



**Jordan University of Science and Technology**  
**Faculty of Applied Medical Sciences**  
**Allied Medical Sciences Department**

LM405 General Safety In Medical Laboratories - JNQF Level: 7

Second Semester 2023-2024

**Course Catalog**

1 Credit Hours. The course is an introduction to laboratory safety. It includes instructions on precautionary labels, Material Safety Data Sheets, use of personal protective equipment, correct and safe handling laboratory equipment. It also includes emergency procedures, safety planning, and risk assessments. Chemical health risks including allergy, cancer and flammable agents and instructions on safely handling, storing and disposing of chemicals. Safe methods of handling microorganisms and cell cultures including human blood and tissue samples, laboratory acquired infections, bio-safety measures including personal protection devices, ventilated workplaces, biosafety levels, transport and disposal of dangerous materials, and waste management.

**Teaching Method:** Blended

**Text Book**

<b>Title</b>	The Foundations of Laboratory Safety, A Guide for the Biomedical Laboratory;
<b>Author(s)</b>	Stephen R. Rayburn
<b>Edition</b>	1st Edition
<b>Short Name</b>	Ref #1
<b>Other Information</b>	<a href="http://www.springer.com/jp/book/9781461279655#otherversion=9781461233206">http://www.springer.com/jp/book/9781461279655#otherversion=9781461233206</a>

**Instructor**

Name	<b>Prof. Samer Swedan</b>
Office Location	M5L-4
Office Hours	
Email	sfswedan4@just.edu.jo

**Class Schedule & Room**

Section 1:

Lecture Time: Thu : 08:30 - 09:30

Room: NB49

**Tentative List of Topics Covered**

Weeks	Topic	References
Week 1	Material Safety Data Sheets (MSDS)	From <b>Ref #1</b>
Week 2	Safety Control Measures in Medical Laboratories	From <b>Ref #1</b>
Week 3	Handling laboratory equipment	From <b>Ref #1</b>
Week 4	Emergency Lab Procedures	From <b>Ref #1</b>
Week 5	Midterm Exam	
Week 6	Emergency Lab Procedures & Safety Planning	From <b>Ref #1</b>
Week 7	Chemical Health Risks and Risk Assessment	From <b>Ref #1</b>
Week 8	Chemical Handling and Storage	From <b>Ref #1</b>
Week 9	Chemical Waste Management	From <b>Ref #1</b>
Week 10	Biosafety Levels and Handling of Biological Samples	From <b>Ref #1</b>
Week 11	Biological Waste Disposal and Laboratory Acquired Infections	From <b>Ref #1</b>
Week 12	Select topics in biosafety #1	
Week 13	Select topics in biosafety #2	
Week 14	Select topics in biosafety #3	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Students will learn basic concepts in biosafety including types of hazards, hazard handling, hazard mitigation and prevention [1SLO1] [1L7K1]	50%	
Students will learn the techniques and appropriate procedures to handle laboratory hazards and respond to emergencies [1SLO2, 1SLO4] [1L7S1, 1L7S3]	40%	
Students will learn how to undergo the process of risk assessment at the medical laboratory setting [1SLO4] [1L7C1]	10%	

**Relationship to Program Student Outcomes (Out of 100%)**

SLO1	SLO2	SLO3	SLO4	SLO5	SLO6	MSLO1	MSLO2	MSLO3	MSLO4	MSLO5	MSLO6
50	20		30								

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S1	L7S3	L7C1
50	20	20	10

Policy	
Attendance policy	<ul style="list-style-type: none"> <li>* Students are expected to attend at least 80% of lectures.</li> <li>* All absences will be entered electronically into the University site</li> <li>* If absence is more than 20% student will be banned from the course after electronic notification from the university through student e-mail.</li> </ul>
Feedback	Concerns or complaints should be expressed in the first instance to the course instructor. If no resolution is forthcoming, then the issue should be brought to the attention of the Department Chair and if still unresolved to the Dean. Questions about the material covered in the lecture, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail to the course instructor.
Makeup Exams	Any student who did not attend any of the scheduled exams and who requests taking a makeup exam must refer to the Dean's Assistant of the Faculty of Applied Medical Sciences to provide an official excuse letter supporting his absence (Medical report from the JUST medical center, etc.). Once the excuse has been accepted by the Dean's Assistant and the Dean, a student can take the makeup exam at a date no later than ONE week from the original exam date. Students must immediately contact and coordinate with the course instructor, and start the process of excuse acceptance at the Deanship.

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