Academic Program Description Form

University Name: Mosul

Faculty/Institute: Agriculture and forestry

Scientific Department . Animal production

Academic or Professional Program Name: PhD. In Animal production

Final Certificate Name: PhD. In Animal production sciences

Academic System: Courses

Description Preparation Date: 1\9\2025

File Completion Date: 1\9\2025

Signature:

Head of Department Name:

Prof. Dr. Omar Dheyaa Muhammad AlMallah

Date:

Signature:

Scientific Associate Name:

Prof. Dr. Hamid Hmud Ali

Date:

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Assist. Lect. Oday Abdulhadi Adday

Date: 2/9/2025

Signature:

Quality Assurance Unit Officer: Lect. Dr. Ramia Amer Khalil

Date: 2/9/2025

Signature

A.M.

Approval of the Dean

1. Program Vision

2.

Excellence and sophistication in academic education, leadership in community service, and quality in scientific research in the fields of animal production in pursuit of international

3. Program Mission

Contributing to achieving sustainable development by preparing a specialized agricultural engineer qualified to work in the fields of animal production, committed to professional ethics, highly competent in terms of science and applied skills, and capable of meeting the needs of the local, regional and global labor market and serving the community at a competitive level through developing scientific research and self-learning skills. Continuous.

4. Program Objectives

1- Preparing specialized scientific cadres, trained and with scientific competencies in the field of animal production, who are able to face the challenges of the profession and compete with their peers in serving the community and meeting the needs of the labor market.

2- Developing a modern, stimulating educational environment equipped with the latest technologies and advanced equipment that enables the student to compete, create, and differentiate, and creates in him the desire to continue continuous learning, self-development, skills, and the ability to develop performance, work within a team, and make decisions in the field of animal production.

3- Qualifying cadres familiar with agricultural legislation, legal and social issues, and commitment to work ethics and quality management related to agricultural fields, especially those related to animal production.

4- Managing and employing resources and addressing problems in agricultural facilities and projects with efficiency and good performance in the field of animal production within the framework of preserving natural resources, biodiversity and sustainable development.

5- Possess skills in the fields of language and use of computers and develop their abilities to use the scientific and practical method in research in the field of animal production and contribute to solving related agricultural problems.

6- Can analyze the ways in which humans, plants, and soil interact with the general environment in order to promote the conservation of natural resources and protect the environment

7- Evaluates the characteristics of soil and water and determines appropriate agricultural use patterns in the field of animal production under different environmental conditions and under the conditions of preserving the soil from deterioration and water from pollution for the sake of a clean, sustainable environment.

8- Able to practice the profession of manufacturing poultry, animal meat, fodder, dairy products, or dairy cows, and manufacturing animal products using economic and business concepts to produce market requirements of multiple high-quality animal products such as meat, dairy, and fish.

9- Preparing graduates with the skills required in managing, breeding, raising and feeding horses to work in recreational and tourism activities for horses.

10- Able to manage feed and produce animal food in an effective and safe way for livestock and human health, and to be environmentally friendly.

11- It can develop and raise sustainable aquaculture and food safety, by equipping students with technology and management skills for aquaculture and fish products.

12- Can study domestic and wild animals that are used for human entertainment, enjoyment, and sporting activities, and the related nutrition, management, and genetic improvement, and prepare graduates for job opportunities in the fields of marketing and feeding pets and captive animals.
13- Knowledge of programs to prevent epidemic, endemic and common diseases and manage animal waste with the concepts of sustainability and environmental preservation.
14- It can preserve the genetic and environmental resources of the national livestock and plan to improve the breeds genetically and use modern scientific concepts to acclimatize them and develop new species suitable for breeding on farms.
15- Able to apply various biotechnology methods in the field of reproduction and artificial insemination in farm animals
16- He possesses advertising and marketing skills, as well as labeling, presenting and selling food animal products
17- He is able to evaluate and analyze agricultural projects in the field of animal production and investment in agricultural natural resources and develop plans for their development and growth.

5. **Program Accreditation**

nothing

6. **Other external influences**

nothing

7. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	3	2	7.14	basic
Department Requirements	10	26	92.86	Basic and elective
Other				

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

8. Program Description

Preparatory year	Course Code	Course Name	Credit Hours	
			theoretical	practical
2025-2026/first semester	Ag.A. 702	Advanced Animal Physiology/Basic	2h	3h
2025-2026/first semester	Ag.Cr . 606	Forage Crops Production/Basic	2h	3h
2025-2026/first semester	Ag.Co. 703	Computer 3/Basic	2h	----
2025-2026/first semester	Ag.Co. 701	Seminars 2 / Basic	1h	----
2025-2026/first semester	Ag.A. 705	Poultry Management	2h	3h
2025-2026/first semester	Ag.A. 706	Sheep production	2h	3h
2025-2026/first semester	Ag.A. 707	dairy cattle production	2h	3h
2025-2026/first semester	Ag.A. 708	Beef cattle production	2h	3h
2025-2026/first semester	Ag.A. 709	Endocrinology	2h	3h
2025-2026/first semester	Ag.A. 710	Physiology of Ruminant Digestion	2h	3h
2025-2026/first semester	Ag.A. 711	Cell Anatomy and Physiology	2h	3h
2025-2026/first semester	Ag.A. 712	Genetic Population	2h	3h
2025-2026/first semester	Ag.A. 713	Genetic engineering	2h	3h
2025-2026/first semester	Ag.A. 714	Quantitative Genetic	2h	3h
2025-2026/second semester	Ag.A. 703	Metabolism/ Basic	2h	3h
2025-2026/second semester	Ag.A. 708	Advanced Pasture Management/ Basic	2h	3h

2025-2026/second semester	Ag.Co. 702	English Language 3/ Basic	2h	-----
2025-2026/second semester	Ag.Co. 715	Research Methodology 2/Basic	2h	-----
2025-2026/second semester	Ag.Co. 701	Seminars 3/Basic	1hr	-----
2025-2026/first semester	Ag.A. 705	Poultry Management	2h	3h
2025-2026/first semester	Ag.A. 706	Sheep production	2h	3h
2025-2026/first semester	Ag.A. 707	dairy cattle production	2h	3h
2025-2026/first semester	Ag.A. 708	Beef cattle production	2h	3h
2025-2026/first semester	Ag.A. 709	Endocrinology	2h	3h
2025-2026/first semester	Ag.A. 710	Physiology of Ruminant Digestion	2h	3h
2025-2026/first semester	Ag.A. 711	Cell Anatomy and Physiology	2h	3h
2025-2026/first semester	Ag.A. 712	Genetic Population	2h	3h
2025-2026/first semester	Ag.A. 713	Genetic engineering	2h	3h
2025-2026/first semester	Ag.A. 714	Quantitative Genetic	2h	3h

9. Expected learning outcomes of the program

Knowledge	
A1	They have a deep understanding of the biological systems of animal production and how these systems integrate with the environment. They can also formulate research hypotheses related to animal production issues.
Skills	
B1	The ability to formulate a research question, review and analyse recent scientific literature, and evaluate the quality of scientific work in terms of both citation standards and practical relevance.
B2	The ability to implement research projects in an integrated manner, including testable hypotheses, the identification of study variables, data analysis plans and ethical and environmental considerations.
B3	Using and developing methods to assess the safety and quality of animal feed and products, as well as evaluating the economic and environmental risks associated with animal production practices.
professional skill	
C1	Mastery of the selection of biological and chemical measurements related to animal production, and their integration with statistical analysis and modelling to explain their relationship with the performance of farm animals.
C2	The ability to write scientific reports, publish research articles and develop specialised learning materials is also required.
Communication skills	
D1	Building a local and global network of cooperation to lead advanced research initiatives in animal production sciences.
Ethics	
E1	We apply ethical research principles to our experiments, documenting them while adhering to animal welfare standards and minimising harm and environmental impact.

10. Teaching and Learning Strategies

Interactive lecture strategy	The most important educational strategies:
Discussion strategy	Cooperative education
Problem solving strategy by commissioning reports	Teaching using projects
Brainstorming strategy	Education using technology

11. Evaluation methods

Quarterly and daily tests

Completion of projects

Discussion and reports on each course item

self evaluation

12. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
prof	Animal production	Animal Nutrition			38	0
Assistant prof		Animal management				
lecture		Animal breeding				
Assistant lecture		Animal physiology				

Professional Development
Mentoring new faculty members
Improving teaching methods and making them more effective, conducting research and community service
Professional development of faculty members
1- Self-development by following the publications of scientific publishing houses and participating in conferences and workshops. 2- Providing support for professors to participate in various scientific and community activities.

13. **Acceptance Criterion**
central

14. **The most important sources of information about the program**
Methodology books Modern electronic copies of books and periodicals Scientific reports in the field Scientific publications and research issued by reputable universities.

15. Program Development Plan
The program is developed based on: 1- Determine the market needs and skills required by the labor market and that the student needs to succeed 2- Review current programs to identify strengths and weaknesses and improve them 3- Determine and constantly update the evaluation methods for the program 4- Developing educational content in line with scientific developments. 5-Activating cooperation with the agricultural and industrial sectors to develop the practical side and link theoretical knowledge with practical application.

	Program Skills Plan										
	Learning outcomes required from the program										
Preparatory year	Course code	Course Name	Essential or optional	Knowledge and understanding	Mental skills			Professional skills		Communication skills	Beliefs and values
				A1	B1	B2	B3	C1	C2	D1	E1
2025 -2026 / the chapter the first	Ag.A. 702	Advanced Animal Physiology/Basic	essential	■		■		■		■	■
	Ag.Cr . 606	Forage Crops Production/Basic	essential	■			■				■
	Ag.Co. 703	Computer 3/Basic	essential	■							
	Ag.Co. 701	Seminars 2 / Basic	essential	■							
	Ag.A. 705	Poultry Management	elective	■	■	■			■	■	■
	Ag.A. 706	Sheep production	elective	■	■	■	■		■	■	■
	Ag.A. 707	dairy cattle production	elective	■	■	■	■	■	■	■	■
	Ag.A. 708	Beefcattle production	elective	■	■	■	■	■	■	■	■
	Ag.A. 709	Endocrinology	elective	■		■	■	■	■	■	■
	Ag.A. 710	Physiology of Ruminant Digestion	elective	■		■	■	■		■	■
	Ag.A. 711	Cell Anatomy and Physiology	elective	■	■	■	■			■	■
	Ag.A. 712	Genetic Population	elective	■		■	■		■	■	■
	Ag.A. 713	Genetic engineering	elective	■		■	■	■		■	■
	Ag.A. 714	Quantitative Genetic	elective	■		■	■	■		■	■
202 6 – 5202 / Chapter Two	Ag.A. 703	Metabolism/ Basic	essential	■	■	■		■	■	■	■
	Ag.A. 708	Advanced Pasture Management/ Basic	essential	■	■	■	■				■
	Ag.Co. 702	English Language 3/ Basic	essential	■							
	Ag.Co. 715	Research Methodology Basic/2	essential	■							■
	Ag.Co. 701	Seminars 3/Basic	elective	■	■	■	■	■	■	■	■
	Ag.A. 705	Poultry Management	elective	■	■	■	■	■	■	■	■
	Ag.A. 706	Sheep production	elective	■	■	■	■	■	■	■	■
	Ag.A. 707	dairy cattle production	elective	■	■	■	■	■	■	■	■
	Ag.A. 708	Beefcattle production	elective	■	■	■	■		■	■	■
	Ag.A. 709	Endocrinology	elective	■		■	■	■	■	■	■
	Ag.A. 710	Physiology of Ruminant Digestion	elective	■		■	■	■		■	■
	Ag.A. 711	Cell Anatomy and Physiology	elective	■	■	■	■			■	■
	Ag.A. 712	Genetic Population	elective	■		■	■		■	■	■
	Ag.A. 713	Genetic engineering	elective	■		■	■	■		■	■
	Ag.A. 714	Quantitative Genetic	elective	■		■	■	■		■	■