



Biochemistry-I	
Title: Biochemistry-I	
Course number: 232 PHL	
Semester: Third Semester (Second Year).	
Duration: 2 + 1 Units (4 contact hours) per week.	
Aims: To provide the student with general knowledge on carbohydrates, amino acids, proteins, nucleic acids, lipids, enzymes and steroids.	
Objectives: At the end of the course the student should know the chemistry of carbohydrates, amino acids, proteins, nucleic acids, lipids, enzymes and steroids.	
Contents:	
Lectures: It is an introductory course that covers water structure and biological buffers; the biochemistry of the living state; the chemistry of carbohydrates, amino acids, proteins, nucleic acids, lipids and steroids; enzymes and enzymes regulations; energy transformations; function of immune system and action of hormones.	
Practical: Qualitative and quantitative analysis of biomolecules such as carbohydrates, proteins, non-protein nitrogen and determination of plasma uric acid.	
Minimum course requirements: 30 (2 x 15) Unit lectures and 30 practical hours (2 x 15) per level.	
Evaluation methods:	
-Quizzes	10%
- Mid term examination	25%
- Practical examinations	25%
- Final examination (written)	40%
Text Books (latest edition):	



1- Harper's Biochemistry, Robert K. Murray.

Recommended books (latest editions):

- 1- Biochemistry, Geoffery Zubay.
- 2- Biochemistry, D.K. Jan.
- 3- Principles of Biochemistry, David L. Nilson.
- 4- Pre Test Biochemistry, Francis J. Chlapows.