## **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.

v. Teaching Institution	University of Kirkuk			
۲. University Department/Centre	College of Veterinary Medicine			
۳. Course title/code	Immunology / PART י/CMV۳) • ٤			
٤. Modes of Attendance offered	Third Class			
•. Semester/Year	first Semester ۲۰۲۰-۲۰۲۱			
٦. Number of hours tuition (total)	י• Hours			
v. Date of production/revision of this specification	Y/9/Y · Y ·			
^. Aims of the Course				
Y. Teaching students immunology that concerned with the study of immune system, component, organ, cells, complement and antibodies.				
<sup>Y</sup> . understanding the basic principles of immune response and reaction				
۳. learning autoimmune diseases				
٤.Methods of attacking foreign body				
°-Study of hypersensitivity				
۹۰ Learning Outcomes, Teaching, Learning and Assessment Method				

## **.** Cognitive goals .

A<sup>1</sup>- Teaching the student the basic of immunology science

- $A^{\gamma}$  Enable our students to become skilled diagnosis for acute and chronic diseases of animals that may affect the public using serology tests.
- A<sup>r</sup>- Teaching the method of doing deferent immunological tests
- A <sup>£</sup>- Students are introduced to basic practical skills (including animal handling, laboratory skills, that concern immunology
- A °- To develop an understanding of the mechanisms complement system
- A<sup>-</sup>- To develop an understanding the new approach of immune therapy
  - B. The skills goals special to the course.
  - B<sup>1</sup>- Introducing students to the field of veterinary medicine in the community

 $B^{r}$  - Enabling students to take the course in protecting society from diseases

**Teaching and Learning Methods** 

- ) The lectures.
- <sup>r</sup>) Discussions during and after the lecture.
- <sup>r</sup>) Motivation through questions and answers.
- ٤) Homework
- •) Preparing scientific reports

Assessment methods

)Daily and monthly (theoretical) tests.

- Y) Discussing scientific reports
- <sup>γ</sup>) Questions and answers

C. Affective and value goals

- $C^{1}$ . Enable the student to think according to his ability  $C^{1}$ . The student understands when and how he should think during and after the lecture
- $C^{r}$  Effective thinking strategy in learning  $C^{\epsilon}$  Pose a problem for analysis

**Teaching and Learning Methods** 

- Implementation methods: a teacher who listens to the learners while they sit in front of him, and they • listen to him, and he must have the ability to indoctrinate and absorb information.
- Conversational methods: the teacher must possess a high scientific ability and the attendees have • information on the topic of the discussion.
- The discovery method: the teacher observes the activities of the learners who are taking examples • individually or collectively.

Assessment methods

- 1. Semester and final theory exams with a rate of 90%
- ۲. Extra-curricular activities (reports, making wall posters) by ٥٪

- D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)
- D'.Teamwork: Working in harmony with a group or team.
- D<sup>r</sup>. Initiative Motivation to work: the ability to take the initiative, determine the hypothesis, and put forward ideas and solutions.
- D<sup>r</sup>. Planning & organization: The ability to develop plans and programs that are feasible for implementation.

۱۰. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teachin g Method	Assessment Method
١	٤	Immunology	Principle of immunity and immune response (specific and non specific)	۲ hours theory ۲ hours practical	
۲	٤		Immunoglobulin: Structure	۲ hours theory ۲ hours practical	
٣	٤		Immunoglobulin: variation,	۲ hours theory ۲ hours practical	
٤	٤		Immunoglobulin: Function and synthesis	۲ hours theory ۲ hours practical	
0	٤		Immunology of T and B cells	۲ hours theory ۲ hours practical	
٦	٤		Complement: Nature, Function and pathways	۲ hours theory ۲ hours practical	
٧	٤		Cell mediated immunity, antigen recognition by T cells	۲ hours theory ۲ hours practical	
٨			Mid-term exam.		Theoretical exam (۲° marks) Practical exam (۱・ marks) Report (° marks)
٩	٤		Immunological tolerance	۲ hours theory ۲ hours practical	
١٠	٤		Types of Hypersensitivity, Mechanisms	۲ hours theory ۲ hours practical	
11	٤		Auto-immunity	۲ hours theory ۲ hours practical	
١٢	٤		Transplantation	۲ hours theory ۲ hours practical	
١٣	٤		Principle of immune genetics	۲ hours theory ۲ hours practical	
١٤	٤		Immune anaphylaxis reaction	۲ hours theory ۲ hours practical	
10	٤		Immunity of infection	۲ hours theory ۲ hours practical	
			Final-term exam.		Theoretical exam (٤• marks) Practical exam (٢• marks)

1. Books Required reading:			
۲. Main references (sources)	<ul> <li>1-Lan R. Tizard(<sup>(</sup>··<sup>(</sup>)):Veterinary Immunology <sup>(</sup>th .ed.Sunders <sup>(</sup>-Gabriel V.(<sup>(</sup>··<sup>(</sup>)): Medical Immunology <sup>(</sup>th Edition by Marcel Dekker, Inc.</li> <li><sup>(</sup>- Leon N.and Sophie M. Veterinary Immunology and Immunopathology(<sup>(</sup>·)<sup>(</sup>)). Nova Science Publishers, Inc.</li> </ul>		
A- Recommended books and references (scientific journals, reports).	٤- Jawetz E. and Levinson W. ( ۱۹۹٦ ) : Medical microbiology and immunology . <sup>٤</sup> th.ed. , Appleton and Large , Stamford .		
B-Electronic references, Internet sites	Wikipedia		
۲. The development of the curriculum plan			
<ol> <li>Adding Visual Studio to the curriculum.</li> </ol>			

