Course Description Form

1. Course Name:
General Toxicology (Theoretical+ Practical)
2. Course Code:
Phpht 24_428--
3. Semester / Year:
Second semester-2023/2024
4. Description Preparation Date:
31/1/2024
5. Available Attendance Forms:
Excel sheets
6. Number of Credit Hours (Total) / Number of Units (Total)
2hours Theoretical + 2 hours Practical (30 hour/3 units)
7. Course administrator's name (mention all, if more than one name)
Theoretical
Name: Assistant Professor Zena Sattam Hamed Email: zenasattam@uomosul.edu.iq Name: Lecturer. Dr. Mohammed Nathem Mohammed Ali Email: mohammedpharma79@uomosul.edu.iq Name : Lecturer. Dr. Sarraa Dhiaa Kasim Email: phsarraakasim82@uomosul.edu.iq Name: Lecturer. Eman Abdullah sulaiman Email: eman.sulaiman2@uomosul.edu.iq Name: Dr. Marwan M. merkhan Email: marwanmerkhan@uomosul.edu.iq
Practical
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8. Course Objectives	
Course Objectives	The course aims to provide students with the principles and skills required to deal with the toxicity of chemicals and drugs in clinical settings; it enables students to correlate signs and symptoms of toxicity with the analytical data, and to know how to establish preventive and therapeutic measures for poisoning cases.
9. Teaching and Learning Strategies	
Strategy	• Lectures and Interactive Presentations • Case-Based Learning • Interactive Workshops and Seminars • Self-Directed Learning and Research Projects • Assessment Strategies

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2+2	A1 student to learn the nature of toxic substances A2 student to understand nature the environmental factors that lead to poisoning.	General consideration: host factor, environmental factors of toxic effects.	Lecture	Quizzes and Exams
2	2+2	B1 student write a report about the role of toxins in causing cancer B1 student differentiate between types of poisoning.	Carcinogenesis General introduction to practical toxicology	Lecture Laboratory demonstration.	Quizzes and Exams
3	2+2	A1 student to learn the damage caused by poisoning in the	Target organs and systemic toxicology: Respiratory system. Acute toxicity study,	Lecture Laboratory demonstration.	Quizzes and Exams

		respiratory system. C1: student able to calculate the toxic dose.	determination of LD50		
4	2+2	B1 student recognise the damage caused by poisoning in the urinary system and liver. C1 student able to differentiate between types of liver poisoning.	Liver, Kidney Drug toxicity on liver	Lecture Laboratory demonstration.	Quizzes and Exams
5	2+2	A1 student to learn the damage caused by poisoning to the nervous system. A2 student understand the role of nicotine in nervous system poisoning.	Nervous system Nicotine toxicity	Lecture Laboratory demonstration.	Quizzes and Exams
6	2+2	B1 student specify the damage caused by poisoning in the cardiovascular system. B2 student to differentiate the difference between types of drug poisoning.	Cardiovascular system Drug induced toxicity	Lecture Laboratory demonstration.	Quizzes and Exams
7	2+2	A1 student to learn the dangers of blood poisoning.	Blood Blood toxicity	Lecture Laboratory demonstration.	Quizzes and Exams

		B1 student shows the difference between types of blood poisoning.			
8	Mid-term exam				
9	2+2	A1 student give examples about additives in food B1 student specify the toxicity of heavy metals.	Food additive and contaminants Metal toxicity	Lecture Laboratory demonstration	Quizzes and Exams
10	2+2	C1 student able to differentiate between the types of pesticides A1 student learn about the toxicity of pesticides.	Pesticides Pesticide toxicity	Lecture Laboratory demonstration	Quizzes and Exams
11	2	B1: student shows the toxicity of metals. A1: student recognise toxic solutions.	Metals, Solvents	Lecture	Quizzes and Exams
12	2	C1 student able to differentiate the toxins produced by the environment. B1 student specify the ways to prevent environmental damage.	Environmental toxicology: Air pollution, water and soil pollutants	Lecture	Quizzes and Exams
13	2	A1 student recognise the types of toxic gases.	Gases (Tear gas, Pepper Spray)	Lecture	Quizzes and Exams

11. Course Evaluation

		B1 student distinguish between the harms caused by each toxic gas.			
14	2	A1 make the student aware of the toxic effects of cyanide and carbon monoxide. B1 student distinguish between the hazards of the two substances.	CO, Cyanide(H2S)	Lecture	Quizzes and Exams
15	2	C1 student aware the types of genetic mutations B1 student connects the role of the toxic substance in causing harm.	Mutagenesis	Lecture	Quizzes and Exams
16	Students' seminars				

Evaluation Breakdown for a Total Score of 100: • 20M Theoretical assessment ; (paper-based mid-term exam) • 20M practical assessment (attendance + quiz) • 60M paper-based theoretical final exam _____ Total 100 M

12. Learning and Teaching Resources	
Required textbooks (curricular books, if a	“ Casarett and Doull, Toxicology, the Basic Science of Poisons; Fourth edition. (2021)
Main references (sources)	“ Casarett and Doull, Toxicology, the Basic Science of Poisons; Fourth edition. (2021)
Recommended books and references (scientific journals, reports...)	Toxicological books in college library.
Electronic References, Websites	○ PubMed (https://pubmed.ncbi.nlm.nih.gov/) ○ Medscape (https://www.medscape.com/) ○ UpToDate (https://www.uptodate.com/)