## **TEMPLATE FOR COURSE SPECIFICATION**

# HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

#### **COURSE SPECIFICATION**

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program.

۲. Teaching Institution	Kirkuk University/ College of Veterinary Medicine
۲. University Department/Centre	Department Of Public health
۳. Course title/code	Research projects /CVMo1.V// CVMo1.V
٤. Modes of Attendance offered	Fifth year students
•. Semester/Year	Fifth year / first and second semesters Y.Y Y.YI
٦. Number of hours tuition (total)	First semester 1° hours / Second semester $r$ . hours
<ul> <li>V. Date of production/revision of this specification</li> <li>V. Providing students with the basic concepts and ex</li> </ul>	7/9/7.7.

<sup>1</sup>. Providing students with the basic concepts and experience necessary to prepare them as veterinarians, and teaching veterinary medicine students the basics of scientific research, as well as a graduation research project writing model.

<sup>Y</sup>. Studying the different methods of conducting scientific research in the field of veterinary medicine.

<sup>r</sup>. The student should acquire integrated skills in how to collect samples and their types, whether they are body fluid samples for different animals, collecting samples, or collecting digital data to prepare sick cases and injuries from information sources, whether from the veterinary hospital or veterinary clinics.

<sup>£</sup>. Using modern methods and trends in scientific research opinions, obtaining results, discussing and interpreting them according to scientific foundations.

•. Learn ways to obtain information from solid scientific sources for use in writing scientific research to review references as well as when discussing results

<sup>7</sup>. Learn scientific methods in writing references

<sup>V</sup>. Spreading the spirit of cooperation among students by conducting scientific research and training students to conduct scientific research by preparing graduation research.

### ۱. Learning Outcomes, Teaching ,Learning and Assessment Method

#### A- Cognitive goals

A<sup>1</sup>- Teaching the student the concept and principles of scientific research.

A<sup>r</sup>- Knowledge, understanding and comprehension of the scientific subject curriculum to conduct scientific research.

A<sup>r</sup>- To classify the theoretical and practical needs for the development of learning and teaching in an appropriate manner with the scientific subject.

A<sup>£</sup>- Knowing how to write a graduation research project and the division of its chapters.

A° - Identify the types of scientific research, types of samples, and the division of samples.

A<sup>1</sup>- Studying how to write references.

A v- Studying how to choose the topic of scientific research.

B- The skills goals special to the course.

 $B^{\gamma}$  - Teaching the student how to take and divide the samples.

 $B^r$  - Teaching the student types of the methods of analyzing materials in different ways according to the type of research.

 $B^r$  - Teaching the student how to divide the work among the research group.

B - Teaching the student how to write scientific research according to the research chapters.

B  $\circ$  - Teaching the student how to write and index the sources.

C-Teaching and Learning Methods

C1- Presentation methods: giving lectures to students while they are sitting in front of the teacher, and they listen to him, and he must have the ability to memorize and absorb information.

 $C^{-}$  Dialogue methods: the teacher uses the method of dialogue with the students in the manner of asking questions to the students and discussing the information with the students.

 $C^r$ - The discovery method: the teacher observes the activities of the students conducting the experiments individually or collectively.

C<sup> $\epsilon$ </sup>- Active methods: the students performs individual or group activities and the teacher takes the students hand towards learning in practical life inside and outside the educational institution and to come into contact with the vocabulary of practical life, which gives meaning to real learning.

Co- Giving lectures using modern methods for presenting power point topics and scientific films.

Assessment methods

- ۲. Semester and final theory exams at a rate of ۹۰٪
- ۲. Evaluation of extra-curricular activities (reports, posters and homework) by ۰٪
- ۳. Learning triangle
- ٤. Daily exams

D - General, qualification and transferable skills (other skills related to employability and personal development).

D'- Team work: working in harmony with the group or team.

 $D^{\gamma}$  - Initiative Motivation to work: the ability to take the initiative, determine the hypothesis, and develop ideas and proposed solutions.

D<sup>r</sup>- Planning & organization: An ability to set plans and programs that are feasible for implementation.

D <sup>£</sup>- Flexibility: adapting to situations.

D - Time management: The ability to work on specific dates.

V · . Course Structure					
Week	Hour s	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
١	١	Types of research Purposes of scientific research	Characteristics of research	Theoretical (1 hour)	daily exam
۲	١	Components of thesis	Characteristics of research	Theoretical (1 hour)	Homework
٣	١	Major Steps in search process	Research Methods	Theoretical (1 hour)	daily exam
٤		Role of veterinaries in Veterinary research	Research Methods	Theoretical (1 hour)	Homework
0	١	References	Research Methods	Theoretical (1 hour)	daily exam
٦	١	Characteristics of variables	Variables	Theoretical (1 hour)	Homework
٧	١	Types of Variables	Variables	Theoretical (1 hour)	
٨	۲	Mid-term exam.		Theoretical ( <sup>Y</sup> hours)	Theoretical exams( $(\cdot)$ ) + daily exam ( $\circ$ ) + reports ( $\circ$ )
٩		Sources of Literature	Literature Review	Theoretical (1 hour)	daily exam
۱.		General Guidelines to Writing a Literature Review	Literature Review	Theoretical (1 hour)	Homework
11	١	Types of sample	Criteria for a good research topic	Theoretical (1 hour)	daily exam
١٢	١	Rules for Collecting Data	Data Collection	Theoretical (1 hour)	Homework
١٣	١	Techniques and tools for Data Collection	Data Collection	Theoretical (1 hour)	daily exam
١٤	١	Types of Questionnaire	Questionnaire	Theoretical (1 hour)	Homework
10	١	Quantitative & Qualitative Study	Study design	Theoretical (1 hour)	
	٣	Final-term exam.			Theoretical exams ( <sup>1</sup> · )

۰۰. Co	V. Course Structure (second semester)				
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessme nt Metho d
١	۲	Cooperation and joint work for students within the research team to complete the graduation research	Presenting the research idea and discussing it with the supervisor	practical ( <sup>Y</sup> hours)	Weekly follow-up by the teacher, the research supervisor
۲	<b>Y</b>	Cooperation and joint work for students within the research team to complete the graduation research	Searching for scientific sources to support the idea of research	practical ( <sup>7</sup> hours)	Weekly follow up
٣	۲	Cooperation and joint work for students within the research team to complete the graduation research	Distribute the tasks among the students within the research group	practical ( <sup>Y</sup> hours)	Weekly follow up
٤		Cooperation and joint work for students within the research team to complete the graduation research	Start collecting samples	practical ( <sup>Y</sup> hours)	Weekly follow up
٥	۲	Cooperation and joint work for students within the research team to complete the graduation research	Follow-up work to complete the research requirements	practical ( <sup>Y</sup> hours)	Weekly follow up
٦	1	for students within the research team to complete	Follow-up work to complete the research requirements	practical ( <sup>†</sup> hours)	Weekly follow up
٧	۲	Cooperation and joint work for students within the research team to complete the graduation research	Follow-up work to complete the research requirements	practical ( <sup>Y</sup> hours)	Weekly follow up
٨	1	Cooperation and joint work for students within the research team to complete the graduation research	Follow-up work to complete the research requirements	practical ( <sup>Y</sup> hours)	Weekly follow up
٩	۲	Cooperation and joint work for students within the research team to complete the graduation research	Follow-up work to complete the research requirements	practical ( <sup>Y</sup> hours)	Weekly follow up
۱.	۲	Cooperation and joint work	get results	practical ( <sup>Y</sup> hours)	Weekly follow up
11	۲	Cooperation and joint work	Finding scientific sources to write the research	practical ( <sup>Y</sup> hours)	Weekly follow up
١٢	۲	Cooperation and joint work for students within the research team to complete the graduation research	Writing the search	practical ( <sup>Y</sup> hours)	Weekly follow up

١٣	۲	Cooperation and joint work for students within the research team to complete the graduation research	Writing the search	practical ( <sup>Y</sup> hours)	
1 £	۲	Cooperation and joint work for students within the research team to complete the graduation research	proofreading	practical ( <sup>Y</sup> hours)	Weekly follow up
10	۲	Cooperation and joint work for students within the research team to complete the graduation research	Printing the search	practical ( <sup>7</sup> hours)	The degree of pursuit of $\xi \cdot$ is granted by the supervisor according to the student's follow- up during the research preparation and writing period
		Final-term exam.			The discussion of graduation research completed by a scientific committee, and the score is calculated from <i>\</i> .

v. Infrastructure		
v. Books Required reading:	Non	
۲. Main references (sources)	۱-SChaum's outlines. General, Organic, and Biochemistry. <sup>۲nd</sup> ed. ۲-Harper's illustrated Biochemistry. ۲۸ <sup>th</sup> ed. ۲۰۰۹. Robert K. Murray, David A. Bender. ۳-Biochemistry, Molecular biology &Genetics. ۵ <sup>th</sup> ed.۲۰۱۰. Todd A. Swarson, Sandra I. Kim, Marc J. Glucksman.	
A- Recommended books and references (scientific journals, reports).		
B-Electronic references, Internet sites	Wikipedia	

### ۲۲. The development of the curriculum plan

<sup>1</sup>. Searching for modern teaching and learning methods and means away from the old traditional recitation method. <sup>4</sup>. Relying on modern educational means to transfer information. <sup>6</sup>. The use of modern devices, machines and technologies, especially electronic ones, to deliver information so that the student uses all his auditory, visual and sensory senses in comprehending and storing the information in his mind. <sup>4</sup>. Using chemical methods and modern equipment to examine and estimate the concentrations of chemical components.