

علم الهيئة  
د. حسن سرعات  
د. د. هادي صدر  
د. فائق احمد

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.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

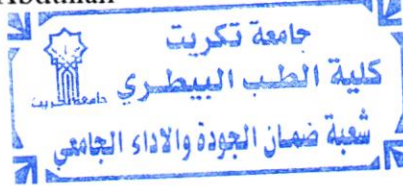
University Name: Tikrit university  
Faculty/Institute: College of Veterinary Medicine  
Scientific Department: Physiology, pharmacology and biochemistry  
Academic or Professional Program Name: Veterinary Medicine  
Final Certificate Name: BSc degree in Veterinary Medicine  
Academic System: Course  
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:

Assist Lecture, Saif khaleel Ibrahim

Date: 20-2-2024

Signature:

Signature of Saif khaleel Ibrahim



### 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

<b>5. Other external influences</b>
Not found

<b>6. Program Structure</b>				
<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.

<b>7. Program Description</b>				
<b>Year/Level</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit Hours</b>	
<b>2024-2023/second stage</b>	<b>VEP2103</b>	<b>Physiology</b>	<b>4 theoretical</b>	<b>2 practical</b>

<b>8. Expected learning outcomes of the program</b>	
<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)

### 11. Faculty

Faculty Members						
Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assistant lecture	biology	Physiology animal			staff	

### Professional Development

Mentoring new faculty members

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

**Professional development of faculty members**

Using modern educational methods

**12. Acceptance Criterion**

(Establishing regulations related to enrollment in the college or institute)

**13. The most important sources of information about the program**

-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

**14. Program Development Plan**

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.

<b>Program Skills Outline</b>																		
							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

1. Course Name:	2.
Physiology	
3. Course Code:	4.
<b>VEP2103</b>	
5. Semester / Year:	6.
2023-2024/ second year	
7. Description Preparation Date:	8.
20/2/2024	
9. Available Attendance Forms:	10.
Attendance	
11. Number of Credit Hours (Total) / Number of Units (Total)	12.
120 theoretical hours + 60 practical hours. 4 theoretical hours + 2 practical hours per week	
13. Course administrator's name (mention all, if more than one name)	14.
prof. <del>Khalid Ahmed Hadi</del> - prof. Dr. Wassan Sarhan	
15. Course Objectives	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..	
17. Teaching and Learning Strategies	18.
<b>Strategy</b>	
	1-Electronic learning method 2- Brainstorming education strategy. 3- Education Strategy Notes Series
<b>10.Course structure</b>	

15 - Course level :Second year Course Name :Theoretical physiology Semester: First & second.					
Evaluation methods	Learning methods	Subjects name	Learning methods outcomes	Hours	weeks
Questions, discussion and daily exam	Lecture and explanation	Introduction :Definition of physiology and its relation to other sciences, the structure of cell membrane and cell organelles functions.	Introducing the student to physiology and its relationship to other sciences, an introductory introduction, the structure of the plasma membrane and the functions of organelles.	4	1-
=	=	Cellular Basis of Animal Physiology, Animal cell ultra-structure, composition	Identify cellular structure	6	5

		and functions Body fluid and its Dynamics. . Physio-chemical laws and membranes' phenomena. Transport of through biological membrane. )Review exam(.			
=	=	Excitable cells, Neurophysiology: structure and functions, Excitability and transmission of impulse in neuron and muscle. Junctional transmission. Neurotransmitters and action potential. Synapse, (Review exam.)	Identify the nervous system and its structure	10	6
=	=	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.)	Identify the function and importance of the muscular system and its relationship with the nervous system	10	7
=	=	Nervous system: organization of the nervous system, CNS, PNS, Spinal cord, Reflex arch, Autonomic nervous system, (sympathetic, and	Specialized nervous system function	6	8 & 9
=	=	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.	Identify the circulatory system, its components, and the importance of each component	10	10 & 11
=	=	Endocrinology: Endocrine system (Glands and their Functions) (Review exam	Identify the endocrine system and the importance of hormones and their work	10	10
=	=	Gastrointestinal Physiology and Metabolism: Organization of the Digestive System, Saliva and Salivary Glands, Liver and Pancreas, Digestive Enzymes, Ruminant physiology and fermentation	Identify digestive system function	12	11
=		Renal Physiology: Nephron structure and Function, Glomerular Filtration, Solute reabsorption, Water Balance, and Acid Base Balance.	Identify urinary system	8	12 & 13
=	Lecture and explanation with preview of samples	Respiratory System Physiology, Respiratory Volumes, Gas Exchange, Gas transport in the Blood, and Control of ventilation	Identify respiratory system	8	12
=	Lecture and explanation with preview of samples	Reproductive Physiology: Gamete development, Ovulation, Reproductive cycle, Pregnancy, Mammary gland and Lactation, Reproductive physiology of the male. (Review exam.)	Identify reproductive system and its function	10	13
=	=	Homeostasis		2	14 & 15

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

Course Name :Practical physiology / 2 hours

1. Semester: First

15 - Coures 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	