

TISHK INTERNATIONAL UNIVERSITY
FACULTY OF APPLIED SCIENCE
Department of MEDICAL ANALYSIS,
-2022 Fall
Course Information for MA 107 LABORATORY SAFETY AND INSTRUMENTATION

Course Name:		LABORATORY SAFETY AND INSTRUMENTATION				
Code	Regular Semester	Theoretical	Practical	Credits	ECTS	
MA 107	1	1	2	2	3	
Name of Lecturer(s)- Academic Title:		Sorani Kayfi - assistant lecturer				
Teaching Assistant:		-				
Course Language:		-				
Course Type:		Main				
Office Hours		Saturday and Wednesday , 9:00am to 5:00pm				
Contact Email:		sorani.kayfi@tiu.edu.iq Tel:07504302814				
Teacher's academic profile:		MSc				
Course Objectives:		The purpose of the course is to give the students an understanding and explanations of various instruments, tools, machines, and devices that are used in the laboratory. It will equip students with the techniques and measures that prevent them from getting injured during laboratory practices.				
Course Description (Course overview):		-				

COURSE CONTENT

Week	Hour	Date	Topic
1	1	19-23/12/2021	Laboratory General overview
2	1	2-5/1/2022	Laboratory General overview
3	1	9-13/1/2022	Classification of medical laboratories
4	1	16-20/1/2022	Structure and Role of medical laboratory service and Technologist
5	1	23-27/1/2022	Laboratory policies
6	1	30/1-3/2/2022	Midterm Exam
7	1	6-10/2/2022	centrifuge
8	1	13-17/2/2022	spectrophotometer
9	1	20-24/2/2022	microscope
10	1	27/2-3/3/2022	Final Exam
11	1	6-10/3/2022	Final Exam

COURSE/STUDENT LEARNING OUTCOMES

- 1 To learn about the devices we use in the laboratory and how they work
- 2 To understand how to properly handle the devices
- 3 To keep themselves and partners away from being injured
- 4 To learn how to deal with injuries if any occurred during the lab work

COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced)

Program Learning Outcomes

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1	Evaluate clinical laboratory data by interpreting laboratory results and relating the data to various disease states.	F
2	apply principles of evidence-based medicine to determine clinical diagnoses.	I
3	apply the basic principles of gross and microscopic anatomy, physiology, biochemistry, immunology, microbiology/virology.	
4	formulate and implement acceptable treatment modalities to various disease states.	
5	use technology effectively in the delivery of instruction, assessment, and professional development.	I
6	exhibit essential employability qualities by demonstrating laboratory safety, analyzing laboratory results, and displaying professional conduct.	I
7	exhibit organizational skills, accountability, and ethical behavior.	F
8	apply skills needed in operating laboratory equipment for testing, assessing quality assurance for lab equipment, and adhering to standard safety practices in the laboratory environment.	
9	apply problem-solving and decision-making skills.	
10	apply and promote health policies and regulatory standards in the field career.	
11	develop research in the field of medical analysis using qualitative and quantitative methods.	

Prerequisites (Course Reading List and References):	-
Student's obligation (Special Requirements):	Attend all the lectures, if possible. Perform quizzes. Participate in the class discussion. Perform midterm exam. Perform Final exam.
Course Book/Textbook:	Key references: CRC Handbook of Laboratory Safety, 5th Edition (Keith Furr) *Useful references: Laboratory Instrumentation, 4E 4th Edition
Other Course Materials/References:	Handouts, Lectures, online resources
Teaching Methods (Forms of Teaching):	Lectures, Practical sessions, Presentation, Seminar, Assignments, , ,

COURSE EVALUATION CRITERIA

Method	Quantity	Percentage (%)
Attendance	1	5
Participation	1	10
Quiz	1	5
Laboratory	1	10
Practical Exam	1	30
Final Exam	1	40
Total		100

Examinations: Essay Questions, True-False, Fill in the Blanks, Multiple Choices, Short Answers, Matching, , ,

Extra Notes:

ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD

Activities	Quantity	Workload Hours for 1 quantity*	Total Workl
Theoretical Hours	11	1	11
Practical Hours	11	2	11
Final Exam	1	3	3
Attendance	1	1	1