prevention of poisoning:	
- Management of Poisoning:	
- Maintenance of vital functions	
- Antidotes: non-specific & specific	
- Prevention of absorption of poisons	
- Enhanced elimination of poisons	
- Supportive management;	
III. Poisoning with Common Drugs:	7
- Selected OTC Products:	
- Aspirin, Paracetamol, Iron	
- CNS Depressants: Barbiturates, Benzodiazepines:	
- CNS Stimulants: Amphetamine & Cocaine	

IV. Poisoning with Common Chemicals:	6
- Household Toxicants:	
- Solvents, corrosives, gases, cleaning agents (soaps, detergents, bleachs, ammonia solution).	
- Pesticides:	
- Halogenated & cholinesterase inhibitor insecticides	
- Rodenticides	
- Herbicides	
- Fungicides	
- Common Heavy Metals and Chelators:	
V. Teratogenic and Other Toxic Effects of Drugs and Chemicals on Reproduction:	2
- Possible site of action of teratogens:	
- Effects on father, mother, feto-placental unit and fetus.	
- Principles of teratology as applied to man:	
- Stages of pregnancy, Drug dosage, placental transfer, use of drugs during pregnancy.	
VI. Radiation and Radioactive Material Toxicity:	1
EXAMINATION:	2
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	Total Hours: 28
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