Republic of Iraq
Ministry of higher education & scientific research
Supervision and scientific evaluation directorate
Quality assurance and academic accreditation

Academic Program Specification Form For The Academic

University: Northern Technical University
College: Technical Agricultural College of Mosul
Department: Animal Production Techniques
Date of form completion: 8/1/2024

Signature

Assit. Prof. Dr. Donea Abdulrazak Abdullah
Head of Department
Date: 8 / 1 / 2024

Signature

Assit. Lec. Mahmood Shaker Mahmood
Dean`s Assistant for Scientific Affairs
Date: 8 / 1 / 2024

Assit. Lec. Haneen Mowfak Ahmeed
Quality Assurance and University Performance Manager

Date: 8 / 1 / 2024
Signature

The Dean
Prof. Dr. Shihab Ahmed Yossuf

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the programme.

1. Teaching Institution	**Northern Technical University**
2. UniversityDepartment/Centre	**Agricultural Technical College**
3. Programme Title	**Animal Production Techniques Department**
4. Title of Final Award	**Animal Production Technical Diploma**
5. Modes of Attendance offered	**Bachelor**
6. Accreditation	**AACSB**
7. Other external influences	**It is the raising and caring of animals in the fields and stations and in the livestock trade**
8. Date of production/revision of this specification	**8 / 1 / 2024**

9. Aims of the Programme

The program aims to prepare qualified technical cadres to practice activities related to animal production, whether in state departments or the private sector. The student is graduated by the department after completing four years calendar with summer training to Bachelor a technical diploma in animal production techniques

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A1. Knowledge and Understanding:

A1. Learn about the types of animals and how to raise them
A2. Learn how to manage farm animals
A3. Learn about animal feeding methods and types of feed
A4. Identify the types of fields.
A5.Identify diseases that affect animals and ways to treat them

B. Subject-specific skills:

B1. Carrying out animal husbandry, fattening and increasing livestock production
B2. The ability to manage farms
B3. Using modern technologies in feeding animals
B4. The ability to care for animals and ways to treat them

Teaching and Learning Methods

Theoretical lectures, seminars, scientific developments, practical training in laboratories, scientific films, animal and poultry project, systematic training in the fields, summer training.

Assessment methods

Daily editorial tests, , class participations, quarterly and final exams (theoretical + practical), reporting, seminars, practical tests in the fields, practical tests in the laboratory and in the field.

C. Thinking Skills:

C1. Self-learning (through assignments to prepare reports on farm animals and breeding methods)
C2. Education and training on collective participation and voluntary work in how to collect information
C3. Enhancing professional behavior with owners aimed at building a good relationship to provide the best services.

Teaching and Learning Methods

Showing scientific films and videos related to animal husbandry, compassion for them and how to deal with them, field visits to fields and veterinary clinics.

Assessment methods

Written and oral tests, preparing reports on visits and discuss it after the visit within a week.

D. General and Transferable Skills (other skills relevant to employability and personal development)
D1. Computer and Internet application skills. D2. Familiarize yourself with modern technologies in the field of livestock.
Teaching and Learning Methods
Traditional lectures, training in laboratories, writing reports, showing scientific films and special videos, conducting scientific visits, methodological training in the fields and veterinary hospital, and
Assessment Methods
Written and oral tests, commitment to assignments (e.g. reporting in the field of specialization and then discussing reports).

11. Programme Structure

Level/Year	Module Code	Course or Module Title	Credit rating	
			Theor.	Pract.
First level	ANP1	Animal Production	16h/Weekly/Autum 11h/Weekly/Spring	28h/Weekly/fall 13h/Weekly/spring
Second Level	ANP2	Animal Production	13h/Weekly/ Autum 15h/Weekly/ Spring	17h/Weekly/fall 19h/Weekly/spring
Third Level	ANP3	Animal Production	13h/Weekly/ Autum 13h/Weekly/ Spring	21h/Weekly/fall 20h/Weekly/spring
Fourth Level	ANP4	Animal Production	13h/Weekly/ Autum 11h/Weekly/ Spring	20h/Weekly/fall 19h/Weekly/spring

12. Personal Development Planning

* Learn about scientific developments which related to specialization .
* Participation in relevant scientific conferences
* Participation in courses within the Institute.
* Participating in courses in institutions of higher education and scientific research.
* Conduct individual or joint scientific research (applied or theoretical).
* Participating in panel discussions and scientific seminars.

13. Admission criteria .

* Degree
* Scientific and professional branch.
* Desire.

14. Key sources of information about the programme

1- The curriculum

2- Scientific books

3- Reports and influences

4- The Internet.

Curriculum Skills Map																				
please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed																				
Nursing Branch				Programme Learning Outcomes																
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transferable Skills (or) Other skills relevant to employability and personal development				
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4	
first Level		Animal environment and behavior	Specialty	√	√			√	√			√	√			√	√			
		Zoology	Specialty	√	√			√	√			√	√			√	√			
		animal production principles	Specialty	√	√			√	√			√	√			√	√			
		Lab Technology	assist	√	√			√	√			√	√			√	√			
		Forage and pasture crops	assist	√	√			√	√			√	√			√	√			
		general chemistry	assist	√	√			√	√			√	√			√	√			
		calculator applications (1)	assist	√	√			√	√			√	√			√	√			
		human rights	General	√	√			√	√			√	√			√	√			
		Poultry production techniques	Specialty	√	√			√	√			√	√			√	√			
		food analysis	Specialty	√	√			√	√			√	√			√	√			
		Sheep and goat production techniques	Specialty	√	√			√	√			√	√			√	√			
		beef cattle production	Specialty	√	√			√	√			√	√			√	√			
		microbiology	assist	√	√			√	√			√	√			√	√			
		Statistics of my life	assist	√	√			√	√			√	√			√	√			
		democracy	General	√	√			√	√			√	√			√	√			
Second Level		Ruminant Physiology	Specialty	√		√		√		√		√		√		√		√		
		Digestive physiology	Specialty	√		√		√		√		√		√		√		√		

		dairy cattle production	Specialty	√		√		√		√		√		√		√		√	
		Fish environment and life	Specialty	√		√		√		√		√		√		√		√	
		parasites	assist	√		√		√		√		√		√		√		√	
		calculator apps (2)	assist	√		√		√		√		√		√		√		√	
		fish production techniques	Specialty	√		√		√		√		√		√		√		√	
		Reproductive physiology and artificial insemination	Specialty	√		√		√		√		√		√		√		√	
		Production of buffalo and apple	Specialty	√		√		√		√		√		√		√		√	
		general inheritance	Specialty	√		√		√		√		√		√		√		√	
		poultry feed	Specialty	√		√		√		√		√		√		√		√	
		Bio chemistry	assist	√		√		√		√		√		√		√		√	
Third Level		animal feed	Specialty	√	√			√	√			√	√			√	√		
		fish feed	Specialty	√	√			√	√			√	√			√	√		
		animal production mechanization	Specialty	√	√			√	√			√	√			√	√		
		poultry incubators	Specialty	√	√			√	√			√	√			√	√		
		Banana production techniques	Specialty	√	√			√	√			√	√			√	√		
		fish diseases	Specialty	√	√			√	√			√	√			√	√		
		Immunology	assist	√	√			√	√			√	√			√	√		
		calculator apps (3)	assist	√	√			√	√			√	√			√	√		
		poultry physiology	Specialty	√	√			√	√			√	√			√	√		
		animal diseases	Specialty	√	√			√	√			√	√			√	√		
		Meat production techniques	Specialty	√	√			√	√			√	√			√	√		
		fingerling production	Specialty	√	√			√	√			√	√			√	√		
		Poultry farming and improvement	Specialty	√	√			√	√			√	√			√	√		
		histology and embryology	Specialty	√	√			√	√			√	√			√	√		
		Molecular inheritance	Specialty	√	√			√	√			√	√			√	√		
Fourth		Embryo transfer		√		√		√		√		√		√		√		√	
		Animal breeding and improvement		√		√		√		√		√		√		√		√	

Level		**Wild animals and decorations**		√		√		√		√		√		√		√		√		
		Project		√		√		√		√		√		√		√		√		
		poultry diseases		√		√		√		√		√		√		√		√		
		Design and analysis of experiments		√		√		√		√		√		√		√		√		
		economics of animal production		√		√		√		√		√		√		√		√		
		calculator apps (4)		√		√		√		√		√		√		√		√		
		Field creation and management techniques		√		√		√		√		√		√		√		√		
		venereal diseases and obstetrics		√		√		√		√		√		√		√		√		
		Egg and sperm techniques		√		√		√		√		√		√		√		√		
		feed manufacturing		√		√		√		√		√		√		√		√		
		Project		√		√		√		√		√		√		√		√		
		Conservation of genetic resources		√		√		√		√		√		√		√		√		

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	**Northern Technical University**
2. University Department/Centre	**Agricultural Technical College**
3. Course title/code	**Department of Animal Production Techniques / Agricultural Technical College**
4. Programme (s) to which it contributes	**Animal Nutrition**
5. Modes of Attendance offered	*** Weekly lesson schedule (theoretical and practical)**
6. Semester/Year	**Courses**
7. Number of hours tuition (total)	**75 h.**
8. Date of production/revision of this specification	**8 / 1 / 2024**

9. **Aims of the Course**

The course aims to prepare the student to practice and prepare animal diets and their benefits in animal fattening processes and the efficiency of food conversion of concentrated and rough feeds and their organization in the correct scientific method and with high production efficiency.

10· Learning Outcomes, Teaching ,Learning and Assessment Methods

A- Knowledge and Understanding

A 1- The concept and definition of food and its importance
A2- Methods of creating relationships
A3- Analyzing food and knowing its components
A4- Efficiency of food conversion
A 5- Types of green and concentrated feed
A6- Types of cereals and their benefits.

B. Subject-specific skills

B1 - Getting to know the feed
B2 - Show samples of feed
B3 - Presenting samples of food additives used in nutrition

Teaching and Learning Methods

Traditional lecture, report writing, conducting seminars, practical training in the lab, methodological training in the nutrition lab, and summer training.

Assessment methods

Daily written and oral tests, applied tests, seminars, partial and final examinations, commitments to assignments, attendance and obligations, feedback (student test in the previous subject), self-assessment (questions are placed for the student by the teacher and the student answers questions as well as the teacher answers the same questions and asks the student to evaluate himself corresponding the teacher's answers), reports on scientific developments in the field of specialization, and asking analytical and productive questions .

C. Thinking Skills

C1- Applying the scientific bases in the preparation and analysis of feed
C 2- Using good quality feed for fattening animals
C3- Skills in feed production projects

Teaching and Learning Methods

Traditional lecture, self-learning, feedback, questions of inferred and analytical thinking, systematic training in laboratories, applied training in fields, and summer training.

Assessment methods

Simulation of the pathological condition, written, oral and applied tests, partial and final examinations, home- commitment to assignments such as the work of reports in the field of specialization and then discussion of s, attendance and commitment, feedback (student test in the previous subject), self-assessment (questions are to the student by the teacher and the student answers questions as well as the teacher answers the same ons and asks the student to evaluate himself corresponding of the teacher's answers), questions of conclusion ference.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Field visits to gain experience from others
D2. Learn about scientific developments in the field of specialization (educational videos)
D3. Practical training in fields.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	5	**The metabolism of CHO , fat and proteins.**	**The metabolism of CHO , fat and proteins.**	lectures and practical training	tests and reports
2	5	**Dairy cows feeding .**	**Dairy cows feeding .**	lectures and practical training	tests and reports
3	5	**Ration formuted voluntary feed intake green roughage .**	**Ration formuted voluntary feed intake green roughage .**	lectures and practical training	tests and reports
4	5	**The animal and its food from cereals .**	**The animal and its food from cereals .**	lectures and practical training	tests and reports
5	5	**Feeding methods , the**	**Feeding methods , the importants**		
6	5	**Feeding of Dairy cows befor and after the delivery .**	**Feeding of Dairy cows befor and after the delivery .**	lectures and practical training	tests and reports
7	5	**Calves fattening , methods and feed conversion ratio .**	**Calves fattening , methods and feed conversion ratio .**	lectures and practical training	tests and reports
8	5	**Feeding of dry cows and bulls .**	**Feeding of dry cows and bulls .**	lectures and practical training	tests and reports
9	5	**Feeding of calves from**	**Feeding of calves from wearing to**	lectures and practical training	tests and reports
10	5	**Energy allowances and feeding system for ruminants.**	**Energy allowances and feeding system for ruminants.**	lectures and practical training	tests and reports
11	5	**Feeding of sheep pregnant and lactating ewes .**	**Feeding of sheep pregnant and lactating ewes .**	lectures and practical training	tests and reports
12	5	**Sucking methods for lamb from birth to maturaty .**	**Sucking methods for lamb from birth to maturaty .**	lectures and practical training	tests and reports
13	5	**Feeding of ewes lamb from birth to maturaty .**	**Feeding of ewes lamb from birth to maturaty .**	lectures and practical training	tests and reports
14	5	**Goats requirement from energy and protien .**	**Goats requirement from energy and protien .**	lectures and practical training	tests and reports
15	5	**The use of NPN to ruminants nourishment .**	**The use of NPN to ruminants nourishment .**	lectures and practical training	tests and reports

12. Infrastructure	
Required reading: · Basic TEXTS · COURSES BOOKS · OTHER	All about animal nutrition Curriculum books (animal nutrition, food and nutrition) Scientific developments and what is available on the Internet
Special requirements (including, for example, workshops, periodicals, software and websites)	Periodicals and websites, scientific visits and specialized seminars
Social services (including guest lectures, professional training and field studies)	Training courses, systematic training and public seminars

13. Subject Development Plan:

- Learn about modern scientific literature
- Participation in relevant scientific conferences
- App ointment of teaching and training personnel in Part and Full-time Training and Working in veterinary hospitals.
- Bringing specialized teachers.
- Scientific Collaboration with other universities and corresponding colleges.