اسم و رمز المقرر باللغة العربية: الكيمياء الحيوية 1 كيس 117 اسم و رمز المقرر باللغة الإنجليزية:

## Biochemistry 1 CCH 117

Credit hours/ week: 3 hours

**Course Description:** the course explains biochemistry and functions of carbohydrates, proteins and lipids.

# **Course Objective:**

1. The course provides the student with basic knowledge and information in biochemistry.

### **Course Contents:**

Introduction to biochemistry, basic knowledge about water and electrolytes, carbohydrates, proteins and lipids (classification, structure and function) and basic structure of nucleic acids.

#### Course Outcomes:

By the end of this course the student should be able to:

- 1. Discuss the importance of biochemistry and its relation with the other life sciences.
- 2. Know the distribution and function of water and electrolyte in the body.
- 3. Understand the structure and function of carbohydrates, proteins and lipids.

## **Teaching Methods:**

1. Lectures.

2. Practical lessons

3.

Seminars

#### Course Assessment:

1. Practical performance

- 2. Tests and assignments
- 3. Final examination (written and practical)

### **References:**

- 1. Bishop M. L., Fody E. P. and Schoeff L. E. (2010). Clinical Chemistry: Principles, Procedures and Correlation. 6<sup>th</sup> edition. Lippincott.
- 2. Murray R. K., Bender D. A. and Bothman K. M. (2009). Harper's Illustrated Biochemistry. 28<sup>th</sup> edition. Lange.
- 3. Burtis C. A., Ashwood E. R. and Bruns D. E. (2008). Fundamentals of Clinical Chemistry. 6<sup>th</sup> edition. Saunders.
- 4. Wilson D. D. (2008). Manual of Laboratory and Diagnostic Tests. 1<sup>st</sup> edition. McGraw-Hill.
- 5. Marshall W. J. and Bangert S. K. (2005). Clinical Chemistry. 5<sup>th</sup> edition.

- 6. Parful B.G. and Darshan P. G. (2004). Textbook of Medical Laboratory Technology. <sup>6th</sup> edition. India.
- 7. Baynnes J. and Domniczak H. (1999). Medical Biochemistry. International edition. Mosby.
- 8. Philip D. M., Zilva F. and Mayne P. (1998). Clinical Chemistry in Diagnosis and Treatment.  $6^{th}$  edition.
- 9. Anderson S. and Cockayne S. (1993). Clinical Chemistry Concepts and Applications. International edition. Sounders.