

# TEMPLATE FOR COURSE SPECIFICATION

## HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

### COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Kut technical institute
2. University Department/Centre	Pathological analysis
3. Course title/code	<b>Clinical chemistry</b>
4. Programme(s) to which it contributes	
5. Modes of Attendance offered	Attendance is mandatory
6. Semester/Year	Yearly
7. Number of hours tuition (total)	180
8. Date of production/revision of this specification	22-11-2016
9. Aims of the Course	
The student will be able to Having idea about clinical chemistry and about the instrument using in it.	

10. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

A1. Knowing how to make the analytical chem.. and have thought about the disease appeared for each abnormal condition.

A2.

A3.

A4.

A5.

A6 .

B. Subject-specific skills

B1.

**B2.**

**B3.**

Teaching and Learning Methods

Laboratories and scientific visits and summer training

Assessment methods

Oral + written + quarterly exams + final

C. Thinking Skills

C1. Lectures

C2. practical skills within the laboratory

C3.

C4.

Teaching and Learning Methods

Theoretical + practical

Assessment methods

Oral + written + practical

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Work in government and private medical laboratories

D2.the possibility of completing his studies and obtain the highest certification  
D2.  
D3.  
D4.

## 11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	6		Introduction , collection and handing of blood samples , anti coagulant protein receipt ant kinds ,urine compassion ,urine collection methods urine preservative .	Theoretical , practical	Theoretical , practical and oral
2	6		Electrolyte (NA <sup>+</sup> , K <sup>+</sup> , ph <sup>-3</sup> , Fe <sup>+3,4</sup> )	Theoretical , practical	Theoretical , practical and oral
3	6		Trace element [ cu , co , zn , mg] ,disease appeared in abnormal metabolism of these metals .	Theoretical , practical	Theoretical , practical and oral
4	6		Acid base balance in body disease appeared in disturbance of acidity and alkanty of blood ,types of buffer system in body .	Theoretical , practical	Theoretical , practical and oral
5	6		Carbohydrate .	Theoretical , practical	Theoretical , practical and oral
6	6		Digestion , absorption in normal condition and abnormal condition .	Theoretical , practical	Theoretical , practical and oral
7	6		Glucose Tolerance test in normal condition and in D.M.	Theoretical , practical	Theoretical , practical and oral
8	6		Glucose metabolism , No. of hormones reside glucose level , hormone decrease blood glucose level .	Theoretical , practical	Theoretical , practical and oral
9	6		Types of D.M. ,canoes , ketosis , glucose uria .	Theoretical , practical	Theoretical , practical and oral
10	6		Proteins .	Theoretical , practical	Theoretical , practical and oral
11	6		Digestion and absorption of proteins in normal and abnormal condition .	Theoretical , practical	Theoretical , practical and oral
12	6		Abnormal proteins types and the disease appeared with these protein .	Theoretical , practical	Theoretical , practical and oral
13	6		Protein metabolism , types of metabolism , protein function .	Theoretical , practical	Theoretical , practical and oral
14	6		Electrophoresis of plasma protein types of blood protein , disease accompanied with these proteins .	Theoretical , practical	Theoretical , practical and oral
15	6		Protein urea , causes disease accompanied with it .	Theoretical , practical	Theoretical , practical and oral
16	6		Protein determination methods	Theoretical , practical	Theoretical , practical and oral
17	6		Lipid , types of lipids , function classification .	Theoretical , practical	Theoretical , practical and oral
18	6		Digestion , absorption of lipid .	Theoretical , practical	Theoretical , practical and oral
19	6		Metabolism of lipid , disease	Theoretical ,	Theoretical , practical and

			appeared with abnormal condition .	practical	oral
20	6		Cholesterol , triglyceride , free fatty acid .	Theoretical , practical	Theoretical , practical and oral
21	6		Lipo proteins ,types ,disease accompanied with abnormal condition .	Theoretical , practical	Theoretical , practical and oral
22	6		Hyper lipedemia , acidosis ketones body .	Theoretical , practical	Theoretical , practical and oral
23	6		Enzyme , important in body .	Theoretical , practical	Theoretical , practical and oral
24	6		Classification , properties .	Theoretical , practical	Theoretical , practical and oral
25	6		Factors effect on enzyme activity .	Theoretical , practical	Theoretical , practical and oral
26	6		Changes in Enzyme activity and the disease accompanied with that change .	Theoretical , practical	Theoretical , practical and oral
27	6		liver function test .	Theoretical , practical	Theoretical , practical and oral
28	6		Hormones , types , properties , function .	Theoretical , practical	Theoretical , practical and oral
29	6		Hormones mechanism , disease accompanied with abnormal secretion .	Theoretical , practical	Theoretical , practical and oral
30	6		Tests and comprehensive	Theoretical , practical	Theoretical , practical and oral

## 12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	1-books (text book of biochemistry) 2-library sources 3-Internet sources
Special requirements (include for example workshops, periodicals, IT software, websites)	Scientific visits to laboratories in hospitals and knowledge of modern equipment
Community-based facilities (include for example, guest Lectures , internship , field studies)	Scientific visits to laboratories in hospitals and knowledge of modern equipment

## 13. Admissions

In addition to the practical method to measure hormones to the human body