

Republic of Iraq
Ministry of Higher Education & Scientific Research
Supervision and Scientific Evaluation Directorate
Quality Assurance and Academic Accreditation

Academic Program Specification Form For The Academic

University: middle technical university
College : kut tech. institute
Department : pathological analysis
Date Of Form Completion :9-11-2016

Dean's Name

Date : / /

Signature

*Dean's Assistant For
Scientific Affairs*

Date : / /

Signature

Head of Department

Date : / /

Signature

Quality Assurance And University Performance Manager

Date : 9 / 11 / 2016

Signature

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme 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 is supported by a specification for each course that contributes to the programme.

1. Teaching Institution	Kut technical institute
2. University Department/Centre	Pathological analysis
3. Programme Title	
4. Title of Final Award	Technical diploma
5. Modes of Attendance offered	Attendance is mandatory
6. Accreditation	
7. Other external influences	There is a close relationship to the labor market
8. Date of production/revision of this specification	9-11-2016
9. Aims of the Programme	
Section aims at graduating angels technique able to work in medical laboratories conducting routine laboratory analyzes general chemical tests and examination of fluid and operation and maintenance of laboratory devices.	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

A. Knowledge and Understanding
A1. 1. Identify the rudiments of the instruments and laboratory equipment and materials
A2..Identify the principles of microbiology science
A3..Identify the principles of bacteria science
A4..Identify the principles of blood science
A5..Identify the principles of urine check
A6.Identify the principles of quality control.

B. Subject-specific skills
B-1 - the skills of drawing blood and mechanism of blood transfusion
B 2 - Know your blood groups
B 3 - stand on the aetiology by diagnosing the cause of a disease

Teaching and Learning Methods

Lecture + Labs + Summer Training

Assessment methods

Oral + written + quarterly exams + final

C. Thinking Skills
C1. sample analysis and diagnosis of diseases in minutes
C 2.draw blood
C 3.know setups and how to work it

D. General and Transferable Skills (other skills relevant to employability and personal development)
D1- possibility of samples using modern equipment analysis
D2- diagnosis aetiology
D3- diagnose the health condition of the patient

Teaching and Learning Methods

Lecture + Labs + Summer Training

Assessment Methods

Oral + written + quarterly exams + final

11. Programme Structure				12. Awards and Credits
Level/Year	Course or Module Code	Course or Module Title	Credit rating	
First		Medical Laboratory Techniques & QC		Bachelor Degree Requires (x) credits
First		Histological & Cytological Techniques		
First		Medical . Lab. Instrument		
First		Blood Transfusion		
First		Histology & Anatomy		
First		Fundamentals of Nursing		
First		Chemistry		
First		Computer Applications (1)		
First		Human Rights & Democratic		
Second		Clinical Chemistry		
Second		Hematology		
Second		Bacteriology		
Second		Parasitology		
Second		Virology		
Second		Medical Mycology		
Second		Immunology & Serology		
Second		Proposal		

second		Professional Ethics		
second		Computer Applications(2)		

13. Personal Development Planning

Get a technical diploma satisfactory analyzes

14. Admission criteria .

1. graduate scientific branch
2. higher than the 80% rate

15. Key sources of information about the programme

1. recruit students in the Ministry of Health after graduation
2. Follow-up and practice by the students and work to raise the students in the educational institutions level

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	Immunology
4. Programme(s) to which it contributes	
5. Modes of Attendance offered	Attendance is mandatory
6. Semester/Year	year
7. Number of hours tuition (total)	180
8. Date of production/revision of this specification	2016-11-9
9. Aims of the Course	
At the end of studying year the study able to collect of principle of immunology & serology with immunologic tests, performance of the tests, accuracy recognition of part of immune system at operation, resist to disease. Student able to know about the lab. Materials and how to deal with specimens.	

10. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

A1. Deal with lab. Specimens of immunology

A2. Perform serologic tests – reporting & and reading, micro titration & macro.

A3. Perform the serologic test.

A4. Preparation of some Ages & Abs.

A5. Detection of some febrile diseases by immunologic assays.

B. Subject-specific skills

B1. Labs

B 2 - scientific visits

B 3 - summer training

Teaching and Learning Methods

Laboratories and scientific visits and summer training

Assessment methods

Oral + written + quarterly exams + final

C. Thinking Skills

C1.diagnosis by serology and hematology

C2. Act in lab.

C3.

C4.

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

D1.You can work in government institutions

D2.Be eligible for technical diploma

D3.

D4.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2 Theoretical 4practical	Technical diploma	The immunity definition , types of immunity , historical .perspective of development of immunology , role of Arab about immunity , The importance of immunity teaching student of analytical pathology , connection of immunology with other natural medical & biologic science . Recommended references .	Lecture lab +	Oral+written
3,2	=		Natural immunity , definition parts of immunity (table of types of immunity) 1- Specific immunity / definition with example. 2- Non –specific immunity (innate-immunity) definition with example. Factor affect on individual immunity like age, harmonic effect, nutrition. Mechanism of natural immunity 1- epithelial layers skin 2- Tissue defenses. A- Humoral immunity. B- Cellular immunity. Humoral immunity its types e.g. lysozyme, properdin –B-lysine, reactive protein, spectrocin, complement.	=	=
4	=		Acquired immunity, definition between natural &acquired immunity. Part of acquired immunity 1- passive acquired immunity divided into:- a) Natural passive immunity. b) Active artificial acq. Immunity. Vaccines & their types. 2- Passive acq. Immunity , definition & types Demand of table of differences between passive & active immunity.	=	=

5	=		Vaccine & types, importance, table of vaccine, with duration. Demand for student to prepare a report of vaccines with importances.	==	=
6	=		Structure of immune system, funct.(Diagram illustrated of human body refer to the site of immune system. a) Central lymphatic system, part of it, thymus, Bursa of lumbricus. b) Peripheral lymph. System \lymph-Nodes – shape, structure spleen, illustrated diagram & it effect upon the cells of reticule - the lymph. System. 1- Macrophage, and microphage, their functions. 2- Lymphatic cells , description , types T-cells & B- cells 3- Plasma cells. K-cells in the human.'prepare on defenses in human defenses of T-cell & B-cell (from the student) (Oral quizzes).	=	=
7	=		Complement system, definition. Chemical of physic properties their component ratio in the body, function of each component. Sits of their synthesis (c ⁻ comp.) in the body, tests depend on the c ⁻ .	=	=
9,8 10	=		Antigen , defined , properties as foreignness , size 1- Complete Ag. 2- Partial Ag (haptent). 3-chemical nature. 4- Responses to T. regulations. 5- Antigenic specificity. 6- Species specificity. 7- Auto specificity. 8- Analogues specificity. 9- Organ specificity. 10- Ag – specificity heterogeneously	=	=
12,11	=		Antibodies (Abs). Immune globulins, definition, properties, types, structure of immunoglobulin. (illustrated diagrams from student) The study of IgA ,IgM and IgG function of each one briefly. As student homework, prepare notes about each types of Ig. E.g. IgE and IgM and IgA with defenses tables of Ig. As complementary for that presented in the lectures.	=	=
-14-13 -16-15 18-17	=		Ag-Ab reaction bonds that responsible of interaction, types of reaction, affinity, monovalent Ags & polyvalent Ags effects. Agglutinations , definition & their applying , using them in general Indirect agglut. Or negative definite. With example. (Latex –test (R-f test) &	=	=

			<p>pregnancy –test. combs test (definition. Uses , principle , technique , reading results)</p> <p>Precipitation, definition. With comparison with agglut. (From student). Application of ppt. reactions, the principle of ppt., Lattice hypothesis ppt. techniques (their uses principle of reaction).</p> <p>Gel-diffusion , ring test , tubes –test</p> <p>1-single diffusion at one direct.</p> <p>2-double diffusion at one direct.</p> <p>3- Single diffusion at tow direct.</p> <p>4- Double diffusion at tow direct.</p> <p>5-electropheresis, their types.</p> <p>Student, homework (differences among 1,2,3,4, and also between , 5, 6 ,neutralization, definition. types.</p> <p>A-viral neutral. e.g. (ASOT)</p> <p>opsonization test</p> <p>1-direct-method</p> <p>2-Indirect method</p> <p>RIA</p> <p>ELIZA</p> <p>Analysis by strips.</p>		
19-20	=		<p>Immune – response</p> <p>Humoral response</p> <p>Primary &secondary responses.</p> <p>Ab .production factors ,</p> <p>Cellular response types</p> <p>Lymphokines types</p>	=	=
22-21	=		<p>Micro organisms immunity</p> <p>A-immunity against bacteria following bacterial infection, role of every system (briefly) for arrest of such infection.</p> <p>Types of cellular &humeral specific immunity. Types of their agents for each one.</p> <p>Role of Antibody for arrest of infect.</p> <p>1-toxin – neutralization with examples.</p> <p>2-complement activation with examples.</p> <p>3-opsonization & phagocytosis.</p>	=	=
23	=		<p>B- Immunity against viruses.</p> <p>1-The specific immunity.</p> <p>2-non specific immunity, their type’s examples on the tests in parasites diagnosis.</p>	=	=
24	=		<p>c- Immunity against parasites examples on tests to parasites diagnosis. General idea about the humoral cellular immunity against the protozoa and against helminthes.</p>	=	=
25	=		<p>Immunity against fungi and that against parasites revision.</p>		
26	=		<p>Micro organism’s immunity.</p>		

27	=	Auto immunity , theories of the formation of auto immune diseases Examples of AID with examples e.g. Rheumatoid arthritis e.g. SLE , mechanism explanation Rh- factor in born hemolysis		
29-28	=	Hyper sensitivity, definition. Examples with tables of each one I-types with illustrated diagram about occurring with examples about diseases cases (also the same with 4 types) anaphylaxis mechanism. Concentrate on the subject connected with diseases of serologic & immunologic tests in the lab.		
30	=	AIDS & immunity .the disease and its relation with the immune system. ELIZA		

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Medical immunology
Special requirements (include for example workshops, periodicals, IT software, websites)	E-book
Community-based facilities (include for example, guest Lectures , internship , field studies)	Medical microbiology

13. Admissions

1- Course of clinical immunology