

Course Description for General Toxicology (Practical)

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	Ministry of Higher Education and Scientific Research / Al-Zahrawi University
2. University Department / Center	College of Pharmacy
3. Course Name / Code	General Toxicology (practical)
4. Programs in which it is included	Bachelor of Pharmaceutical Sciences
5. Available Forms of Attendance	Daily Attendance
6. Semester / Year	Second Semester / Fourth year
7. Total Number of Study Hours	2 hours weekly
8. Date of preparing this description	2025-2026
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.	
9. 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)

1. Subject-Specific Skills

- 1: Teaching skills in the field of toxicology.
- 2: The ability to explain the differences between toxins and various drugs in both written and oral forms.
- 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**

2. Evaluation Methods

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

3. Thinking Skills

- ☐ Using modern methods to prepare and deliver lectures through PowerPoint presentations.
- ☑ Applying group discussion techniques to enhance understanding of the subject matter.
- ☑ Assigning homework and research tasks to develop analytical and critical thinking skills.

4. General and Transferable Skills

- ☑ Enabling students to apply the knowledge they have acquired in practical settings.
- ☑ Enhancing students' self-confidence through participation in discussions and seminars.
- ☑ Empowering students to apply what they have learned to their professional development.

11. Course Structure					
Weeks	Hours	Required Learning Outcomes	Unit Name / Course or Topic	Learning Methods	Evaluation Method
1	2	Knowledge	Laboratory Principles or Toxicological Screening	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
2	2	Knowledge	Evaluation of drug toxicity on human	and PowerPoint Presentations	Group discussion, oral exams, and assignments
3	2	Knowledge	Over the counter drugs: Case on Acetaminophen poisoning, salicylates	whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
4	2	Knowledge	Evaluation of urine salicylates	whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
5	2	Knowledge	Cardiac glycosides toxicity: Digitalis.	whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
6	2	Knowledge	Urine analysis of toxins and chemicals.	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
7	2	Knowledge	Cases on toxicity with foods and dietary supplements.	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
8	2	Knowledge	Toxic effects of Pesticides	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
9	2	Knowledge	Toxic effects of Metals	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
10	2	Knowledge	Toxic responses of the Heart and vascular system	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
11	2	Knowledge	Toxic responses of the Respiratory system	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
12	2	Knowledge	Toxic responses of the kidney	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments

13	2	Knowledge	Toxic responses of the liver	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
14	2	Knowledge	Carcinogenesis and Mutagenesis	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments
15	2	Knowledge	Seminars	Whiteboard and PowerPoint Presentations	Group discussion, oral exams, and assignments

12. Infrastructure	
Required Readings:	Lab. Manual of Practical Toxicology Adopted by Department
Special Requirements (Workshops, Journals, Software, Websites):	Electronic Websites:
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:

Assistant Lecturer Muntadher Zyara