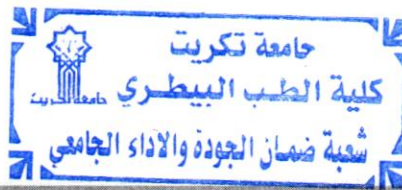


Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department



# Academic Program and Course Description Guide

2024

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Academic Program Description Form

University Name: Tikrit university

Faculty/Institute: College of Veterinary Medicine

Scientific Department: Physiology, pharmacology and biochemistry

Academic or Professional Program Name: Veterinary Medicine

Final Certificate Name: BSc degree in Veterinary Medicine

Academic System: Course

Description Preparation Date: 15/10/2023

File Completion Date: 20/2/2024

Signature:

Head of Department Name: Prof. Dr. Buthina

Abdel Hameed Abdullah

Date: 20/2/2024

Signature:

Scientific Associate Name:

Prof. Dakheel Hussein Hadree

Date: 20/2/2024



The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

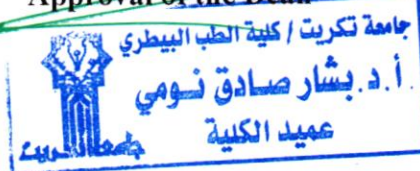
Date: 20 - 2 - 2024

Signature:

Signature of M. M. Saif Khalil Ibrahim

M. M. Saif Khalil Ibrahim

Approval of the Dean



**The file is checked by:**

**Department of Quality Assurance and University Performance**

**Director of the Quality Assurance and University Performance Department:**

**Date:**

**Signature:**

**Approval of the Dean**

### **1. Program Vision**

The College of Veterinary Medicine / Tikrit University seeks to become an educational, research and extension institution and to be a pioneer and distinguished in order to advance the educational process and advance it regionally and internationally by adhering to Arab and international quality assurance standards and policies and university performance and achieving excellence and creativity in the field of the veterinary medicine profession by creating competencies. Veterinary medicine is able to keep pace with scientific development in the field of the profession, as this is done through developing and updating the curriculum so that graduates can perform their work efficiently in accordance with the need of the labor market and provide the best service to society.

### **2. Program Mission**

The basic outputs of the college are to prepare distinguished, competent graduates in the field of veterinary medicine by relying on the outputs of the College of Veterinary Medicine as basic building blocks for primary and postgraduate studies to serve the country's livestock. This is done by developing the curriculum in a way that is compatible with the spirit of the times and modernity. The college is also committed, through its mission, to honesty and quality in education at all levels. In addition to encouraging distinguished research projects for teachers in accordance with the needs of society and the labor market. The college also seeks to achieve excellence in preparing students with solid academic preparation that qualifies them to serve the community in the field of specialization. It also works to establish values and ideals among the college's members and students.

### **3. Program Objectives**

The College of Veterinary Medicine aims to raise the scientific level of undergraduate and graduate students and build their capabilities at the scientific and applied levels, and work to direct scientific research in the applied direction in the field of veterinary medicine and livestock and protect humans from common diseases by combating them and carrying out awareness and educational campaigns to prevent them, as well as graduating doctors. Veterinarians are able to perform their work in the field of community service with high efficiency through the scientific capabilities available at the college, including laboratories, the consulting office, and the veterinary teaching hospital, examining and treating various field animals, poultry, and fish ponds, supervising and treating them, and providing consultations in the field of care and nutrition of animals, poultry, and fish in order to obtain a food product. Safe from healthy animal

origin and free of diseases, spreading environmental and cultural awareness of the importance of veterinary medicine in serving society and developing the environment, focusing on the educational and moral aspect of the student and spreading the spirit of dedication, tolerance and commitment.

**4. Program Accreditation**

Not found

**5. Other external influences**

Not found

**6. Program Structure**

<b>Program Structure</b>	<b>Number of Courses</b>	<b>Study Unit</b>	<b>Percentage</b>	<b>Reviews*</b>
<b>Institution Requirements</b>	<b>Institution requirements: 60 hours (theoretical) + 30 hours (practical), first semester 60 hours (theoretical) + 30 hours (practical), second semester</b>	<b>5 first semester units + 5 second semester units</b>		<b>Basic course</b>
<b>College Requirements</b>	<b>Yes</b>			
<b>Department Requirements</b>	<b>Yes</b>			
<b>Summer Training</b>	<b>Yes</b>			
<b>Other</b>				

\* This can include notes whether the course is basic or optional.

7. Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
٢٠٢٣ ٢٠٢٤/second stage	VEP2103	Physiology	4 theoretical	2 practical

8. Expected learning outcomes of the program	
<b>Knowledge</b>	
	Teaching the student to know the most important natural functions of organs, blood tests, methods of conducting them, and the materials and elements that are included in these tests.
<b>Skills</b>	
	Students learned laboratory skills in how to deal with pathological cases, methods of drawing blood, and how to conduct tests and compare them with normal standards.
<b>Ethics</b>	
	Developing students' abilities to share ideas
	1- Enabling the student to know how to diagnose the disease and the pathology of the disease 2- Enabling the student to recognize normal functions and compare them with diseases. 3- Enabling students to link the functioning of the organs and their influence with other substances, such as medicines and toxins. 4- Enabling students to know about diseases and the extent of their impact on public health and economic aspects

### 9. Teaching and Learning Strategies

1- Theoretical/through scientific lectures and new explanatory methods - getting to know the functions of organs in detail and expanding the student's mind in the field of organ physiology and linking it to other sciences.

2- Practical/through practical lectures in the laboratory and in order to learn about the most important methods of measuring normal blood parameters and comparing them with pathological cases.

### 10. Evaluation methods

- 1-Theoretical exams (daily, monthly, end of semester)
- 2- Practical exams (daily, monthly, end of semester)

<b>11. Faculty</b>						
<b>Faculty Members</b>						
<b>Academic Rank</b>	<b>Specialization</b>		<b>Special Requirements/Skills (if applicable)</b>		<b>Number of the teaching staff</b>	
	<b>General</b>	<b>Special</b>			<b>Staff</b>	<b>Lecturer</b>
Assistant professor	Veterinary medicine and surgery	physiology			staff	

<b>Professional Development</b>
<b>Mentoring new faculty members</b>
Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.
<b>Professional development of faculty members</b>
Using modern educational methods

<b>12. Acceptance Criterion</b>
(Establishing regulations related to enrollment in the college or institute)

<b>13. The most important sources of information about the program</b>
-Gyuton and Hill , medical physiology, 2008, Ramesh C. Gupta, Veterinary Toxicology Basic and Clinical Principles. First edition 2008,
-Jim E. Riviere , Mark G. Papich . Veterinary Pharmacology and Therapeutics, 9th Edition
-Journal of physiology
-Amer. J. of pharmacology
-Veterinary physiology 2006

<b>14. Program Development Plan</b>
In order to link the theoretical information that the student receives to clinical reality, several things must be done, the most important of which are the following: -
1- Increasing field visits to government and private projects
2- Encouragement to visit the college library and the central library at the university
3- Urging students to benefit from summer training in veterinary centers and the teaching hospital
4- Improving research projects and graduation projects.

Program Skills Outline																		
					Required program Learning outcomes													
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics						
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4			
2023-2024	VEP2103	Physiology	Basic		x		x	X										

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.



### Course Description Form

<b>1. Course Name:</b>	2	
Physiology		
<b>2. Course Code:</b>	4	
<b>VEP2103</b>		
<b>3. Semester / Year:</b>	6	
2023-2024/ second year		
<b>4. Description Preparation Date:</b>	8	
20/2/2024		
<b>5. Available Attendance Forms:</b>	10	
Attendance		
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	12	
120 theoretical hours + 60 practical hours. 4 theoretical hours + 2 practical hours per week		
<b>7. Course administrator's name (mention all, if more than one name)</b>	14	
Name: Prof. Dr. Muneef Saab Ahmed      Email: muneef.s962@tu.edu.iq.		
<b>8. Course Objectives</b>	16	
1- Teaching the student to know the most important natural functions of the organs, blood tests, methods of conducting them, and the materials and elements that go into these tests. 2- Students learned laboratory skills in how to deal with pathological cases, methods of draw blood, and how to conduct tests for them and compare them with normal standards..		
<b>9. Teaching and Learning Strategies</b>	18	
<b>Strategy</b>	1-Electronic learning method 2- Brainstorming education strategy. 3- Education Strategy Notes Series	
<b>10.Course structure</b>		

		<b>Animal cell ultra-structure, composition and functions Body fluid and its Dynamics. . Physio-chemical laws and membranes' phenomena. Transport of through biological membrane. )Review exam(.</b>			
=	=	<b>Excitable cells, Neurophysiology: structure and functions, Excitability and transmission of impulse in neuron and muscle. Junctional transmission. Neuro-transmitters and action potential. Synapse, (Review exam.)</b>	Identify the nervous system and its structure	1.	6
=	=	<b>Muscle Physiology Muscle types and their intra-cellular contractile mechanisms. Electrophysiology of muscles. Neuromuscular junction. Excitation contraction coupling, its biochemical and ionic mechanisms. Molecular basis of muscle contraction (Review exam.)</b>	Identify the function and importance of the muscular system and its relationship with the nervous system	10	7
=	=	<b>Nervous system: organization of the nervous system, CNS, PNS, Spinal cord, Reflex arch, Autonomic nervous system, (sympathetic, and</b>	Specialized nervous system function	7	8 & 9
=	=	<b>Cardiovascular physiology: Cellular component of blood, Types and Functions, Hemoglobin Structure and Function, Electrical activity of the heart, (ECG...EKG), Capillaries and fluid exchange. Neural and Hormonal Control of Blood pressure, Blood Volume. and Hemostasis.</b>	Identify the circulatory system, its components, and the importance of each component	10	10 & 11
=	=	<b>Endocrinology: Endocrine system (Glands and their Functions) (Review exam</b>	Identify the endocrine system and the importance of hormones and their work	1.	10
=	=	<b>Gastrointestinal Physiology and Metabolism: Organization of the Digestive System, Saliva and Salivary Glands, Liver and Pancreas, Digestive Enzymes, Ruminant physiology and fermentation</b>	Identify digestive system function	12	11
=		<b>Renal Physiology: Nephron structure and Function, Glomerular Filtration, Solute reabsorption, Water Balance, and Acid Base Balance.</b>	Identify urinary system	^	12 & 13
=	Lecture and explanation with preview of samples	<b>Respiratory System Physiology, Respiratory Volumes, Gas Exchange, Gas transport in the Blood, and Control of ventilation</b>	Identify respiratory system	8	12
=	Lecture and explanation with preview of samples	<b>Reproductive Physiology: Gamete development, Ovulation, Reproductive cycle, Pregnancy, Mammary gland and Lactation, Reproductive physiology of the male. (Review exam.)</b>	Identify reproductive system and its function	1.	13
=	=	<b>Homeostasis</b>		2	14 & 15

15 - Courses level :2<sup>nd</sup> year

Course Name :Practical physiology / 2 hours

1. Semester: First

15 - Courses level :2<sup>nd</sup> year

Course Name :Practical physiology / 2 hours

Semester: First

Evaluation methods	Learning methods	Subject name	Learning method outcome	Hours	Weeks
Daily exam questions and discussion	Lecture and explanation with ppt presentation	Safety in the physiological Laboratory		2	1
=	=	Introduction to apparatus and instruments.		2	2
=	=	Fragility of Red Blood cell.		2	3
=	=	Red blood cell count.		2	4
=	=	White blood cell count.		2	5
=	=	Differential leukocyte count		2	6
=	=	Estimation of hemoglobin		2	7
=	=	Estimation of packed cell volume		2	8
=	=	Estimation of erythrocyte sedimentation		2	9
=	=	The Win Trobe erythrocyte indexes		2	10
=	=	Blood groups		2	11
=	=	Coagulation		2	12
=	=	Bleeding time		2	13
=	=	Blood pressure		2	14
=	=	Effect of exercise and gravity on blood pressure and venous pressure		2	15

Examine

## 1. Course Evaluation

The distribution is as follows: 40 marks for the annual pursuit and 60 marks for the final exams

## 2. Learning and Teaching Resources

Required textbooks (curricular books, if any)	<b>Veterinary physiology</b>
Main references (sources)	Gyuton and Hill , medi physiology,
Recommended books and references (scientific journals, reports...)	Jim E. Riviere , Mark G. Papich . Veterinary Pharmacology and Therapeutics, 9th Edition <b>-Journal of physiology</b> <b>-Amer. J. of pharmacology</b> ..
Electronic References, Websites	