

## Planning and Quality Assurance Affairs

Form (A)

### Course Specifications

#### General Information

Course name	Clinical Chemistry(2)
Course number	AMSL4327
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

#### Course Objectives

- 1 - This course is considered as clinical extension for Clinical chemistry I. 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"> <li>* Apply several techniques in medical Labs.</li> <li>* Choose the best technique which gives the most accurate results in measurement different analytes.</li> <li>* Know the best time, and sample to obtain the best results.</li> <li>* Develop skills of communication with other medical personnel (doctors, nurses) with regard to patient samples and results.</li> <li>* Develop his skills about how to update his knowledge and back ground in the latest ideas in clinical chemistry.</li> <li>* Recognize factors and conditions in which it is necessary to reject and in compatible samples.</li> <li>* Strengthen previous skills about the guides and rules of quality control within the lab.</li> <li>* Building of strong knowledge about previously mentioned topics.</li> <li>* Interpret and critique data from primary research articles.</li> <li>* Write a review about a primary research article.</li> </ul>
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## Course Contents

- 1 - 1. Carbohydrates, with special focus on diabetes mellitus.
- 2 - 2. Lipids and Lipoproteins Disorders.
- 3 - 3. Pancreatic Function.
- 4 - 4. Gastrointestinal Function.
- 5 - 5. Cancer and Tumor Markers.
- 6 - 6. Therapeutic Drugs Metabolism.
- 7 - 7. Trace Elements Metabolism.

## Teaching and Learning Methods

- 1 - Discussion of certain clinical cases, and asking volunteer students to prepare presentation presentation about certain medical conditions or disorders.

## 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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