

Animal Nutrition \ 1

تغذية حيوان

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

Faculty/Institute: Veterinary Medicine

Scientific Department: Public Health

Academic or Professional Program Name: Veterinary medicine and surgery

Final Certificate Name: Bachelor of Veterinary Medicine and Surgery

Academic System: quarterly

Description Preparation Date: 5/10/2023

File Completion Date: 20/2/2024

Signature: L.Dr. Ali Qais Jalil

Head of Department Name:

Date: 20/2/2024

Signature: A.P. Dakheel H. Hidry

Scientific Associate Name:

Date: 20/2/2024



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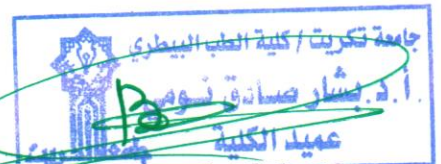
Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

A. L. Saif Kh. Sallom

Date: 20/2/2024

Signature:



Approval of the Dean

1. Program Vision

The College of Veterinary Medicine aims to be one of the leading higher education institutions in the faculties of Tikrit University in the field of modern education and scientific research through its scientific, research and administrative activities. It also works to provide an integrated path for its students and professors to make them active and creative in serving the community in the fields of veterinary medicine and animal health.

2. Program Mission

Prepare and graduate leading scientific and leadership competencies in languages, sciences and literature, and to develop the balance of knowledge in the field of scientific research to serve the local, regional and international community, as well as training and refining the minds of students scientifically and cognitively, and emphasizing social and cultural values and responding to the requirements of the labor market.

3. Program Objectives

1. Embodying the vision, mission and goals of Tikrit University, and applying the best educational practices with a focus on ensuring and enhancing quality and performance.
2. Preparing specialized cadres capable of serving the community and preparing for the preparation of future specializations.
3. Spreading the culture of human diversity in society, transferring veterinary knowledge and skills, writing academic research, and creative scientific achievement through student- and teaching-focused activities.
4. The college seeks to conclude scientific and cultural cooperation agreements with corresponding colleges and corresponding departments in different colleges to achieve best practices in the fields of teaching, learning and translation.
5. Focusing on the educational and moral aspect for all members and spreading the spirit of dedication, tolerance, commitment and work to serve the nation.
6. Paying attention to intellectual and cultural construction through openness to the experiences of other countries in the fields of languages, literature and translation.
7. Focus on the educational and moral aspect of the student and instill a spirit of dedication, tolerance and commitment.

4. Program Accreditation

National institutional accreditation standards for higher education institutions in Iraqi universities

5. Other external influences

Laboratories, farm, library, internet, veterinary projects, journals, research, articles

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	60			
College Requirements	Yes			
Department Requirements	Yes			
Summer Training	No			
Other				

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
2023-2024 Second	VEH2105	Animal Nutrition\1	30	30

8. Expected learning outcomes of the program

Knowledge

Learning Outcomes 1

- 1- The student's knowledge of the concept of food, its components and composition, as well as identifying the metabolic processes that occur within the body, in addition to nutritional deficiency diseases.
- 2- Providing the student with skills in how to deal with animals.
- 3- Providing the student with skills in how to work with laboratory equipment.
- 4- Giving the student the skill of forming relationships and observing their effect.

Skills

Learning Outcomes 2

Training students in the laboratory on methods used in food analyzes and methods for measuring digestion parameters

Ethics

Learning Outcomes 4

Developing students' abilities to share ideas

Learning Outcomes 5

Disclosing one's thoughts and feelings regarding life matters, including scientific material related to animal nutrition

9. Teaching and Learning Strategies

1- Enabling the student to perform the skills related to the practical aspect through knowledge of the use of laboratory techniques, which enables him to know the foods that are beneficial to animals.

2- Developing the student's creative skills in order to know the amount of food appropriate to the type, age and condition of the animal.

3- Enabling the student to apply theoretical information practically in laboratories

4- Learn planning and research skills in the field of veterinary specialization

10. Evaluation methods

Monthly and daily exams, reports, and the end-of-year exam.

11. Faculty

Faculty Members

Academic Rank	Specialization	Special Requirements/Skills	Number of the teaching staff
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			(if applicable)		Staff	Lecturer
	General	Special				
Assist Proff.	Animal Production	Animal Nutrition			Yes	

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

Briefly describe the academic and professional development plan and arrangements for faculty such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

12. Acceptance Criterion

(Setting regulations related to enrollment in the college or institute, whether central admission or others)

13. The most important sources of information about the program

- Animal Nutrition , P McDonald et al 2010
- Animal Nutrition Handbook , 2009 , Lee I. Chiba
- General-Animal-Nutrition , P.S. Niranjan and Sanjay Kumar , 2008

14. Program Development Plan

Course Description Form

1. Course Name: Animal Nutrition\1	
2. Course Code: VEH2105	
3. Semester 2 / Year: First	
4. Description Preparation Date: 20/2/2024	
5. Available Attendance Forms: A presence	
6. Number of Credit Hours (Total) / Number of Units (Total) 60 h./course 4 h./week	
7. Course administrator's name (mention all, if more than one name) Name: Assist. Prof. Mwaffuk H. Ali Email: drmwoffuk75@tu.edu.iq Name: Assist. Prof. Salih N. Hussein Email: salihnajim@tu.edu.iq	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> The student's knowledge of the concept of food, its components and composition, as well as identifying the metabolic processes that occur within the body, in addition to nutritional deficiency diseases. Training students in the laboratory on the methods used in food analyzes and methods for measuring digestion parameters
9. Teaching and Learning Strategies	
Strategy	<ul style="list-style-type: none"> Educational strategy, collaborative concept planning. Brainstorming education strategy. Education Strategy Notes Series
10. Course Structure	

	Course contents - Theoretical	
weeks	topics	Hours

1	Orientation and general information Developments of nutrition science ,Animal nutrition : Its Role in Modern Agriculture and society .Definition of terms ,Composition of animal feed .Composition of animal body .	2
2-3	Water and its function Proportion and function of Water , Absorption and turnover of Water, Sources of water supply , Sources of water loss ,Water requirements, Water restriction , Water quality ,Water regulation	4
4-5	Carbohydrate metabolism Chemical forms and dietary sources , Carbohydrate metabolism , Important of glucose ,sources of blood glucose , Glycogen breakdown , Glucose anabolism , glucose Utilization	4
6	Volatile fatty acids Sources of Volatile fatty acids , Ruminal production and Absorption, post - absorptive metabolism , post - hepatic tissues metabolism, metabolism in ruminates tissue	2
7-8	Lipid metabolism Classification of Lipid , Structures and function of lipid, Lipid anabolism, Lipid synthesis (lipogenesis) ,Lipid Catabolism	4
9-10	Protein metabolism Biological function and proportion ,composition and structure, structural classification, general properties of amino acids , essential and non-essential amino acids , amino acids composition and protein quality ,protein metabolism , protein syntheses , protein syntheses versus degradation animal responses to protein nutrition , practical considerations	4
11-12	Trace element Mineral classification ,General minerals functions, Factors effecting requirements , Deficiencies and excesses of minerals , Biological function dietary sources and deficiency symptoms of minerals	4
13-14	Vitamins Definition ,Classification ,Feature and General Functions , Fat soluble vitamins ,Biological function dietary sources and deficiency symptoms, water soluble vitamins Biological function dietary sources and deficiency symptoms.	4
15	Exam	2
Total		30

week	Practical Animal Nutrition\1	hours
	Topics	

1	Using the Nutrition Laboratory	2
2	Food staff Approximate analysis	2
3 & 4	How take A sample for analysis	4
5, 6, 7, 8	Moisture Determination in feed stuff green roughage, milk, meat and egg	8
9	Determination of Ash	2
10	Determination of Silo	2
11, 12	Preparing Standard Solution	4
13, 14	Determination of Crude Protein	4
15	Exam	2
Total		30

week	Practical Animal Nutrition\2	hours
	Topics	
1, 2	Determination of fiber	4
3, 4	Determination of Ether Extract	4
5	Determination of NFE by calculated method	2
6	Determination of gross energy by calculated method	2
7	Determination of energy by bomb calorimetric	2
8,9,10,11	Digestive trials	8
12,13,14	Making standard ration for farm animal	6
15	Exam	2
Total		30

11.Course Evaluation

The distribution is as follows: 40 marks for the pursuit exams for the second semester + 20 marks for the final practical exams + 40 marks for the final practical exams

12.Learning and Teaching Resources


Required textbooks (curricular books, if any) :

Main references (sources) : Animal Nutrition , P McDonald et al 2010

Recommended books and references (scientific journals, reports...):

- Animal Nutrition Handbook , 2009 , Lee I. Chiba
- General-Animal-Nutrition , P.S. Niranjan and Sanjay Kumar , 2008

Electronic References, Websites : <https://www.fao.org>


P.h.D. Ali Qays Jalil
Head = Branch of Public health
20/2/2024