Academic Program Description

University Name: Mosul

Faculty/Institute: Agriculture and forestry

Scientific Department :Dept. Animal production

Academic or Professional Program Name: Animal production

Final Certificate Name: Animal production sciences

Academic System: Courses

Description Preparation Date: 18\5\2025

File Completion Date: 18\5\2025

جامعة الموصل
كلية الزراعة والغابات
قسم الانتاج الحيواني

Signature:

Head of Department Name:

Prof. Dr. Omar Diaa Muhammad Al-Mallah

Date: 19\5\2025

Signature:

Scientific Associate Name:

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

Quality Assurance Unit Head: Asst. Dr. Ramia Amer Khalil

Date:

Signature:

Approval of the Dean

Prof. Dr. Ali Farouq Al-Ma'athedi

1. Program Vision

Excellence and innovation in education and scientific research, providing training opportunities for graduates in partnership with the private and public sectors, in accordance with sustainable international standards.

2. Program Mission

We strive to develop the animal production sector to serve the community and ensure sustainable food security while maintaining animal welfare and protecting the environment.

3. 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.

4. **Program Accreditation**

nothing

5. **Other external influences**

nothing

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	8	18.5	17.02	basic
College Requirements	13	45.5	27.66	basic
Department Requirements	26	87.5	55.32	basic
Summer Training				basic
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
2024-2025/1st class	ANCH107	analytical chemistry	2h	3h
2024-2025/1st class	PRSS113	Principles of soil science	2h	3h
2024-2025/1st class	PRPP117	Principles of plant protection	2h	3h
2024-2025/1st class	PRAP114	Principles of animal production	2h	3h
2024-2025/1st class	SURV120	surveying	2h	3h
2024-2025/1st class	COMA103	Computer applications 1	---	3h
2024-2025/1st class	ENGL101	English language 1	2h	---
2024-2025/1st class	DEHR100	Democracy and human rights	2h	3h
2024-2025/1st class	ORCH105	organic chemistry	2h	3h
2024-2025/1st class	PRFC112	Principles of field crops	2h	3h
2024-2025/1st class	STAT109	statistical	2h	3h
2024-2025/1st class	PRPO125	Principles of domestic birds	2h	3h
2024-2025/1st class	MATH104	mathematics	2h	----
2024-2025/1st class	GEZO123	General animal	2h	3h
2024-2025/2nd class	BICH204	Biochemistry	2h	3h

2024-2025/2nd class	ANPH222	Health of animal products	**2h**	**3h**
2024-2025/2nd class	PRFI223	Principles of fishes	**2h**	**3h**
2024-2025/2nd class	PRHS116	Principles of horticulture	**2h**	**3h**
2024-2025/2nd class	PAEX206	Principles of agricultural extension	**2h**	**3h**
2024-2025/2nd class	PRMB205	Principles of microbiology	**2h**	**3h**
2024-2025/2nd class	AGMM207	Mechanization of animal production	**2h**	**3h**
2024-2025/2nd class	ARAL102	Arabic language	**2h**	---
2024-2025/2nd class	CBAP200	Crimes of the defunct Baath Party	**2h**	**3h**
2024-2025/2nd class	GENT212	Genetics	**2h**	**3h**
2024-2025/2nd class	FOCP225	Fodder crops and pastures	**2h**	**3h**
2024-2025/2nd class	FIBP226	Fish breeding and production	**2h**	**3h**
2024-2025/2nd class	PRPD227	Dairy principles	**2h**	**3h**
2024-2025/2nd class	PAEC115	Principles of agricultural economics	**2h**	**3h**
2024-2025/2nd class	COMA203	Computer applications 2	---	**3h**
2024-2025/2nd class	ENGL201	English language 2	**2h**	**3h**
2024-2025/3rd class	ANPH323	Animal physiology	**2h**	**3h**
2024-2025/3rd class	HAHM324	Hatching and hatchery management	**2h**	**3h**
2024-2025/3rd class	ANUT325	Animal feeding	**2h**	**3h**
2024-2025/3rd class	ECAP326	Economics of animal production	**2h**	**3h**
2024-2025/3rd class	ANEB327	Ecology and animal behavior	**2h**	----
2024-2025/3rd class	DAAE302	Design and analysis of experiments	**2h**	**3h**
2024-2025/3rd class	MEVI221	Medical and veterinary insects	**2h**	**3h**
2024-2025/3rd class	ENGL300	English language 3	**2h**	**3h**
2024-2025/3rd class	POPH328	Poultry physiology	**2h**	**3h**
2024-2025/3rd class	PPTE329	Technology of poultry products	**2h**	**3h**
2024-2025/3rd class	FEFD330	Feed and rations	**2h**	**3h**
2024-2025/3rd class	ANDI331	Animal diseases	**2h**	**3h**
2024-2025/3rd class	ANUB332	Animal breeding	**2h**	**3h**
2024-2025/3rd class	REPH333	Reproductive physiology	**2h**	**3h**
2024-2025/3rd class	COMA301	Computer applications 3	---	**3h**
2024-2025/4th class	PONU428	Poultry feeding	**2h**	**3h**

2024-2025/4th class	POBR429	Poultry Breeding	**2h**	**3h**
2024-2025/4th class	SPGO430	Sheep and goat production	**2h**	**3h**
2024-2025/4th class	MEPR431	Meat production	**2h**	**3h**
2024-2025/4th class	PBPM432	Management and production of poultry	**2h**	**3h**
2024-2025/4th class	PAMA433	Pasture management	**2h**	**3h**
2024-2025/4th class	REPR402	research project1	**2h**	**3h**
2024-2025/4th class	COMA401	Computer applications 4	**----**	**3h**
2024-2025/4th class	PODI434	Poultry diseases	**2h**	**3h**
2024-2025/4th class	MOBI435	Molecular biology	**2h**	**3h**
2024-2025/4th class	DACP436	Milk cattle production	**2h**	**3h**
2024-2025/4th class	MTSC437	Meat science	**2h**	**3h**
2024-2025/4th class	BUPR438	Buffalo production	**2h**	**----**
2024-2025/4th class	SEMN404	Seminars	**1h**	**----**
2024-2025/4th class	REPR403	research project	**----**	**3h**
2024-2025/4th class	ENGL400	English language 4	**2h**	**-----**

8.	**Expected learning outcomes of the program**
code	**Knowledge and Understanding**
A1	Exhibits a comprehensive grasp of core scientific principles and foundational skills, integrating scientific and linguistic literacy (Arabic and English) with a cultivated aptitude for self-directed learning and rigorous scientific research in the realm of animal production.
A2	Demonstrates proficiency in addressing complex problems, encompassing the ability to analyze environmental and agricultural challenges, design and implement modern agricultural practices, and comprehend food production along with the health and nutritional aspects related to both animals and plants.
A3	Understands and values the development of professional ethics and awareness, the ability to collaborate effectively within a team, the commitment to quality and safety protocols, and the appreciation for the crucial role of sustainable development in animal production.
code	**Cognitive Skills**
B1	Employs contemporary design approaches in addressing challenges, showcasing the capacity to analyze various problems and issues with a systematic and positive mindset, and to suggest suitable and inventive resolutions.

B2	Employs proficient communication skills and fosters constructive dialogue, showcasing the capacity to express thoughts with clarity and objectivity, engage positively with colleagues and experts, and participate in discussions and the assessment of studies and research relevant to the community.
B3	Applies methods of strategic planning and evaluation, demonstrating the ability to propose production and commercial plans for plant, animal, and food crops based on market data and assess the economic situation to meet needs.
B4	Applies analytical and interpretive thinking, demonstrating the ability to comprehend problems related to systems, processes, and interactions between microorganisms and animals, and to analyze data and information pertaining to agricultural, nutritional, animal, and fish production challenges.
B5	Exercises sound judgment in decision-making and problem resolution, showcasing the capacity to address problems and issues within animal and fish production, suggest inventive solutions, and diagnose prevalent diseases in animals and fish to implement suitable measures.
code	**Technical Skills**
C1	Applies modern agricultural technologies, demonstrating the ability to design scientific experiments to solve agricultural problems and implement contemporary techniques related to agricultural processes and food production.
C2	Utilizes skills in managing integrated agricultural operations, demonstrating the ability to diagnose the causes of plant and animal diseases and pests, and implement good agricultural practices to enhance productivity and produce safe food.
C3	Participates in the planning and execution of agricultural ventures, showcasing the capacity to develop specialized scientific research and studies in Arabic and English, and perform feasibility analyses for agricultural projects utilizing diverse software tools.
C4	Focuses on Improving Productivity and Sustainability: Showcases the capacity to practice effective agricultural techniques that optimize agricultural, organic, and aquaculture productivity, and food production, while addressing challenges related to fertility and yield reduction; formulating well-balanced, nutritious, and cost-effective diets; employing agricultural resources efficiently for sustainable agricultural growth; and utilizing contemporary biotechnology to enhance genetics and output.
code	**Communication Skills**

D1	Develops proficiency in employing computer software for the analysis and presentation of data and information within the agricultural domain, leveraging information technology for efficient and accessible information retrieval, and presenting information through sound scientific methodologies.
D2	Gains the ability for linguistic and cultural communication, demonstrating the capacity to actively participate in establishing concepts of coexistence, tolerance, and pluralism and practicing their applications, and to communicate fluently and effectively in both Arabic and English within their field of specialization.
D3	Recognizes the significance of collaborative work, showcasing the capacity to develop skills in planning, organization, time management, and successful group leadership, to operate effectively within a team environment, and to communicate proficiently with colleagues.
D4	Develops the ability to present information to team members, communicate effectively with others, present information orally or in writing, and utilize appropriate audio-visual aids proficiently in displaying environment-related data and information.
D5	Keeps pace with the development of self-directed and lifelong learning abilities and professional skills, continuously evaluates self and identifies personal learning needs, interacts consciously with labor market demands by staying informed about modern developments in animal production science, food science, and human nutrition, works effectively within multicultural teams, and appreciates and understands community behaviors.
code	**Ethics**
E1	Exhibits professional accountability and adherence to ethical standards, takes ownership of completing tasks effectively, contributes to fostering professional development, and respects legal, ethical, and social obligations.
E2	Recognizes the necessity of lifelong learning and proposes methods for environmental and resource conservation, demonstrates competence and effectiveness in transferring knowledge and skills to farmers, breeders, and the general public, emphasizes analysis and critical thinking within Eastern and Arab cultural traditions, and evaluates ethical issues using critical thinking skills.

9. **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

10. Evaluation methods

Quarterly and daily tests

Completion of projects

Discussion and reports on each course item

self evaluation

11. 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			42	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.

12. **Acceptance Criterion**
central

13. **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.

14. 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

Program Skills Outline

Required program Learning outcomes

Year/Level	Course Code	Course Name	Basic or optional	Knowledge and Understanding			Cognitive Skills					Technical Skills				Communication Skills					Beliefs and Values	
				A1	A2	A3	B1	B2	B3	B4	B5	C1	C2	C3	C4	D1	D2	D3	D4	D5	E1	E2
2025 -2024 st class1	ANCH107	analytical chemistry	Basic	*	*	*																
	PRSS113	Principles of soil science	Basic		*	*	*	*		*				*					*		*	*
	PRPP117	Principles of plant protection	Basic			*		*		*		*										
	PRAP114	Principles of animal production	Basic			*		*	*						*							
	SURV120	surveying	Basic		*																	*
	COMA103	Computer applications 1	Basic			*	*	*								*			*	*		*
	ENGL101	English language 1	Basic			*								*				*				
2025-2024 st class1/	DEHR100	Democracy and human rights	Basic		*	*		*									*					*
	ORCH105	organic chemistry	Basic			*	*	*				*	*					*	*		*	
	PRFC112	Principles of field crops	Basic	*								*		*					*			
	STAT109	statistical	Basic		*			*						*	*	*			*	*		
	PRPO125	Principles of domestic birds	Basic			*							*	*	*						*	*
	MATH104	mathematics	Basic	*			*	*						*	*							*
	GEZO123	General animal	Basic			*	*	*					*	*		*		*		*	*	
2025-2024 nd class2/	BICH204	Biochemistry	Basic			*	*															
	ANPH222	Health of animal products	Basic		*	*								*								
	PRFI223	Principles of fishes	Basic		*					*	*			*	*							*
	PRHS116	Principles of horticulture	Basic			*																
	PAEX206	Principles of agricultural extension	Basic		*		*	*											*	*		*
	PRMB205	Principles of microbiology	Basic			*			*					*								
	AGMM207	Mechanization of animal production	Basic			*					*											
	ARAL102	Arabic language	Basic	*	*		*	*														
	ENGL201	English language 2	Basic	*										*				*				
	CBAP200	Crimes of the defunct Baath Party	Basic			*									*					*	*	
2024-2025 /2nd class	GENT212	Genetics	Basic		*	*					*											
	FOCP225	Fodder crops and pastures	Basic								*			*	*			*			*	
	FIBP226	Fish breeding and production	Basic			*								*	*							*
	PRPD227	Dairy principles	Basic		*	*					*		*									
	PAEC115	Principles of agricultural economics	Basic			*		*							*							
	COMA203	Computer applications 2	Basic			*	*	*				*			*	*			*	*	*	
2025-2024 rd class3/	ANPH323	Animal physiology	Basic			*					*											*
	HAHM324	Hatching and hatchery management	Basic			*	*						*						*			
	ANUT325	Animal feeding	Basic		*	*			*	*					*						*	
	ECAP326	Economics of animal production	Basic				*			*		*		*	*	*						*
	ANEB327	Ecology and animal behavior	Basic		*	*														*	*	
	DAAE302	Design and analysis of experiments	Basic		*		*					*		*								

	MEVI221	Medical and veterinary insects	Basic			*				*			*									*
	ENGL300	English language 3	Basic	*										*				*				
2025-2024 rd class3/	POPH328	Poultry physiology	Basic			*					*											*
	PPTE329	Technology of poultry products	Basic			*	*					*	*		*							
	FEFD330	Feed and rations	Basic		*	*		*	*	*	*			*	*		*					
	ANDI331	Animal diseases	Basic		*			*			*			*	*							
	ANUB332	Animal breeding	Basic		*		*	*				*	*		*							*
	REPH333	Reproductive physiology	Basic			*	*				*	*		*	*					*		*
	COMA301	Computer applications 3	Basic	*							*	*								*	*	
2025-2024 th class4/	PONU428	Poultry feeding	Basic		*	*							*	*	*		*					*
	POBR429	Poultry Breeding	Basic		*		*	*		*				*	*		*	*		*		
	SPGO430	Sheep and goat production	Basic		*	*					*		*	*	*							
	MEPR431	Meat production	Basic		*	*					*				*					*		
	PBPM432	Management and production of poultry	Basic			*		*		*					*	*		*	*	*		
	PAMA433	Pasture management	Basic			*						*								*	*	
	REPR402	research project1	Basic				*	*	*						*	*	*	*				
	COMA401	Computer applications 4	Basic			*	*	*			*	*			*	*		*	*	*	*	
2025-2024 th class4/	PODI434	Poultry diseases	Basic			*					*		*	*								
	MOBI435	Molecular biology	Basic		*	*		*	*		*		*		*							
	DACP436	Milk cattle production	Basic	*	*	*						*	*									
	MTSC437	Meat science	Basic	*	*	*					*				*					*		
	BUPR438	Buffalo production	Basic	*	*		*			*	*			*	*				*			
	SEMN404	Seminars	Basic	*	*	*	*		*													
	REPR403	research project	Basic	*		*	*	*	*	*					*							
	ENGL400	English language 4	Basic	*										*				*				