

**Ministry of Higher Education
and Scientific Research
Scientific supervision and evaluation device
Department of Quality Assurance and Academic Accreditation**

Academic description program form (ADPF) of colleges (2023-2024)

University name: Al-Muthanna University

College name: College of Veterinary Medicine

Scientific Branch: One-department College

File filing date: 01/11/2023

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Course description

ADPF provides a summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description

1. Educational institution	Ministry of Higher Education and Scientific Research
2. Scientific Department/Center	College of Veterinary Medicine - Al-Muthanna University
3. Name of the academic or professional program	College of Veterinary Medicine
4. Title of the final certificate	Bachelor of Veterinary Medicine and Surgery
5. The academic system	Semester system
6. Accreditation program	American System of Veterinary Colleges (Theoretical + Practical)
7. Laboratory external influences.	Animal House, the library, Animal slaughter. Veterinary hospital, fields, Related websites
8. The date this description was prepared	11/1/2023
9. Objectives of the academic program:	<ul style="list-style-type: none"> • Graduate veterinarians who have science and knowledge and keep them up with the latest scientific developments in their field of specialization. • Courses in academic programs are described accurately, including general information about the course, a brief description of the course, the learning outcomes of the course, the vocabulary included in the course, the sources approved in the course, and the methods adopted in evaluating the course. • The content of the academic program is consistent with the stated mission and objectives of the College of Veterinary Medicine. • Contributing to the development of livestock through developing and following the latest scientific methods and methods in diagnosis and treatment. • The content of courses in the academic program helps students acquire basic concepts in the field of specialization. • The content of the academic program's courses includes applied cognitive and field experiences and activities in a way that helps students develop their knowledge and skills. • It helps serve the labor market.

Required learning outcomes and teaching, learning and assessment methods
A- Cognitive objectives <ol style="list-style-type: none"> 1. Developing the student's scientific ability 2. Developing communication between students and research centers 3. Preparing and increasing scientific capabilities by identifying medical problems in veterinary medicine 4. Developing scientific research 5. Enabling the student to acquire skills that will benefit him in his field of work
B. Skills objectives of the program <ol style="list-style-type: none"> 1. The student acquires the necessary skills for veterinary medicine 2. Enable the student to demonstrate quality in the field and treatment of animals 3. Enable the student to conduct all animal examinations
Teaching and learning methods <ul style="list-style-type: none"> - Scientific lectures - Study groups - Practical lessons and clinical veterinary application
Evaluation methods <ul style="list-style-type: none"> • Theoretical exam: MCQ + Short Essay • Practical exam: OSCE+OSPE • Student seminars + reports
C. Sentimental and value goals <ol style="list-style-type: none"> 1. Enable the student to know the importance of veterinary medicine 2. Enabling the student to know the effective role of veterinary medicine 3. Enabling the student to know the relationship between veterinary medicine and the labor market 4. Enabling the student to strengthen the relationship with educators
Teaching and learning methods <p>Field and field visits Scientific trips</p>
D. Generic and transferable skills (other skills related to employability and personal development) <ol style="list-style-type: none"> 1. Enabling the student to know professional ethics 2. Enabling the student to persevere to develop his level 3. Keep up with continuing education 4. Enabling the student to gain multiple experience to work in multiple fields

Teaching and learning methods	
1. Courses and seminars	2.
Conferences	3.
Field teaching	
4. Laboratory teaching	
5. Labor market	6.
Special projects	7.
Public projects	
Evaluation methods	
• Practical exam	•
Theoretical exam	
• Planning personal development	
1. Continuing education for all specializations and scientific branches	2.
Attending veterinary medicine conferences	3.
Attending workshops and seminars	4.
Voluntary work in specialized institutions to gain experience and skills	5.
Attending specialized training programs	
• Admission standard (setting regulations related to admission to the college or institute)	
1. Passing the preparatory stage (scientific stream)	2. The acceptance rate must not be less than 70%3. A personal interview must be conducted before completing the final admission procedures
	Note that these procedures are followed in Arab and foreign countries and the acceptance rate is not less than 90%.
The most important sources of information about the program	
- Ministry of Higher Education and Scientific Research / Curricula of colleges of veterinary medicine in Iraqi universities	- Similar
colleges in Arab and international countries	

This academic description program provides a summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description	
1. Educational institution	College of Veterinary Medicine
2. Scientific Department/Center	Veterinary Public Health Division
3. Course name/code	Animal management, poultry management, computers, democracy and human rights, English language, Arabic language, animal nutrition, genetics, statistics, veterinary public health, veterinary professional behavior
4. Available forms of attendance	Theoretical/practical
5. Semester/year	Annual/quarterly
6. Number of study hours (total)	120,15,30,60,60,90,45,120,60,30,15,120
7. Course objectives	<ol style="list-style-type: none"> 1. Providing the student with theoretical and practical information on how to care for animals and follow modern methods of field management. 2. Teaching the student the basic supporting sciences, which are computers, statistics, genetics, and nutrition. 3. Providing the student with theoretical and practical information on how to manage poultry fields, feed manufacturing plants, slaughterhouses, and animal breeding stations.
Course outcomes, learning methods, teaching and evaluation	
A. Cognitive objectives:	
<ol style="list-style-type: none"> 1. Teaching students how to create an animal field with modern specifications and methods of managing them. 2. Teaching students how to develop the genetic makeup of animals and adopt the principle of breeding to preserve good local characteristics and select and develop animals with high production. 3. How to control diseases transmitted between humans and animals and produce healthy food for humans that is free of diseases by mastering food hygiene and milk hygiene. 4. Methods for developing animal and poultry nutrition and raising the efficiency of animal feed conversion. 5. How to establish and manage poultry fields with international standards. 	
B. Skills objectives:	
<ol style="list-style-type: none"> 1. Providing the student with the skills of applying scientific methods regarding establishing animal and poultry fields. 2. Training the student to manufacture good quality feed. 3. Providing the student with the skills of examining meat and giving reports in slaughterhouses. 	
Learning and teaching methods:	
<p>Providing theoretical and practical lectures on display screens, PowerPoint, and microscopes, and experiments examining milk and meat samples bacteriologically and chemically using various laboratory devices and equipment, in addition to examining feeds and inspecting the animal field, as well as training on animal control and methods of administering medications.</p>	

Evaluation methods:

Quizzes
 Monthly exams
 Semester and final exams

C. Sentimental and value goal:

1. Enabling the student to apply theoretical veterinary information in a practical way.
2. Developing the student's national spirit to increase production in quantity and quality.
3. Instilling the concept of community service and the ideal way to deal with the simple segments of the community of farmers and animal breeders.
4. Developing the student's ethics as a veterinarian by following the correct professional behavior

Teaching and learning methods:

Giving practical lectures in the animal field to train student.

Evaluation methods:

Daily, monthly and quarterly exams

D. Generic and transferable skills (other skills related to employability and personal development)

Developing students' skills and abilities in managing animal fields.

Evaluation method	Teaching method	Name of the unit/topic	Required learning outcomes	Hours	The week
Exams	Theoretical + practical	Animal management	Add learning outcomes	2 theoretical + 2 practical	Weekly
Exams	Theoretical + practical	Poultry management	Add learning outcomes	2 theoretical +1 practical	Weekly
Exams	Theoretical + practical	Computer	Add learning outcomes	2 theoretical +1 practical	Weekly
Exams	Theoretical + practical	Veterinary public health	Add learning outcomes	2 theoretical +1 practical	Weekly
Exams	Theoretical	Democracy and human rights	Add learning outcomes	2 theoretical	
Exams	Theoretical	English language	Add learning outcomes	1 theoretical	Weekly
Exams	Theoretical	Arabic Language	Add learning outcomes	1 theoretical	Weekly

Exams	Theoretical + practical	Animal feeding	Add learning outcomes	2 theoretical +2 practical	Weekly
Exams	Theoretical	heredity	Add learning outcomes	2 theoretical +2 practical	Weekly
Exams	Theoretical + practical	Counting	Add learning outcomes	2 theoretical +2 practical	Weekly
Exams	Theoretical	Veterinary professional behavior	Add learning outcomes	1 theoretical	Weekly

12-Human structures :	
Prescribed methodological books	Required prescribed books
Supporting sources for each course	Main references
Basic journals in veterinary and scientific specialties	Recommended books and references (scientific journals, reports, etc.)
Al-Muthanna University e-learning website	Scientific references and websites
13-Course development plan :	
Developing academic curricula to suit the specificity of the governorate in terms of animal production, focusing on poultry farming, introducing a fish farming lesson, and developing the animal field to suit the requirements of the study.	

ADPF provides a summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description

College of Veterinary Medicine	1- Educational institution
Branch of diseases and diseases of poultry and fish	2-Scientific Department/Center
General pathology, special pathology, histopathology and forensic medicine PAT, SPA, LPS	3-Course name/code
Theoretical/practical	4-Available forms of attendance
Annual/quarterly	5- Semester/year
30,60,45,45	6-Number of study hours (total)
1- Providing the student with theoretical and practical information about diseases and diseases of poultry and fish 2-Increasing capabilities in the field of diseases and diseases of poultry and fish 3-Explaining the diseases that affect poultry and fish and methods of diagnosing and treating them . 4-Explaining the most important signs that occur to the animal after death and knowing the causes of death .	7-Course objectives
Course outcomes, learning methods, teaching and evaluation	
A. Inspirational forces:	
1- Identify the concept of pathology 2- The animal's condition after the appearance of sick signs 3- Disease developments and disease course 4- Post-no signs above the animal 5- Knowing the histological events and types and linking them to disease developments. 6- Important knowledge of poultry and fish diseases	
A. Skills objectives:	
1-Differentiating between healthy tissue and diseased tissue. 2-Increasing the student's awareness of tissue changes after contracting the disease. 3- Increase the ability to identify the histological structure of the body's organs. 4-Knowledge of animal anatomy methods	
Learning and teaching method:	
The student learns the basics of pathology and fish diseases, in addition to laboratory methods for reading slides and animal dissection methods	
Evaluation methods:	
Surprising daily exams Monthly exams Semester and final exams	
C. Sentimental and value goals:	
1-Identify diseases in detail . 2-Knowing the most important signs and changes of disease . 3-Linking changes to reach an accurate diagnosis . 4-veloping the student's ethics as a veterinarian by following the correct professional behavior .	

Teaching and learning methods:

Giving practical lectures and training students to read slides in the laboratory

Evaluation methods:

Daily, monthly and quarterly exams

D.Generic and transferable skills (other skills related to employability and personal development)

1-How to diagnose the disease

2- Knowing the differential diagnosis for other Diseases

3-Linking with diseases common between humans and animals

4-Knowing the extent of the impact of diseases on public health

11- Course structure

Evaluation method	Teaching method	Name of the unit/topic	Required learning outcomes	Hours	The week
Exams	theoretical +practical	General pathology sem1	Add learning outcomes	3theoretical +3 practical	weekly
Exams	theoretical +practical	Special Pathology Sem2	Add learning outcomes	3theoretical +3practical	weekly
Exams	theoretical +practical+field	Annual poultry diseases	Add learning outcomes	2theoretical +2practical	weekly
Exams	theoretical +practical+field	Fish diseases sem1	Add learning outcomes	2theoretical +1practical	weekly
Exams	theoretical +practical	Pathological anatomy and forensic medicine sem2	Add learning outcomes	1theoretical	weekly

12-Infrastructure :	
Prescribed methodological books	Required prescribed books
Supporting sources for each course	Main references
Basic journals in veterinary and scientific specialties	Recommended books and references (scientific journals, reports, etc.)
E- Al-Muthanna University learning website	Scientific references and websites
12- Course development plan :	
1- Increase visits to civil and governmental projects 2-Encouragement to visit the university library and the college library and review the sources 3-Benefit from summer training and the veterinary hospital 4-Improving research and graduation projects	

Description of this academic program provides a summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description	
College of Veterinary Medicine	1-Educational institution
Branch of Veterinary Microbiology and Parasitology	2-Scientific Department/Center
Microbiology, viruses, immunityMIC,SML,VIR,IMU	3-Course name/code
Theoretical/practical	4-Available forms of attendance
Annual/quarterly	5-Semester/year
60,60,75,90	6-Number of study hours (total)
1-Training students on knowledge of microscopic organisms and modern molecular methods for their detection and diagnosis 2- Study the immune system and know the types of immunity 3-Classification of bacteria, viruses and fungi	7-Course objectives
Course outcomes, learning methods, teaching and evaluation	
A-Cognitive objectives:	
1-Learn about the concept of microbiology 2-Knowledge and understanding of immunology 3-Understanding the science of viruses and fungi	
B- Skills objectives:	
1-Providing the student with the skills of sterilization and bacterial cultivation . 2-Knowing how to preserve pathological samples and food materials	
Teaching and learning methods:	
The student learns basic microbiology and links practical and theoretical subjects	
Evaluation methods:	
Surprising daily exams Monthly exams Semester and final exams	
C. Sentimental Isand value goa :	
1.Analytical skills that enable the student to know the function of the immune system in the body .2 .Knowledge of sterilization and disinfection methods	
Teaching and learning methods :	
isms and prevent infection with Training in the laboratory on how to detect microscopic organ them	
Evaluation methods :	
Daily, monthly and quarterly exams	
D. Generic and transferable skills (other skills related to employability and personal development)	
Linking microbiology and immunology	

11. course structure					
Evaluation method	Teaching method	Name of the Unit/topic	Required learning outcomes	hours	the week
Examination	theoretical+ practical	General Microbiology	Add learning outcomes	3 theoretical+ 3 practical	weekly
Examination	theoretical+ practical	Immunity	Add learning outcomes	2 theoretical+ 2 practical	weekly
Examination	theoretical+ practical	Special microbiology	Add learning outcomes	3 theoretical+ 2 practical	weekly
Examination	theoretical+ practical	Viruses	Add learning outcomes	2 theoretical+ 2 practical	weekly

12 .Infrastructure :	
Prescribed methodological books	Required prescribed books
Supporting sources for each course	Main references
ntific specialtiesBasic journals in veterinary and scie	Recommended books and references (.scientific journals, reports, etc)
learning website-Muthanna University e-Al	Scientific references and websites

13 .Course development plan :

Adding vocabulary to the curricula not exceeding 10% .
 tant characteristics of the This academic program description provides a summary of the most impor program and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description

College of Veterinary Medicine	1 .institution Educational
Branch of Physiology , Pharmaceuticals and Biochemistry	2 .Scientific Department/ Center
General chemistry, physiology biochemistry, drugs and ‘ toxins, parasitology <i>GCH,PHY,BIO,PHA,PAR</i>	3 .Course name/code
Theoretical/practical	4 .Available forms of attendance
Annual/quarterly	5 .Semester/year
75,30,75,90,75,75	6 .(Number of study hours (total
1 .Understanding the functions of cells and the functions of systems and organs 2 .tanding the biochemical processes taking place Unders within the body 3 .Identify medicines, their composition, benefits and harms to the body 4 .Knowing toxins and dealing with them 5 .Knowledge of parasitic diseases and methods of emdiagnosing and preventing th	7 Course objectives

Course outcomes, learning methods, teaching and evaluation

:Cognitive objectives

- 1 .Knowing and understanding the functions of the body’s organs and systems
- 2 .Understanding chemistry and biochemistry
- 3 .mIdentify toxins and methods of classifying the
- 4 .Learn about methods of diagnosing and treating parasitic diseases

: Skills objectives

- 1 .Providing the student with the skills to understand body functions

- 2 .within the body Providing the student with the skills to understand cellular metabolism and interactions
- 3 .Providing the student with knowledge of drugs and poisons
4. Methods of diagnosing and culturing eggs for various parasites
- 5 .Knowing the relationship between parasitic infections and the diseases they cause between humans and animals

Learning and teaching methods :
The theoretical side and the practical side

Evaluation methods :
Surprising daily exams
Monthly exams
Semester and final exams

C. Emotional and value goals :

1. Enables the student to know the function of the body .
- 2 . Make the student know how to draw a complete picture of the body's functions .
- 3.Enabling the student to make the correct choice of veterinary medicines

Teaching and learning methods :
ent's understanding of physiological Displaying videos, shapes, pictures, and models that increase the stud and chemical processes

Evaluation methods :
and quarterly exams 'Daily, monthly

D. Generic and transferable skills (other skills related to employability and personal development)

1. Increasing the student's skills in understanding physiological and chemical processes and methods for manufacturing medicines and poisons
2. Knowing the methods of diagnosing parasitic diseases

11. course structure

Evaluation method	Teaching method	Name of the Unit/topic	Required learning outcomes	hours	the week
Examination	theoretical+ practical	biology	Add learning outcomes	2 theoretical+ 2 practical	weekl y
Examination	theoretical+ practical	parasitology	Add learning outcomes	3 theoretical+ 2 practical	weekl y
			Add learning outcomes		

11. course structure					
<u>Evaluation method</u>	<u>Teaching method</u>	<u>Name of the Unit/topic</u>	<u>outputs learning required</u>	<u>hours</u>	<u>the week</u>
<u>Examination</u>	<u>theoretical+ practical</u>	<u>General chemistry</u>	<u>Add output learning</u>	<u>3 theoretical+ 2practical</u>	<u>weekl y</u>
<u>Examination</u>	<u>theoretical+ practical</u>	<u>physiology</u>	<u>Add output learning</u>	<u>4 theoretical+ 2 practical</u>	<u>weekl y</u>
<u>Examination</u>	<u>theoretical+ practical</u>	<u>Biochemistry</u>	<u>Add output learning</u>	<u>3theoretical+ 2 practical</u>	<u>weekl y</u>
<u>Examination</u>	<u>theoretical+ practical</u>		<u>Add output learning</u>	<u>2 theoretical</u>	<u>weekl y</u>
<u>Examination</u>	<u>theoretical+ practical</u>	<u>poisons</u>	<u>Add output learning</u>	<u>3 theoretical+ 2practical</u>	<u>weekl y</u>

12 .Infrastructure :	
Prescribed methodological books	Required prescribed books
Supporting sources for each course	Main references
y and scientific Basic journals in veterinar specialties	Recommended books and references (scientific (journals, reports, etc
learning –Muthanna University e–Al website	Scientific references and websites

13 .Course development plan :

Adding vocabulary to the curricula not exceeding 10% .

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College of Veterinary Medicine	1. Educational institution
Branch of Internal and Preventive Medicine	2. Scientific Department/Center
es, Internal medicine , infectious diseases, pathological diagnos common diseases, veterinary application, summer veterinary application IMD,CDI,CPA,CDI,PVI,SVP	3.Course name/code
Theoretical/practical	4 .Available forms of attendance
Annual/quarterly	5. Semester/year

90,30,30,90,90,90	6 .Number of study hours total))
1 .Identify diseases that affect animals, methods of diagnosing them, diagnosis, differentiation, prevention and treatment 2 .Identify diseases common between humans and animals 3 .Knowledge of laboratory diagnostic methods	7 . Course objectives

outcomes, learning methods, teaching and evaluation Course

1. Cognitive objectives :

- 1.Enable the student to know the diseases that affect animals**
- 2 .Understanding diagnostic and treatment procedures**
- 3.Knowledge of diseases common between humans and animals**
- 4.wering and training students in clinical and laboratory diagnosisEmpo**

2. Skills objectives :

- 1 .Providing the student with diagnostic skills**
- 2 .Providing the student with animal examination skills**
- 3 .isProviding the student with knowledge of laboratory diagnos**

Learning and teaching methods :

The theoretical aspect, the practical aspect and the veterinary hospital

Evaluation methods :

Surprising daily exams

Monthly exams

Semester and final exams

C. Emotional and value goals :

- 1. the methods of examining animals Enables the student to know .**
- 2. Make the student knowledgeable about diagnosing and treating animals .**
- 3. Knowledge of animal treatment methods**

Teaching and learning methods :

s for laboratory examination, Examine the animal clinically, record the clinical signs, take sample and link the signs with the test results to reach the correct diagnosis and prescribe the appropriate treatment and how to administer it .

methods :

Daily, monthly and quarterly exams

D. Generic and transferable skills (other skills related to employability and personal development)

1. Increasing the student's clinical and laboratory diagnosis skills

11. course structure					
Evaluation method	Teaching method	Name of the Unit/topic	Required learning outcomes	hours	the week
the exam	theoretical	internal medicine	Add learning outcomes	3 theoretical	weekly
the exam	theoretical	infectious and epidemic diseases	Add learning outcomes	3 theoretical	weekly
the exam	theoretical+ practical	pathological diagnoses	Add learning outcomes	1 theoretical+ 2practical	weekly
the exam	theoretical	common diseases	Add learning outcomes	2 theoretical	weekly
the exam	practical	veterinary application	Add learning outcomes	13 practical	weekly
the exam	practical	summer veterinary application	Add learning outcomes	3 practical	weekly
			Add learning outcomes		

12 .Infrastructure :

Prescribed methodological books	Required prescribed books
Supporting sources for each course and scientific Basic journals in veterinary specialties	Main references
	Recommended books and references (scientific journals, (.reports, etc
learning website-Muthanna University e-Al	Scientific references and websites

13.Course development plan :

Adding vocabulary to the curricula not exceeding 10% .

This academic program's description provides a brief including most important features of the program and learning outcomes which are expected to be achieved by students to proof if they benefit from available learning opportunities. And it's necessary to connect them with the program's description.

College of veterinary medicine	.1Educational institution
Department of surgery and obstetrics	.2Scientific department / Center
Veterinary surgery .Fertility Genital diseases .Veterinary obstetrics .Artificial insemination .Reproduction techniques SUR,FF,VO,AL,RT	.3Name / Code of curriculum
Theoretical/ Practical	.4Available forms of attendance
Yearly/Semesterical	.5Semester/ year
90,60,60,60	.6Number of study hours (total)
1. Learning basics of surgery and animal surgical procedures 2.Anatomy of reproductive system and differential anatomy and the most important diseases of female reproductive system 3. Diseases of male genital system and artificial insemination 4. Learning the latest updates of in vitro fertilization and assisting reproduction techniques	.7Goals of curriculum
Outcomes of curriculum and methods of learning, education and evaluation	
Cognitive goals	
1. Enabling students to know about genital diseases and ways of treating them 2.Understanding surgical cases and how to deal with them 3.Learning basics of anesthesia in animals 4.Enabling and training student on artificial insemination technique 5 . Learning methods of collecting semen, examining it, evaluating it and injecting it 6.How to deal with cases of dystocia and pregnancy problems 7.Learning most important modern methods to help treating poor fertility and infertility	
Skill goals	
1. Giving students skills of anesthesia and performing major and minor surgeries 2. Giving students skills to perform obstetrical maneuvers 3. Giving students skills of collecting semen, examining it and evaluating it	
Methods of learning and education	
Theoretical side and practical side and veterinary hospital	
Methods of evaluation	
Daily quizzes Monthly exams Semesterical and final exams	
Sentimental and valuable goals	
1. Enabling students to know about surgical procedures and to use diagnosis instruments such as X-Ray and endoscope 2. Enabling students to know how to deal with cases of dystocia 3. Knowing basics of pregnancy testing in different methods	

<p>Methods of education and learning</p> <p>1. Field training in veterinary hospital on incoming surgical and obstetrical cases and how to deal with them</p> <p>2. Rectal palpation to detect pregnancy in large animals</p> <p>Methods of evaluation: Daily and monthly and semesterical exams</p> <p>Common and transferred skills (other skills related to ability to employment and personal development)</p> <p>1. Increasing students' skills to perform surgical or obstetrical procedures and methods of pregnancy diagnosis in different animals</p>
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11. course structure					
Evaluation method	Teaching method	Name of the Unit/topic	Required learning outcomes	hours	the week
Exams	theoretical	veterinary obstetrics	Add outcomes of learning	1 theoretical	weekly
Exams	obstetrics room	veterinary obstetrics	Add outcomes of learning	2 practical	weekly
Exams	theoretical	fertility and genital diseases	Add outcomes of learning	2 theoretical	weekly
			Add outcomes of learning	2 practical	weekly

.12Infrastructure	
Systematic curriculum books	Required curriculum books
Supportive references for every curriculum	Main references
Basic journals in veterinary and scientific specializations	Recommended books and references (scientific journals, reports, etc)
Almuthanna university electronic education website	Scientific references and websites
13. Curriculum development plan	
<p>1. Construction of a surgery room supplied with modern devices that help in accurate diagnosis and conducting surgeries and treating dystocia</p> <p>2. Construction of a lab for artificial insemination and reproduction assistant techniques</p> <p>3. Construction of veterinary Ultrasound device unit</p>	

This academic program's description provides a brief including most important features of the program and learning outcomes which are expected to be achieved by students to proof if they benefit from available learning opportunities. And it's necessary to connect them with the program's description.

College of veterinary medicine	1.Educational institution
Department of anatomy and histology and embryology	2.Scientific department / Center
Anatomy, histology, embryology ANA,HIS,EMB	3.Name / Code of curriculum
Theoretical/ Practical	4.Available forms of attendance
Yearly/ semesterial 150,150,15	5.Semester/year
1. Learning basics of anatomy and organs and systems of body and blood and nerve supply 2. Knowing histological composition for body organs 3. Knowing development of embryos and ways to conduct tissue dissection	6.Number of study hours (total)
Goals of curriculum	
Outcomes of curriculum and methods of learning, education and evaluation	
Cognitive goals	
<ol style="list-style-type: none"> 1. Enabling students to know ways of killing and dissecting an animal and ways of course samples preservation 2. Understanding histology and methods of making tissue dissection 3. Understanding embryology and methods to identify fetus age 	
Skill goals	
<ol style="list-style-type: none"> 1. Teaching students skills of correct anatomy and comparative anatomy and ways of corpse reservation 2. Teaching students skills of tissue dissection 3. Teaching students skills of embryo development and identifying age 	
Ways of education and learning	
Theoretical side and practical side and veterinary hospital	
Ways of evaluation	
Daily quizzes Monthly exams Semesterial and final exams	
Sentimental and valuable goals	
<ol style="list-style-type: none"> 1. Enabling students to distinguish between intact and damaged organs after anatomy 2. Enabling students to know how important tissue dissection is to detect changes 	
Ways of education and learning	
Training students on anatomy and differential anatomy and special features of organs for different species of animals	
Methods of evaluation	
Daily monthly and semestrial exams	
Common and transferred skills (other skills related to ability to employment and personal development)	
Increasing students' skills about importance of anatomy, histology and embryology and connecting them to other sciences	

11. course structure					
Evaluation method	Teaching method	Name of the Unit/topic	outputs learning required	hours	the week
Exams	theoretical+ practical	veterinary anatomy	Add learning outcomes	2 theoretical+3practical	weekl y
Exams	theoretical+ practical	veterinary histology	Add learning outcomes	2 theoretical+ 3 practical	weekl y
Exams	theoretical+ practical	veterinary embryology	Add learning outcomes	1theoretical	weekl y

12. Infrastructure	
Systematic curriculum books	Required curriculum books
	Main references
Supportive references for every curriculum	
Basic journals in veterinary and scientific specializations	Recommended books and references (scientific journals, reports, etc)
AL-Muthanna university electronic education website	Scientific references and websites
13. Curriculum development plan	
Adding curriculums that keep pace with development in these sciences and according to determined proportion	

First Year

1. Veterinary Anatomy
2. Animal management
3. Biology
4. Computer science
5. General Chemistry
6. Poultry Management
7. Democracy and human rights
8. English language

First semester (1st) subjects

No	Subjects	Hours		Units		Total	Code
		Theoretical	Practical	Theoretical	Practical		
1	Anatomy	2	3	2	1.5	3.5	Anat 1 st
2	Animal management	2	2	2	1	3	AM 1 st
3	Biology	2	2	2	1	3	Bio 1 st
4	Computer science	1	2	1	1	2	Comp 1 st
5	English language	1	0	1	0	1	Eng 1 st
6	Democracy and human rights	2	0	2	0	2	Democ 1 st
7	General chemistry	3	2	3	1	4	GC 1 st
Total		13	11	13	5.5	18.5	

Second semester (2nd)

No	Subjects	Hours		Units		Total	Codes
		Theoretical	Practical	Theoretical	Practical		
1	Anatomy	2	3	2	1.5	3.5	Anat 2 nd
2	Animal management	2	2	2	1	3	AM2 nd
3	Biology	2	2	2	1	3	Bio2 nd
4	Computer science	1	2	1	1	2	Comp2 nd
5	English language	1	0	1	0	1	Eng2 nd
6	Democracy & human rights	2	0	2	0	2	Democ2 nd
7	Poultry Management	1	2	1	1	2	PM2 nd
Total		11	11	11	5.5	16.5	

Second Year

1. Anatomy
2. nutrition
3. Physiology
4. Biochemistry
5. Histology
6. Embryology
7. Genetics
8. Biostatistic

First semester (1st)subjects

No	Subjects	Hours		Units		Total	Codes
		Theoretical	Practical	Theoretical	Practical		
1	Anatomy	2	2	2	1	3	Anat1 st
2	Histology	2	3	2	1.5	3.5	Hist1 st
3	Physiology	4	2	4	1	5	Phy1 st
4	Biochemistry	3	2	3	1	4	Bioc1 st
5	Animal nutrition	2	2	2	1	3	AN1 st
6	Genetic	2	0	2	0	2	Gen1 st
Total		15	11	15	5.5	20.5	

Second semester(2nd) subjects

No	Subjects	Hours		Units		Total	Codes
		Theoretical	Practical	Theoretical	Practical		
1	Anatomy	2	2	2	1	3	Anat 2 nd
2	Histology	2	3	2	1.5	3.5	Hist 2 nd
3	Physiology	4	2	4	1	5	Phy 2 nd
4	Biochemistry	3	2	3	1	4	Bioc 2 nd
5	Animal nutrition	2	2	2	1	3	AN 2 nd
6	Embryology	1	0	1	0	1	Emb 2 nd
7	Statistics	2	2	2	1	3	Stat 2 nd
Total		16	13	16	6.5	22.5	

Third Year

1. Veterinary Clinic
2. Immunity
3. Microbiology
4. Parasitology
5. Pathology
6. Pharmacology
7. Toxicology

First semester (1st) subjects

No	Subjects	Hours		Units		Total	Codes
		Theoretical	Practical	Theoretical	Practical		
1	Pathology	3	3	3	1.5	4.5	Path 1 st
2	Pharmacology	3	2	3	1	4	Pharm 1 st
3	Parasitology	3	2	3	1	4	Para 1 st
4	Microbiology	3	3	3	1.5	4.5	Micro 1 st
5	Immunology	2	2	2	1	3	Immun 1 st
Total		14	12	14	6	20	

Second semester (2nd) subjects

No	Subjects	Hours		Units		Total	Codes
		Theoretical	Practical	Theoretical	Practical		
1	Pathology	3	3	3	1.5	4.5	Path 2 nd
2	Pharmacology	3	2	3	1	4	Pharm2 nd
3	Parasitology	3	2	3	1	4	Para 2 nd
4	Microbiology	3	3	3	1.5	4.5	Micro 2 nd
5	Toxicology	2	0	2	0	2	Toxo 2 nd
6	Clinic	0	2	0	1	1	Clin 2 nd
Total		14	12	12	6	20	

Fourth Year

1. Veterinary clinic
2. Medicine
3. Infectious diseases & epidemiology
4. Female fertility and venereal diseases
5. Poultry diseases
6. Surgery
7. clinical pathology
8. Zoonotic diseases (2nd semester)

Codes	Total Units	Units		Hours		Subjects	No
		Practical	Theoretical	Practical	Theoretical		
Clin	4	4	0	4	0	Clinic	1
Med	6	0	6	0	3	Medicine	2
Infec& Epid	6	0	3	0	3	Infectious diseases & epidemiology	3
FF	6	2	4	2	2	Female fertility	4
PD	6	2	4	2	2	Poultry diseases	5
Surg	8	2	6	2	3	Surgery	6
CP	4	2	2	2	1	Clinical pathology	7
ZD	2	0	2	0	2	Zoonotic diseases (2 nd semester)	8
	42	12	27	12	16	Total	

Fifth Year

1. Medicine
2. Surgery
3. Veterinary public health
4. Obstetrics
5. Research project
6. Fish diseases
7. Morbid anatomy & forensic medicine
8. Veterinary ethics
9. Summer Clinic
- 10.

No	Subjects	Hours		Units		Total Units	
		Theoretical	Practical	Theoretical	Practical		
1	Clinic	0	13	0	13	13	Clin
2	Medicine	3	0	6	0	6	Med
3	Surgery	2	2	4	2	6	Surg
4	Veterinary public health	2	2	4	2	6	VPH
5	Obstetrics	1	2	2	2	4	Obst
6	Research project	1	0	2	0	2	RP
7	Fish diseases (1st semester)	1	1	2	2	2	FD
8	Morbid anatomy & forensic Medicine (2nd semester)	1	2	1	1	2	MA
9	Veterinary ethics (2nd semester)	1	0	1	0	1	VE
10	Summer Clinic	0	3	0	2	2	SClin
Total	12	26			44		