

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Clinical Chemistry (1)
Course number	AMSL3320
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

- 1 - The purpose of this course is to prepare students with the knowledge of routine procedures and instrumentation within a clinical chemistry laboratory. It is designed to produce entry level competence needed to perform at the level of a medical laboratory technician in a sophisticated clinical chemistry laboratory.

Intended Learning Outcomes

Knowledge and Understanding	<ul style="list-style-type: none"> * 1. Apply several techniques in medical Labs. * 2. Choose the best technique which gives the most accurate results in measurement different analytes. * 3. Know the best time, and sample to obtain the best results. * 4. develop skills of communication with other medical personnel (doctors, nurses) with regard to patient samples and results. * 5. develop his skills about how to update his knowledge and back ground in the latest ideas in clinical chemistry. * 6. Recognize factors and conditions in which it is necessary to reject and in compatible samples. * 7. Strengthen previous skills about the guides and rules of quality control within the lab. * 8. Building of strong knowledge about previously mentioned topics. * 9. Interpret and critique data from primary research articles. * 10. Write a review about a primary research article.
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Course Contents

- 1 - 1. Proteins disorders.
- 2 - 2. Clinical Enzymology.
- 3 - 3. Liver Function.
- 4 - 4. Kidney Function.
- 5 - 5. Electrolytes.
- 6 - 6. Acid Base Balance.
- 7 - 7. Respiratory Function and Blood Gases.

Teaching and Learning Methods

- 1 - Discussion of some clinical cases, and asking students to present some information about these cases.

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
First Midterm	5th week	20%
Second Midterm	9th week	20%
Quizzes and attendance		10%
Final Exam	End of term	50%

Books and References

Course note	Michael L. Bishop and others. (2015). Clinical chemistry : principles, techniques, and correlations. (7th Ed.). ISBN 978-1-4511-1869-8. Carl A. Burtis, and others. (2012). Tietz textbook of clinical chemistry and molecular diagnostics. (5th ed). ISBN 978-1-4160-6164-9 Wendy Arneson and Jean Brickell . (2007) Clinical Chemistry A Laboratory Perspective. ISBN-10: 0-8036-1498-5
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