Clinical Biochemistry 1 0308313

**Course Description**

Discuss advanced principles of clinical chemistry as well as acquisition, management and application of laboratory data. It also studies methods of quantitating clinicaly significant analysis, including pathophysiology of related disease states.

**Textbook**

**Title** Biochemistry.

**Author(s)** Campbell & Farrel

**Publisher** Thomson –Brooks/Cole

**Year** 2006

**Edition** 5th edition.

**Course Content**

**Week Topics Chapter in Textbook**

**Lecturer**

1 Quality assurance in clinical chemistry (quality controls, RI, method selection

And method evaluation) International system units and conversion Rules.

2 Blood specimen collection and sources of biological variation

3 Substrate and enzyme measurements(end point, kinetics )

4 Enzymes of (LFT, KFT. Cardiac, CSF,pancreas)

5 Special techniques in clinical chemistry.

6 HbA1c-method of analysis, Blood gases

7 Electrophoresis – Hb

8 Immunoassay in clinical chemistry

9 Microparticle enzyme immunoassay(EMIT)

10 Radiative energy attenuation (REA) Fluorescent polarization immunoassay

(FBIA)

11 Chemiluminescence's