



Jordan University of Science and Technology
Faculty of Science & Arts
Chemistry Department

CHEM201 Chemical Safety And Ethics - JNQF Level: 7

First Semester 2023-2024

Course Catalog

2 Credit Hours. The department offer compulsory course (Ethics and Chemical Safety (Chem. 201) dedicated to present global chemist?s code of ethics which focuses on promotion of a positive perception through research, teamwork, collaboration and high ethical standards. How to conduct a culture of safety and security is presented to the students in detail, including engineering and administrative controls and how to protect dual use chemicals and facilities. This course is designed to try to understand the best practices for handling chemicals and chemistry processes to minimize risk, whether to person, facility, or community. It involves understanding the physical, chemical, and toxicological hazards of chemicals. It also involves the understanding of preventing illegal or antisocial use of chemicals.

Teaching Method: Blended

Text Book

Title	Chemical Safety and Security Handouts
Author(s)	Sandia Laboratories
Edition	1st Edition
Short Name	Handouts
Other Information	

Instructor

Name	Prof. Ahmed Hijazi
Office Location	N4 L0
Office Hours	Sun : 10:30 - 11:30 Sun : 12:30 - 13:30 Tue : 10:30 - 11:15 Tue : 14:30 - 15:00 Wed : 08:00 - 08:45 Thu : 10:30 - 11:30 Thu : 12:30 - 13:30
Email	akhijazi@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Tue : 12:30 - 13:30 Room: SF08

Tentative List of Topics Covered		
Weeks	Topic	References
Weeks 1, 2	Chemist's code of ethics	From Handouts
Week 3	Chemical safety and security overview	From Handouts
Week 4	Fundamentals of chemical laboratory safety	From Handouts
Week 5	Chemistry laboratory hazards	From Handouts
Week 6	Personal Protective Equipment	From Handouts
Weeks 7, 8	Engineering Controls in Lab	From Handouts
Week 9	Laboratory assessment	From Handouts
Weeks 10, 11, 12	Chemical Management	From Handouts
Week 13	Fire Prevention and Protection	From Handouts
Week 14	Aspects of chemical security: Dual use chemicals	From Handouts
Week 15	Relationship between chemical safety and security	From Handouts
Week 16	Chemical Storage and Handling	From Handouts

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Have an understanding of global chemist's code of ethics. [1e, 1g] [1L7K1, 1L7S3]	5%	First
Have an understanding of chemical safety concept. [1a, 1f, 1j] [1L7K1, 1L7S1]	75%	First, Second, Final
Have an understanding of chemical security concept. [1d, 1e, 1h] [1L7K1, 1L7C2, 1L7C3]	20%	Final

Relationship to Program Student Outcomes (Out of 100%)										
a	b	c	d	e	f	g	h	i	j	k
25			6.67	9.17	25	2.5	6.67		25	

Relationship to NQF Outcomes (Out of 100%)				
L7K1	L7S1	L7S3	L7C2	L7C3
46.67	37.5	2.5	6.67	6.67

Evaluation	
Assessment Tool	Weight
First	30%
Second	30%
Final	40%

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