



Course Description for General Toxicology Second Semester (Theory)

Performance Review of Higher Education Institution ((Academic Program Review))

Course Description:

This course description provides a summary of the main characteristics of the course and the learning outcomes expected from the student to achieve, demonstrating whether they have made the maximum use of the available learning opportunities. It must be linked to the program description

1. Educational Institution	Al-Zahrawi University - Ministry of Higher Education and Scientific Research
2. University Department / Center	College of Pharmacy
3. Course Name / Code	General Toxicology (Theory)
4. Programs in which it is included	Bachelor of Science in Pharmacy
5. Available Forms of Attendance	Daily Attendance
6. Semester / Year	Second Semester/forth stage / 2025 – 2026
7. Total Number of Study Hours	2 hours per week
8. Date of preparing this description	7/4/2026
9. Course Objectives:	
	• Study the principle of exposure to different chemical and environmental agents, their sources, mechanisms of toxicity, and the dangers they pose to humans. • Enable students to understand the necessary measures to protect living organisms from suspected toxic hazards.
10. Learning Outcomes, Teaching and Learning Methods, and Evaluation	

A. Knowledge and Understanding

- A.1: The student should be able to identify the different mechanisms of poisoning that occur in the human body.
- A.2: The student should describe the relationship between the toxic substance and the human body.
- A.3: The student should recognize the degree and severity of toxicity and the lethal dose (LD50).
- A.4: The student should explain the kinetics and dynamics of the toxic substance.
- A.5: The student should distinguish between the different methods of eliminating the toxic substance.
- A.6: The student should deduce the outcome of using the antidote (Anti-dote)

B. Subject-Specific Skills

- B.1: Teaching skills in the field of toxicology.
- B.2: The ability to explain the differences between toxins and various drugs in both written and oral forms.
- B.3: The ability to link natural causes to their effects.

Teaching and Learning Methods

- Discussion and thinking style.
- Scientific tests used in laboratories.
- Learning through exploratory lectures

C. Evaluation Methods

- Submission of weekly reports.
- Examination grades.
- Discussion sessions and presentations.

D. Thinking Skills

- D.1: Dialogue style between the student and the professor.
- D.2: Preparation of weekly reports.
- D.3: Conducting discussions of results.
- D.4: Exploratory thinking.

Teaching and Learning Methods

Grades.
Discussion and dialogue.
Examinations.

Evaluation Methods

1. Grades, research, and reports
2. Exams

E. General and Transferable Skills

- E-1: The ability to apply acquired knowledge.
- E-2: The ability to master teaching and learning skills.
- E-3: The ability to reflect gained knowledge into professional development.

11. Course Structure					
Weeks	Hours	Required Learning Outcomes	Unit Name / Course or Topic	Learning Methods	Evaluation Method
1	2	Knowledge	Introduction: General considerations, host factors, environmental factors with toxic effects	Blackboard and Projector Usage	Daily Exam and Oral Questions
2	2	Knowledge	Mechanism of toxicity	Blackboard and Projector Usage	Daily Exam and Oral Questions
3	2	Knowledge	Carcinogenesis and Mutagenesis: part 1	Blackboard and Projector Usage	Daily Exam and Oral Questions
4	2	Knowledge	Carcinogenesis and Mutagenesis: part 2	Blackboard and Projector Usage	Daily Exam and Oral Questions
5	2	Knowledge	Toxic responses of the liver: part 1	Blackboard and Projector Usage	Daily Exam and Oral Questions
6	2	Knowledge	Toxic responses of the liver: part 2	Blackboard and Projector Usage	Daily Exam and Oral Questions
7	2	Knowledge	Toxic responses of the kidney: part 1	Blackboard and Projector Usage	Daily Exam and Oral Questions
8	2	Knowledge	Toxic responses of the kidney: part 2	Blackboard and Projector Usage	Daily Exam and Oral Questions
9	2	Knowledge	Toxic responses of the Respiratory system	Blackboard and Projector Usage	Daily Exam and Oral Questions
10	2	Knowledge	Toxic responses of the Heart and vascular system: part 1	Blackboard and Projector Usage	Daily Exam and Oral Questions
11	2	Knowledge	Toxic responses of the Heart and vascular system: part 2	Blackboard and Projector Usage	Daily Exam and Oral Questions
12	2	Knowledge	Toxic effects of Metals: part 1	Blackboard and Projector Usage	Daily Exam and Oral Questions

13	2	Knowledge	Toxic effects of Metals: part 2	Blackboard and Projector Usage	Daily Exam and Oral Questions
14	2	Knowledge	Toxic effects of Pesticides: part 1	Blackboard and Projector Usage	Daily Exam and Oral Questions
15	2	Knowledge	Toxic effects of Pesticides: part 2	Blackboard and Projector Usage	Daily Exam and Oral Questions

12. Infrastructure	
Required Readings:	References: Casarett and Doull Toxicology: The Basic Science of Poisons; Latest Edition.
Special Requirements (Workshops, Journals, Software, Websites):	Electronic Websites: https://chemistry.com.pk/books/casarett-doulls-toxicology-the-basic-science-of-poisons-9e/
Social Services (Guest Lectures, Professional Training, Field Studies, Others)	Organizing workshops and courses for graduates:

13. Admission:	
Prerequisites	Admission according to the central plan
Minimum Number of Students	/
Maximum Number of Students	Admission exceeds the capacity plan

Name of the Instructor: Asst. Lec. Mohammed shaheed