

SEMESTER I
LSM4211 TOXICOLOGY

Prerequisite: LSM3211 or LSM3221

Workload: 26 lecture hours + 16 PBL hours + 4 Revision hours

Toxicology is the study of the adverse effects of chemicals on humans. This introductory course will cover the basics of toxicological science, from molecular mechanisms to quantitative risk assessment of hazardous compounds and for extrapolation from animal data to humans. The important concepts of toxicology will be illustrated with examples including drugs, natural toxins, industrial chemicals, and environmental toxicants.

S/N	Topics	Lecture hours
L1	Introduction	2 DRH
L2	Mechanistic Toxicology	2 JS
L3	Toxicokinetics	2 SM
L4	Organ directed toxicity: Neurotoxicity and renal toxicity	2 SM
L5	Risk assessments	2 VS/RR
L6	Organ directed toxicity: Hepatotoxicity and cardiovascular toxicity	2 RRS
L7	Organ directed toxicity: Pulmonary toxicity and immunotoxicity	2 DRH
L8	Organ directed toxicity: Toxicity of sensory and reproductive systems	1 DRH 1 IRI
L9	Non-organ directed toxicity	2 DRH
L10	Toxic agents: Pesticides and metals	2 JS
L11	Toxic agents: Solvents/vapors and radiation	2 JS
L12	Toxic agents: Plant and animal toxins	2 DRH
L13	Environmental toxicology	2 SWJ
L14	Applications of toxicology	1 VS 1 RR
Total Lectures: 28 h Revisions: 4 h Problem-based Learning: 16 h		
Total hours:		48 h

MODE OF ASSESSMENT: CA/PBL 40 %; Final Exam 60 %

MODULE CO-ORDINATOR:

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