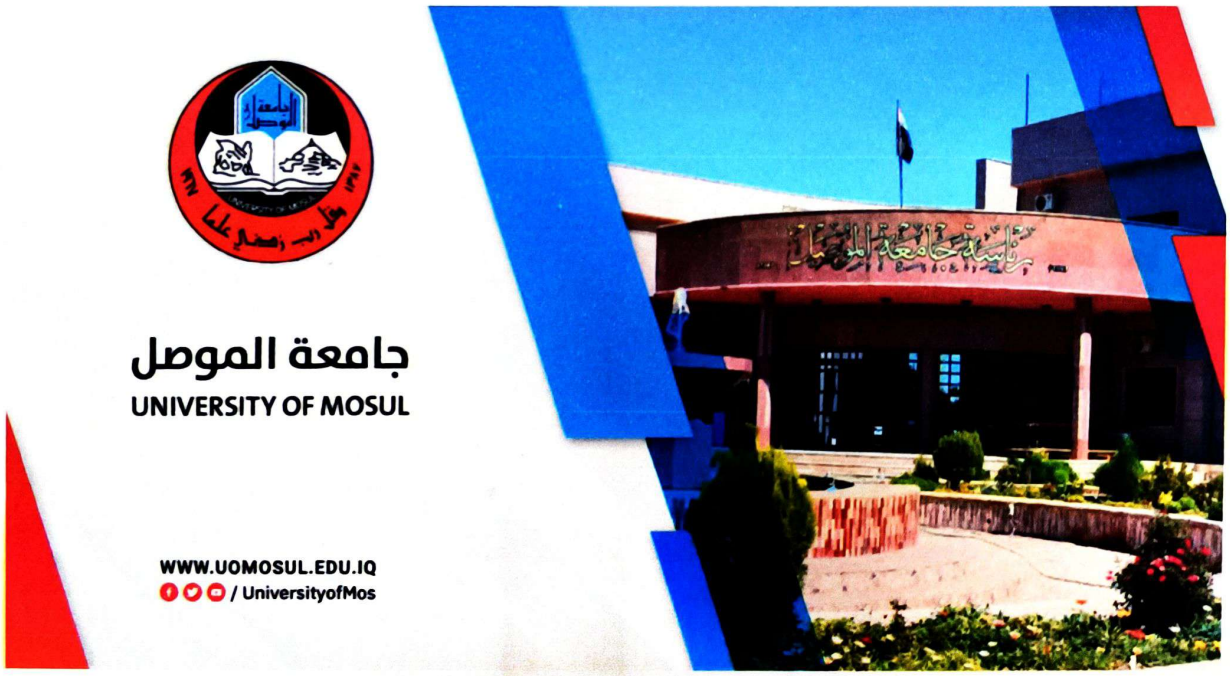
University of Mosul

جامعة الموصل

First Cycle – Bachelor's degree (B.Sc.) – Animal Production

بكالوريوس علوم الإنتاج الحيواني



جامعة الموصل
كلية الزراعة والغابات
قسم الانتاج الحيواني

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1. Mission & Vision Statement

Vision Statement

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.

Mission Statement

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.

Program Specification

Programme code:	BSc-BIO	**ECTS**	240
Duration:	4 levels, 8 Semesters	**Method of Attendance:**	Full Time

Write something like:

Animal production is a wonderfully wide-ranging subject and is well equipped to deliver. The emphasis of the programmer is the whole animals to which everything is related, be it the molecules that form livestock animal's production in specializations (Animal nutrition, Animal breeding, Animal

management and Animal physiology). All students have the opportunity to transfer onto our specialist degrees in animal production.

The first level introduces students to the basics of basic agricultural sciences, and is suitable for progression to advanced stages in animal production sciences. Core program-specific topics are covered at Level 2 to prepare for specialist modules in research-led topics at Levels 3 and 4. Therefore it is done Training the graduate of the Animal Production Department to acquire communication skills, the relationship of the environment to animal production, and modern methods in agricultural marketing, so that the student's learning outcomes are paved for g In levels 2, 3 and 4, students have the freedom to choose more than half of their study units provided that a set of units is chosen that reflects the importance of specialized lessons that ensure that the student benefits from the targeted learning outcomes of the program and that are in line with the labor market and facilitate integration into the labor market for the graduate from During the breadth of knowledge expected of an animal production sciences graduate. The research ethos is developed and fostered from the start via practical's, which are either embedded in lecture modules or taught in dedicated practical modules, research seminars and tutorials. There is a compulsory field course in Level 1, which students must pass in order to progress into Level 2, and optional field courses in Levels 2, 3 and 4. At Level 4 all students carry out an independent research project, which may be a xx credit library or data analysis project. Academic tutorials are held at Levels 1 and 2 with the same tutor, who is also the personal tutor, providing continuity and progressive guidance. Level 1 and 2 tutorials include a number of workshops to teach skills, e.g. library use and presentation skills, followed by assessed exercises, e.g. essays and talks, as opportunities to practice these skills in a subject-specific context. International years and Industrial placements are also offered and individual needs are discussed with the appropriate tutor and accommodated wherever possible.

2. 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.

3. Student Learning Outcomes

No.	learning outcome code	learning outcome
1	LO#4, A1	Has information on basic characteristics (anatomic, morphologic,physiological and biological) of farm animals
2	LO#2,B1 LO#3,C1	Has information on planning animal housing for environmental aspects and animal species, about forage production and storage for environmental conditions and different species, making plans about animal breeding

3	**LO#2,B2 LO#3,C2**	Has genetic and statistical information which can be the basis of animal improvement .Has adequate knowledge of industrial animal farming
4	**LO#1 D1 LO#5 D1**	Has information on alternative production systems
5	**LO#4, A2**	To get technical knowledge in his/her field
6	**LO#2,B3**	Knows the techniques in Animal Breeding and applies. Has information about small cattle raising and poultry farming and nutrition and applies.Transfers genetic and statistical information that can be the basis of animal breeding to animal production
7	**LO#3,C3**	Finds the reasons of the technical and economical problems that can adversely affect the quality and capacity levels desired in Animal Science and develops solutions
8	**LO#3,C4 LO#5 ,D2**	Obtains information in the field of Animal Science, researches, evaluates, records,consults,plans projects and applies
9	**LO#1 D3 LO#5 D3**	Uses IT to get new information in animal production
10	**LO#1, D4 LO#5, D4 LO#6 , E1**	Transfers knowledge to people who work in the field at various levels, has communication skills,has the self -confidence in providing information and following technical developments
11	**LO#6,E2**	He is aware of the impacts of animal science and agricultural engineering applications on health, environment and safety in the comprehensive and social dimensions and the problems of the times that are reflected in the field of engineering.

Outcome 1

Identification of Complex Relationships

Graduates will be able to illustrate the principles of animal production and explain the strains of farm animals.

Outcome 2

Oral and Written Communication

Graduates will be able to formally communicate the results of animals investigations using both oral and written communication skills.

Outcome 3

Laboratory and Field Studies

Graduates will be able to perform laboratory experiments and field studies, by using scientific equipment and computer technology while observing appropriate safety protocols.

Outcome 4

Scientific Knowledge

Graduates will be able to demonstrate a balanced concept of how scientific knowledge develops, including the historical development of foundational theories and laws and the nature of science.

Outcome 5

Data Analyses

Graduates will be able to demonstrate scientific quantitative skills, such as the ability to conduct simple data analyses.

Outcome 6

Critical Thinking

Graduates will be able to use critical-thinking and problem-solving skills to develop a research project and/or paper.

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5. Credits, Grading and GPA

Credits

University of Mosul is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 hrs student workload, including structured and unstructured workload.

Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

GRADING SCHEME مخطط الدرجات				
Group	**Grade**	التقدير	**Marks (%)**	**Definition**
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب - قيد المعالجة	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				
Number Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

Calculation of the Cumulative Grade Point Average (CGPA)

1. The CGPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

   CGPA of a 4-year B.Sc. degree:

   CGPA = [(1st ^{m}odule score x ECTS) + (2nd ^{m}odule score x ECTS) + ……] / 240

6. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
UOM1031	**COMPUTER**	47	28	3.00	B	
UOM1040	**DEMOCRACY and HUMAN RIGHTS**	32	18	2.00	B	
UOM1021	**ENGLISH LANGUAGE1**	32	18	2.00	B	
MAT1010	**MATHEMATICS**	63	112	7.00	B	
ACE1020	**AGRICULTURAL CARRER ETHICS**	62	63	5.00	S	
END1030	**ENGINEERING DRAWING**	63	87	6.00	B	
AET1040	**AGRICULTRAL ENGINEERING TECHNIQUES TRANSFER**	63	62	5.00	C	

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

UOM1011	**ARABIC LANGUAGE1**	32	18	2.00	B	
BSS1050	**BIOSAFETY and SECURITY**	47	28	3.00	S	
AGS1060	**AGRICULTURAL STATISTICS**	78	47	5.00	C	
BIO1070	**BIODIVERSITY**	63	62	5.00	C	
AGI1080	**AGRICULTURAL INFORMATICS**	63	62	5.00	C	
SUD1090	**SUSTANIBLE DEVELOPMENT**	62	63	5.00	C	
AMT1100	**AGRICULTURAL MARKETING TECHNIQUES**	32	93	5.00	C	

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
UOM1012	**ARABICLANGUAGE2**	32	18	2.00	B	**ARABIC LANGUAGE1**
UOM2050	**The CRIMES of the BATH REGIME in IRAQ**	32	18	2.00	B	
IPM2110	**INTEGRATED PEST MANAGEMENT**	63	62	5.00	C	
AEM2120	**AGRICULTRAL ENGINEERING PROJECT MANAGEMENT**	78	72	6.00	C	
DAE2160	**DESIGN AND ANALYSIS of EXPERIMENTS**	63	62	5.00	C	
APT2140	**AGRICULTURAL PRODUCTION TECHNOLOGIES**	63	62	5.00	C	
FTP2150	**FOOD TECHNOLOGIES and HEALTH AGRICULTRAL PRODUCTS**	63	62	5.00	C	

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
UOM2022	**ENGLISH LANGUAGE2**	32	18	2.00	B	ENGLISH LANGUAGE1
UOM2032	**COMPUTER SKILLS2**	47	28	3.00	B	COMPUTER SKILLS1
APT2130	**AGRICULTURAL PRODUCTION MECHANIZATION TECHNIQUES**	63	62	5.00	C	
DPF2170	**DESIGN and PLANNING of AGRICULTURAL FACILITIES**	63	62	5.00	C	
BEI2180	**BENEFICAL INSECTS**	63	62	5.00	C	
BIA2200	**BIOCHEMICAL ANALYSIS**	63	62	5.00	C	
AWE2210	**AGRICULTURAL WASTE TREATMENT ENGINEERING**	63	62	5.00	C	

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ANG3210	**ANIMAL GENETIC**	48	2	2.00	C	
ANP3220	**ANIMAL PHYSIOLOGY**	63	12	3.00	B	
FAH3500	**FARM ANIMALS DISEASES and HYGEINE**	63	62	5.00	C	
ANN3510	**ANIMAL NUTRITION**	63	62	5.00	C	
ANB3520	**ANIMAL BIOTECHNOLOGY**	63	62	5.00	C	
FIT 3530	**FISH TECHNOLOGY**	63	62	5.00	C	
AB 3540	**ANIMAL BREEDING TECHNIQUES**	63	62	5.00	C	

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
AQE3550	**AQUACULTURE ENGINEERING**	48	52	4.00	C	
PB3560	**POULTRY BREEDING TECHNIQIES**	63	62	5.00	C	
RTI3570	**REPRODUCTIVE TECHNOLGIES and ARTIFICIAL INSEMINATION**	63	62	5.00	C	
PMT3580	**POULTRY MANAGEMENT TECHNOLOGY**	63	62	5.00	C	
PON3590	**POULTRY NUTRITION**	63	62	5.00	C	
ANM3600	**ANIMAL MANAGEMENT TECCHNOLOGY**	63	62	5.00	C	
SEM3260	**SEMINAR**	17	8	1.00	C	

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
APM4330	**ANIMAL PRODUCTION MECHANIZATION**	63	12	3.00	C	
SGP4610	**SHEEP and GOAT PRODUCTION**	63	62	5.00	C	
AVP4620	**AVIAN PHYSIOLOGY**	63	62	5.00	C	
FFT4630	**FEED and FEEDING TECHNOLOGY**	63	62	5.00	C	
ANB4640	**ANIMAL BEHAVIOR**	63	62	5.00	C	
MPT4650	**MEAT PRODUCTION TECHNOLOGY**	63	62	5.00	C	
AGP4290	**AGRICULTURAL ENGINEERING PROJECT1**	47	3	2.00	C	

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
AMG4660	**ANIMAL MOLECULAR GENETIC**	63	12	3.00	C	
MES4670	**MEAT SCIENCE**	63	62	5.00	C	
DAP4680	**DAIRY CATTLE PRODUCTION**	63	62	5.00	C	
WP4690	**WOOL PRODUCTION TECHNOLOGY**	63	62	5.00	C	
PP4700	**POULTRY PRODUCTS TECHNOLOGY**	63	62	5.00	C	
SAP4710	**SUSTAINABLE ANIMAL PRODUCTION**	63	62	5.00	C	
AEP4292	**AGRICULTURAL ENGINEERING PROJECT2**	47	3	2.00	C	

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