

## Department of Animal Resources

<b>1. Basic Information about the Program: Animal Resources</b>	
<b>Program Title and Final Award</b>	Bachelor of Science in <b>Animal Resources</b>
<b>Awarding Body/ Institution</b>	Faculty of Agriculture, Foods, and Environment
<b>Teaching Institution/ Responsible Department</b>	Department of Animal Resources- Faculty of Agriculture, Foods, and Environment
<b>Program Type</b>	Independent (*), Joint with Other Department(s) ( ) Multi-Departmental ( )
<b>Other Departments Involved in Teaching the Program</b>	Faculty of Agriculture, Foods, and Environment
<b>Medium of Instruction</b>	Arabic
<b>Program Start Year</b>	2020/ 2021
<b>Study Mode</b>	Full-time (mandatory attendance)
<b>Place of Study</b>	Faculty Classrooms, Laboratories, and Farm
<b>System of study</b>	Annual System (Two Semesters per Year)
<b>Time Required for Graduation</b>	Four years (145 credit hours)
<b>Prerequisite Qualifications</b>	High School Certificate (Scientific Section)
<b>Required Average Grade for Admission</b>	At Least 70%
<b>Other Requirements</b>	
<b>Program Coordinator</b>	
<b>Date of Program Specification/ Latest Accreditation</b>	<b>The program is pursuing accreditation</b>

### **Department Vision:**

Providing education that adheres to high-quality standards and academic accreditation for its graduates and conducting scientific research and field studies, utilizing the outcomes to address and resolve animal production challenges within Yemen and the surrounding region.

### **Department Mission:**

Providing an educational and training program that equips graduates with sufficient experience in all branches of animal production, providing a high level of scientific and practical training for work in various animal production projects, conducting distinguished scientific research that contributes to the development of scientific knowledge and addresses the problems of animal production in Yemen, and serving the community to drive the wheel of development forward.

### **Department Aims:**

- 1) Graduating highly qualified cadres equipped with advanced scientific and professional skills in various animal production fields to enable them to compete effectively in the local and regional labor markets.
- 2) Directing scientific research and field studies that contribute to the development and resolution of animal production problems and the advancement of production methods.
- 3) Continuously developing the mechanisms that contribute to the educational and research process (curricula, laboratories, farms) to provide comprehensive practical training in the implementation and management of various cyclical operations.
- 4) Graduating distinguished scientific cadres in the field of postgraduate studies (diplomas and master's degrees) in all animal production specializations.
- 5) Organizing seminars, workshops, and training courses that address the various aspects of animal production and serve the workers in this sector.
- 6) Establishing partnerships with relevant institutions and entities involved in animal and poultry production activities.

### **Graduate Attributes:**

Upon successful completion of this program, the graduate will be able to:

1. Implement good agricultural practices that maximize agricultural productivity, animal and fish production, ensuring safe food production, addressing fertility issues, and overcoming low production problems.
2. Formulate a variety of balanced and cost-effective rations to ensure the production of safe animal products for human consumption.
3. Utilize agricultural resources optimally within the animal and fish wealth sector, effectively leveraging investment projects to achieve sustainable agricultural development.
4. Apply modern techniques relevant to agricultural operations, food production, and management of animal and fish farms to conduct rigorous scientific research aimed at genetic improvement, production optimization, and preservation of genetic resources.
5. Master effective communication skills within team settings, demonstrate an understanding of others' behaviors, and engage in self-learning to enhance their scientific capabilities.

6. Analyze data and information using scientific methodology to address agricultural, nutritional, animal, and fish production problems, effectively identifying and implementing optimal solutions.
7. Propose commercial production plans for animal and food resources in alignment with market systems and evaluate their environmental impact.
8. Diagnose major diseases affecting animals and fish, implement appropriate measures to prevent their spread, and safeguard the environment.
9. Elaborate on animal health care practices, the impact of animal-environment interactions, and demonstrate proficiency in laboratory skills, adhering to quality and safety standards in the field of agriculture and food.

## **Animal Resources Program**

### **Program Mission:**

Contributing to the qualitative educational development of department students by enhancing their knowledge and skills in various fields of animal production in accordance with established academic standards that meet market needs and ultimately enhance their capabilities.

### **Program Aims:**

- 1- Utilizing scientific knowledge and theories for effective animal production project management.
- 2- Leveraging appropriate technology to tackle issues in the animal production sector.
- 3- Encouraging studies and research on natural resources, assets, and biodiversity in Yemen.
- 4- Studying the management of animal herds under different production systems.
- 5- Nurturing capabilities and enhancing self-directed and continuous learning performance.
- 6- Utilizing fundamental scientific concepts in the physiology, nutrition, breeding, and genetic improvement of farm animals.
- 7- Pursuing graduate studies and conducting research in the field of animal production.

## Undergraduate Program Courses for Departments of the Faculty of Agriculture, Foods, and Environment - First and Second Levels

First Level Courses					
First Semester			Second Semester		
Course code	Course Title	Credit Hours	Course code	Course Title	Credit Hours
UR001	Arabic Language (1)	2	FR001	Physics & Meteorology	3
UR006	Islamic Culture	3	FR006	Principles of Statistics	2
FR111	General Chemistry	3	FR111	Organic Chemistry	3
FR112	General Botany	3	FR112	Principles of Agricultural Economics	2
FR113	Mathematics	2	FR113	General Zoology	3
FR114	Agriculture in Yemeni Environment	1	FR114	Principles of Ecology	2
UR007	National culture	2	UR002	Arabic Language (2)	2
FR115	Geology	1	UR008	Conflict with the Israeli enemy	2
Total		17	Total		19

## Undergraduate Program Courses for Departments of the Faculty of Agriculture, Foods, and Environment - First and Second Levels

Second Level Courses					
First Semester			Second Semester		
Course code	Course Title	Credit Hours	Course code	Course Title	Credit Hours
FR211	Soil Fundamentals	2	FR221	Principles of Food Science	2
FR112	General Microbiology	3	FR222	Principles of Crops Protection	2
FR113	Biochemistry	3	UR004	English Language (2)	2
FR114	Principles of Animal Production	2	FR127	Principles of Genetics	2
UR003	English Language (1)	2	FR223	Principles of Horticulture	2
FR114	Principles of Crops Production	2	FR224	Plant Physiology	2
FR215	Principles of Agricultural Engineering	2	FR225	Principles of Human Nutrition	2
----	-----	--	UR005	Computer Skills	3
Total		16	Total		17

**Undergraduate Courses for the Animal Resources Program (ANR) -  
Department of Animal Resources**

<b>Third Level Courses</b>					
<b>First Semester</b>			<b>Second Semester</b>		
<b>Course code</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Course code</b>	<b>Course Title</b>	<b>Credit Hours</b>
ANR311	Ruminant Nutrition	3	ANR321	Poultry Nutrition	3
ANR312	Animals and Poultry Health	3	ANR322	Fish culture and Aquaponic	3
ANR313	Wealth Aquatic Animal	3	ANR323	Physiology of Reproduction	3
ANR314	Animal and Poultry Physiology	3	ANR324	Meat Cattle Production	3
FR315	Agricultural Extension & Rural Community	2	ANR325	Sheep and Goats Production	3
CRP314	Forage and Pastures Crops	2	ANR326	Poultry Diseases	3
ANR315	Statistical Designs	3	ANR327	Summer Training	1
<b>Total</b>		<b>19</b>	<b>Total</b>		<b>19</b>

<b>Fourth Level Courses</b>					
<b>First Semester</b>			<b>Second Semester</b>		
<b>Course code</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Course code</b>	<b>Course Title</b>	<b>Credit Hours</b>
FSN417	Dairy and Meat Technology	3	ANR421	Animal Environment	3
ANR411	Dairy Cattle Production	3	ANR422	Animal Production Farms	3
ANR412	Poultry Meat Production	3	ANR423	Animal Diseases	3
CRP412	Natural Postures	3	ANR424	Genetic Improvement	3
ANR413	Fish Production	2	ANR425	Poultry Egg Production	3
ANR414	Feedstuff Analysis	3	PLP422	Apiculture	2
ANR415	Camel and Horses Production	3	ANR426	Graduation Project	1
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>18</b>