



Training Course specification of Biochemistry and Chemistry of Nutrition

1-Basic information	
Course title	Training Course specification of Biochemistry and Chemistry of Nutrition
Academic year:	2 nd year (2014-2015)
Program title	Bachelor of Veterinary Medical Science
Contact hours/week	See training program specification

2-Professional information

1- Overall aims of course

At the end of this course, students should gain the essential practical skills in the laboratory test for metabolic disorders and basic molecular techniques.

2- Intended learning outcomes of course (ILOs)

a-Knowledge and understanding

By the end of this course, graduate should be able to:

- a.1. Describe the metabolic syndrome.
- a.2. Identify the pathological constituents of the body fluids.
- a.3. Describe the important diagnostic enzymes and metabolites and their clinical significance.
- a.4. Recognize the principals and steps of molecular techniques.

b-Intellectual skills

By the end of this course, graduate should be able to:

- b.1 Identify the metabolic disorders.
- b.2. Interpret the biochemical analysis of the serum and urine.
- b.3. Analyze the disorders of nutrients metabolism.
- b.4. Identify the liver and renal disorders
- b.5. Point out the importance of the molecular techniques.

c-Professional and practical skills

By the end of this course, graduate should be able to:

- c.1. Estimate blood levels of glucose and total lipids.

- c.2. Estimate of serum levels of liver enzymes.
- C.3. Estimate of r serum levels of renal metabolites.
- c.4. Practice the basic molecular techniques for PCR and molecular cloning

d-General and transferable skill

- d.1. Write reports efficiently.
- d.2. Work in team.
- d.3. Communicate with others effectively.

3- Topic
Biochemical test for diabetes and metabolic syndrome
Biochemical testes for liver enzymes
Biochemical testes for renal metabolites
Basics of molecular techniques

4- Teaching and learning methods

- 4.1 Practical sessions for the students to gain practical skills.
- 4.2 Analyze the results and reach specific conclusion.

5-Student assessment

See training program specification

Head of department: Prof. Dr. Hesham El Sabbagh

Course coordinator: Dr. Mabrouk Attia Abd Eldaim