

Ministry of Higher Education and Scientific Research Scientific Supervision and Scientific Evaluation Apparatus Directorate of Quality Assurance and Academic Accreditation

**Accreditation Department** 

# Academic Program Course Description Guide Department Of Animal Production

Wasit University - College of Agriculture

### In troduction

The academic program is considered a coordinated and organized package of courses that includes procedures and experiences organized into study units. Its main purpose is to build and refine graduates' skills to make them qualified to meet the demands of the job market. It is reviewed and evaluated annually through internal or external audit procedures and programs such as the external examiner program.

The academic program description provides a brief summary of the main features of the program and its courses, outlining the skills that students are expected to acquire based on the program's objectives. The importance of this description lies in its role as the cornerstone of program accreditation, and it is collaboratively written by faculty under the supervision of academic committees in academic departments.

This guide, in its second edition, includes a description of the academic program after updating vocabulary and paragraphs in light of developments in the Iraqi educational system. It includes the traditional description of the academic program (annual, semester system), as well as adopting the generalized description of the academic program under the Ministry of Education's letter M3/2906 on 3/5/2023 regarding programs that primarily follow the Bologna process.

In this context, we cannot but emphasize the importance of writing academic program descriptions and course outlines to ensure the smooth running of the educational process. Concepts and Terminology:

Academic Program Description: Provides a concise summary of its vision, mission, and objectives, including a detailed description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Offers a concise summary of the main features of the course and the expected learning outcomes for students to achieve, demonstrating whether they have maximized their learning opportunities. It is derived from the program description.

**Program Vision:** A visionary image of the academic program's future, aiming for it to be advanced, inspiring, motivating, realistic, and applicable.

Program Mission: Clarifies the goals and activities necessary to achieve them succinctly, outlining the program's development paths and trends.

**Program Objectives:** Statements describing what the academic program intends to achieve within a specific time frame, measurable and observable.

Curriculum Structure: All academic courses/subjects included in the academic program according to the adopted learning system (semester, annual, Bologna process), whether they are core (ministerial, university, college, scientific department) with the number of study units.

**Learning Outcomes:** A cohesive set of knowledge, skills, and values that a student has acquired upon successful completion of an academic program. Learning outcomes for each course must be defined in a way that achieves the program's objectives.

Teaching and Learning Strategies: These are the strategies used by faculty members to develop student learning. They are plans followed to achieve learning objectives, describing all classroom and non-classroom activities to achieve the program's learning outcomes.

#### Academic program description

# Academic Program Description Form

Signature

Head of Department Name: Dr. mohammed A. Rashid Date: 21/5/2024 Signature:

Scientific Associate Name:

Dean Assissant for Scientific Affairs

Date: 21/5/2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

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Date: 21/5/2024 Signature Ariah A. Hussein

Assist. Profe Dr. Hakeem.S. Abed Approval of the Dean

## Academic program description

This academic program description provides a concise summary of the program's key features and the expected learning outcomes for students, demonstrating whether they have maximized their learning opportunities. It is accompanied by a description for each course within the program.

1. Educational Institution	Wasit University- College of Agriculture
2. Scientific Department / Center	Animal production
3. Academic Program or Professional Program Name	Animal production
4. Final Degree Name	Bachelor of Science in Agriculture - Animal Production
Study System: (Annual, Modular, Semester)	Semester
6. Accredited Accreditation Program	The Agricultural Sector Committee – Ministry of Higher Education and Scientific Research
7. Other External Influences	Decisions issued by the Ministry of Higher Education and Scientific Research and Baghdad University.
8. Description Preparation Date	

Academic Program Objectives:

- Prepare agricultural engineers specializing in animal production who are qualified for work, supervision, and the development of animal production projects through the scientific experiences incorporated into the modern curricula that keep pace with the advancements in their field, encompassing theoretical foundations and practical skills that meet the requirements of the job market.

- Lay the foundation for an enlightened generation that is aligned with the principles and traditions of scientific research to be a fundamental asset in rebuilding this province, especially, and the country as a whole.

- Follow a policy of continuous development for the academic program's courses by developing the teaching staff and engaging them in training courses, seminars, and conferences within and outside Iraq to ensure scientific interaction and keep pace with regional and global developments.

- Develop the reality of animal wealth in the province by coordinating with agricultural and veterinary departments through field visits to public and private sector projects to develop poultry breeding and production projects (meat and egg production projects), as well as large animal breeding projects (cattle, buffalo, sheep, and goats), in addition to aquaculture projects, through effective cooperation between the department's outputs, the College of Agriculture, and the university with agricultural and veterinary departments in the province.

The required program outcomes and teaching, learning, and assessment methods

Cognitive Objectives:

<sup>1</sup>. Develop students' capabilities in their specific field of specialization, as well as related agricultural sciences.

<sup>Y</sup>. Enable students to acquire knowledge and understanding of course content.

<sup>°</sup>. Enable students to understand the needs of agricultural animals for growth and production.

 $\boldsymbol{\xi}$ . Familiarize them with methods of handling agricultural animals and caring for them.

Program's Skills Objectives:

1. Understanding how to interact with different animals and comprehend their behavior.

<sup>7</sup>. Learning how to prepare feed mixtures and utilize factory by-products to achieve optimal production with minimal costs.

 $\tilde{}$ . Empowering students to identify problems related to the animal production sector and devise solutions.

Encouraging students to participate in discussions on topics covered in lectures.
 Teaching and Learning Methods:

<sup>1</sup>. Delivering theoretical lectures to convey information to students using one of the following methods:

- Whiteboard.

- Data projector.

- Interactive lectures.

- Educational video presentations.

<sup>Y</sup>. Applying practical lectures through observations and interaction with field or laboratory aspects.

<sup>γ</sup>. Involving students in acquiring information by presenting scientific reports on a specific topic to enhance cognitive capacity.

 $\xi$ . Training students in logical discussion methods to reach conclusions based on available data.

Assessment Methods:

1. Conducting quick daily quizzes.

<sup>٢</sup>. Administering monthly exams.

<sup>°</sup>. Performing practical assessments.

<sup>£</sup>. Administering the final exam.

Emotional and Values Objectives:

<sup>1</sup>. The program adopts educational values in dealing with students to instill the desire for knowledge and interaction among students.

<sup>Y</sup>. Striving to disseminate scientific benefit to society through mastery of work and dedication to accomplishing it.

<sup>°</sup>. Emphasizing the importance of fair competition in project development and gaining market share for their products through quality assurance.

<sup>£</sup>. Linking scientific advancements with the animal production sector.

Transferable General Skills and Qualifications (Other Skills Related to Employability and Personal Development):

). Empowering students to present the required expertise and pass job interviews.

<sup>Y</sup>. Enhancing students' ability to conduct and write scientific research.

<sup>°</sup>. Encouraging students to establish their own projects after graduation from college.

 $\xi$ . Empowering students to acquire knowledge and understanding of work ethics in the animal production sector.

Teaching and Learning Methods:

<sup>1</sup>. Empowering students with discussion and logical deduction skills for research findings.

<sup>7</sup>. Conducting educational advisory seminars.

 $\tilde{}$ . Honoring exemplary students to highlight positive role models in behavior.

 $\xi$ . Encouraging student initiative by presenting ideas and addressing inappropriate behavior in the academic environment.

•. Activating the work of specialized educational committees in the program's academic years.

Assessment Methods:

). Conducting student surveys to assess opinions within the student community.

<sup>Y</sup>. Monitoring reports from educational committees in the program's years.

<sup>γ</sup>. Evaluating the frequency of positive behavioral occurrences within the student community and identifying unacceptable cases.

 $\xi$ . Involving students in discussions and seminars to develop skills in presenting scientific ideas.

Program Structure:

Approved HoursCourse Name or TitleCourse Code orStudy Level

Practica	Theoret		Title	
1	ical			
٣	۲	Analytical Chemistry	ANCH 111	First - Autumn Semester
٣	٢	Principles of Soil Science	SOSC 112	First - Autumn Semester
٣	٢	Principles of Plant Protection	PLPR 113	First - Autumn Semester
٣	۲	Principles of Animal Production	ANPR 114	First - Autumn Semester
٣	۲	Principles of Statistics	STAT 115	First - Autumn Semester
٣	-	Computer Applications (1)	COMA 102	First - Autumn Semester
-	۲	English Language (1)	ENGL 101	First - Autumn Semester
-	1	Human Rights	HURI 103	First - Autumn Semester
٣	۲	Organic Chemistry	ORCH 120	First - Spring Semester
٣	۲	Principles of Field Crops	PCSC 119	First - Spring Semester
٣	١	Surveying	SUV 118	First - Spring Semester
٣	۲	Poultry Principles	PRPO 117	First - Spring Semester
٣	۲	General Animal	ZOOL 116	First - Spring Semester
3	-	Mathematics	MATH 106	First - Spring Semester
٣	-	Computer Applications (2)	COMA 105	First - Spring Semester
_	۲	Arabic Language	ARAL 104	First - Spring Semester
٣	۲	Biochemistry	BICH 211	Second - Autumn Semester
٣	۲	Animal Product Health	SAAP 212	Second - Autumn Semester
٣	۲	Fish Principles	ICHT 213	Second - Autumn

				Semester
٣	۲	Horticulture Principles	PHSC 214	Second - Autumn Semester
٣	۲	Microbiology Principles	PRMI 215	Second - Autumn Semester
٣	۲	Animal Production Machinery	APME 216	Second - Autumn Semester
-	۲	Agricultural Extension Principles	PRAE 217	Second - Autumn Semester
٣	-	Computer Applications (3)	COMA 202	Second - Autumn Semester
-	۲	English Language (2)	ENGL 201	Second - Autumn Semester
٣	2	Genetics	GENE 218	Second - Spring Semester
٣	2	Forage Crops and Pastures	FOCR 219	Second - Spring Semester
٣	2	Fish Farming and Production	HPRE 220	Second - Spring Semester
٣	2	Dairy Science Principles	PDSC 221	Second - Spring Semester
-	2	Agricultural Economics Principles	PRAE 222	Second - Spring Semester
-	1	Freedom and Democracy	FRDE 204	Second - Spring Semester
٣	-	Computer Applications (4)	COMA 203	Third - Autumn Semester
٣	۲	Animal Physiology	ANPH 311	Third - Autumn Semester
٣	۲	Incubation and Hatchery Management	HMHA 312	Third - Autumn Semester
٣	۲	Animal Nutrition	ANNU 313	Third - Autumn Semester
-	3	Livestock Production Economics	APEC 314	Third - Autumn Semester
-	۲	Animal Environment and Behavior	AEBE 315	Third - Autumn Semester
٣	۲	Experiment Design and Analysis	EXDA 316	Third - Autumn Semester

YMedical and Veterinary EntomologyMVIN 317Third - Autumn SemesterYPoultry PhysiologyPOPH 318Third - Spring SemesterYPoultry Products TechnologyPOPT 319Third - Spring SemesterYYPeeds and RationsFEFE 320Third - Spring SemesterYYFeeds and RationsFEFE 320Third - Spring SemesterYYAnimal Diseases ImprovementANDI 321Third - Spring SemesterYYAnimal Breeding and ImprovementANBR 322Third - Spring SemesterYYReproductive Physiology ImprovementREPH 323Third - Spring SemesterYYPoultry Nutrition PONU 411Fourth - Autumn SemesterYYPoultry Breeding and ImprovementPOBR 412Fourth - Autumn SemesterYYPoultry Streeding and ImprovementDCPR 413Fourth - Autumn SemesterYYPoultry Management and ProductionPOMP 415Fourth - Autumn SemesterYYPoultry Management and ProductionPOMA 416Fourth - Autumn SemesterYPoultry Management and ProjectPOIL 418Fourth - Spring SemesterYPoultry DiseasesPOIL 418Fourth - Spring SemesterYPoultry DiseasesPOIL 418Fourth - Spring SemesterYPoultry DiseasesPOIL 418Fourth - Spring SemesterYPoultry DiseasesPOIL 418Fourth - Spring Semes					
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vPoultry Products TechnologyPOPT 319Third - Spring SemestervvFeeds and RationsFEFE 320Third - Spring SemestervvAnimal DiseasesANDI 321Third - Spring SemestervvAnimal Breeding and ImprovementANBR 322Third - Spring SemestervvAnimal Breeding and 	٣	۲	Poultry Physiology	POPH 318	Third - Spring
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-YEnglish Language (3) EnGL 301ENGL 301Fourth - Autumn SemesterYYPoultry Nutrition ImprovementPONU 411Fourth - Autumn SemesterYYPoultry Breeding and ImprovementPOBR 412Fourth - Autumn SemesterYYDairy Cattle Production 	٣	۲	Reproductive Physiology	REPH 323	Third - Spring Semester
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r $r$ Pasture ManagementPAMA 416Fourth - Autumn Semester $r$ $-$ Graduation Research ProjectREPR 417Fourth - Spring Semester $r$ $r$ Poultry DiseasesPODI 418Fourth - Spring 	٣	۲	Poultry Management and Production	POMP 415	Fourth - Autumn Semester
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Semester	٣	۲	Meat Science	MESC 421	Fourth - Spring Semester
- Y Buffalo Production BUPR 422 Fourth - Spring	-	۲	Buffalo Production	BUPR 422	Fourth - Spring

						Se	emester
-	1	Seminar Se	ssions	SE	MN 423	Fo Se	ourth - Spring emester
٣	-	Graduation Project	Research	RE	EPR 424	Fo Se	ourth - Spring emester
-	۲	English La	nguage (4)	ENGL 401		Fo Se	ourth - Spring emester
Academ	ic Prog	ram Structure	Number of		Number of		Drogram
Notes		Percentage	Number of Units		Number of Courses		Structure
Basic		٦,٧٦	١٢		٧	Institution Requirements	
Basic		۳۲,۳۹	٥٧,٥		۲.	College Requirements	
Basic		٦٠,٨٤	١٠٨		٣٤		Department Requirements
Basic		-	Fulfiller		-		Summer Training
		۱	177,0		7)		Total

## Personal Development Planning:

Personal follow-up on related topics on the internet.

Summer training and practical lessons.

Reading and increasing knowledge in other general topics.

14. Admission Criteria (Institutional Admission Systems):

Centralized Admission (Central Planning).

Academic Level of the Student (Grade Point Average obtained in preparatory studies).

Personal Interview at the College.

15. Key Information Sources about the Program:

References and textbooks.

Journals and scientific magazines.

Information network (Internet).

Study sessions and training courses.

Instructions issued by the Ministry of Higher Education and Scientific Research, as well as Baghdad University.

Course Description Template	
	where a fit has been factured of the course and the surrented
course description provides a concise s arning outcomes for students to achie	summary of the key features of the course and the expected ve, demonstrating whether they have maximally benefited
course description provides a concise s arning outcomes for students to achier om the available learning opportunities	summary of the key features of the course and the expected ve, demonstrating whether they have maximally benefited s. It must be linked to the program description.
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course description provides a concise s arning outcomes for students to achie om the available learning opportunities Course Description: First level: Educational Institution Scientific Department / Center Course Name Course Code Number of Credit Units Available Attendance Modes Level - Semester	summary of the key features of the course and the expected         ve, demonstrating whether they have maximally benefited         s. It must be linked to the program description.         College of Agriculture - Wasit University         Animal Production         Analytical Chemistry         ANCH 111         3.5         Attendance: Yes         First Year - Autumn Semester
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		compounds in the mat	erial being analyzed	d.	
		Delivering theoretical lectures using the following			
Teaching and Learning		methods: (whiteboard, data projector, interactive lecture,			
Methods		educational video presentation).			
		Applying practical lec	tures through obser	vations and	
		interaction with field of	or laboratory aspect	S.	
		Conducting daily quic	k tests.		
		Evaluating students th	rough scientific rep	oorts and oral	
Assessment Methods		questions.			
		Conducting monthly e	exams.		
		Conducting practical e	exams.		
		Conducting final exan	<u>1 1 c1 </u>	<b>P</b> 1 1	
		Required textbooks: A	nalytical Chemistry	y Fundamentals	
		(Translated by Zuhair	Meti Qusair, Edmo	nd Mikhail	
		Hanna, and Abdul Lat	if Abdul Razzaq).	· · · ·	
		Key references (source	es): Analytical Cher	mistry: Basic	
Infrastructure		Concepts in Traditiona	al and Automated A	nalysis by	
		Abdullah Mahmoud Abu Al-Kubash.			
		Recommended books and references (scientific journals,			
		reports).			
		Theoretical Exam (30 points) + Practical Exam (20			
		Theoretical Exam (30 points) + Practical Exam (20			
Evaluation of the course		points) = (50 points) C	ontinuous Assessm	tent + (50)	
		points) Final Exam.			
Course structure:					
	N	ame of the unit or	Method of	Evaluation	
Week Hours	su	biect	Education	method	
	In	portance of	Theoretical	Theoretical	
(2) hours	O	uantitative Chemistry	lectures	quiz	
The first theoretical	an	d Concentration	Practical lectures	Practical quiz	
(3) hours	Ez	pressions with	Laboratory	Scientific	
practical	Pr	oblems	experiments	Reports	
	Ez	pression of Laws of	Theoretical	Theoretical	
(2) hours	pp	om, w/w%, v/v% with	lectures	quiz	
The second theoretical	D	ilution Laws for	Practical lectures	Practical quiz	
(3) hours	St	andard Solutions with	Laboratory	Scientific	
practical	Pr	oblems	experiments	Reports	
The third (2) hours	In	troduction to Ionic	Theoretical	Theoretical	

	theoretical (3) hours practical	Balance, Theories of Hydrolysis, and pH for Acids, Bases, and Salts with Strong and Weak Types with Problems	lectures Practical lectures Laboratory experiments	quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	pH Measurement Methods and pH Meter Explanation with Detailed Description of Buffered Solutions	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Preparation Methods of Buffered Solutions with Problems	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Explanation of Acid- Base Indicators with Multiple Problems on all the Above Topics	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Ka Estimation Method and Titration Curves with Problems	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Precipitation Titration and Introduction to Mohr and Volhard Methods	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Standards and Characteristics of Standard Substances, Titration Steps with Problems on the Subject with Introduction to Complex Titration	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	(2) hours theoretical	Complex Titrations with EDTA, Characteristics,	Theoretical lectures	Theoretical quiz

	(3) hours	and Problems on the	Practical lectures	Practical quiz
	practical	Subject	Laboratory	Scientific
			experiments	Reports
	(2) hours	Student's Familiarity	Theoretical	Theoretical
	theoretical	with Volumetrie	lectures	quiz
The eleventh	(3) hours	Mathada including the	Practical lectures	Practical quiz
	practical	use of $(FDTA)$	Laboratory	Scientific
		use of (EDIA)	experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Student's Introduction	lectures	quiz
The twelfth	(3) hours	to Gravimetric Analysis	Practical lectures	Practical quiz
	(3) Hours	with Problems	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Student's Introduction	lectures	quiz
thirteenth	(3) hours	to Oxidation-Reduction	Practical lectures	Practical quiz
	(3) nours	Titrations	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Student's Familiarity	Theoretical	Theoretical
The	(2) nours	with Oxidation	lectures	quiz
fourteenth	(3) hours	Reduction Indicators	Practical lectures	Practical quiz
Iourteentii	(3) nours	with Problems	Laboratory	Scientific
	practical	with 1 rootenis	experiments	Reports
	(2) hours	Automated Analysis and	Theoretical	Theoretical
	theoretical	Understanding of	lectures	quiz
The fifteenth	(3) hours	Lambert-Beer Law and	Practical lectures	Practical quiz
	practical	Spectrophotometer with	Laboratory	Scientific
	practical	Problems	experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of soil science
Course Code	SOSC 112
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours $+$ (3) Practical Hours $=$ (5) Hours
Total Hours of Instruction	per Week
Date of Description	12/2/2024

Preparation	Preparation				
Course Coordi	nator's Name				
Course Object	ives	<ul><li>Familiarizing the students with the science of soil formation and development.</li><li>Including the physical and chemical properties of soil.</li><li>Classifying and managing soil in Iraq.</li></ul>			
Teaching and Learning MethodsDelivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lectu educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.				following eractive lecture, vations and s.	
Assessment M	ethods	<ul> <li>Conducting daily quick tests.</li> <li>Evaluating students through scientific reports and oral questions.</li> <li>Conducting monthly exams.</li> <li>Conducting practical exams.</li> <li>Conducting final exam.</li> </ul>			
Infrastructure		Required Textbooks: Principles of Soil Science by Dr.         Abdullah Najm Al-Ani.         Main References (Sources): Chemical Analysis of Soil         by Dr. Hamad Allah Sulaiman Rahi and Dr. Mohammed         Ali.         Recommended books and references (scientific journals, reports).			
Evaluation of t	he course	Theoretical Exam (30 points) = (50 points) C points) Final Exam.	points) + Practical Continuous Assessm	Exam (20 nent + (50	
Course structur	re:				
Week	Hours	Name of the unit or subject	Name of the unit orMethod ofEvaluationsubjectEducationmethod		
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	General Concepts of Soil and Soil Sciences, Formation and Development of Soil	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The second	(2) hours theoretical	Student's Familiarity with the Physical	Theoretical lectures	Theoretical quiz	

	(3) hours practical	Properties of Soil	Practical lectures Laboratory experiments	Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Student's Familiarity with Soil Water	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Student's Familiarity with Aggregates and Chemical Properties of Soil	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Student's Familiarity with Soil Salinity, Alkalinity, Reclamation of Saline Lands, and Managed Soil	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Understanding Biological and Biochemical Properties of Soil	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Student's Familiarity with Soil Fertility and Plant Nutrition	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Understanding Soil Aggregates and Chemical Properties	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Types of Soil Particles and Their Characteristics	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

			Theoretical	Theoretical
	(2) hours theoretical	Student's Familiarity	lectures	auiz
The tenth		with Organic Soil	Practical lectures	Practical guiz
	(3) hours	Aggregates	Laboratory	Scientific
	practical	1.281.08	experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical		lectures	auiz
The eleventh	(3) hours	Understanding Soil	Practical lectures	Practical quiz
	practical	Formation Processes	Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours	Student's Familiarity	lectures	
The twelfth	theoretical	with Soil Salinity and	Practical lectures	Practical quiz
	(3) hours practical	Alkalinity	I aboratory	Scientific
			experiments	Peports
			Theoretical	Theoretical
	(2) hours			i neoretical
	theoretical	Understanding Ion	lectures	
The thirteenth	(3) hours practical	Exchange in Soil	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	Student's Familiarity	lectures	quiz
Fourteenth	(3) hours	with Soil Salinity	Practical lectures	Practical quiz
rourteentii	(5) nours	Determination	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Student's Familiarity	lectures	quiz
The fifteenth	(2) have	with Soil Water	Practical lectures	Practical quiz
	(3) hours practical	Classification	Laboratory	Scientific
			experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of plant protection
Course Code	PLPR 113
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes

Level - Semest	ter	First Year - Autumn S	emester				
Total Hours of	Instruction	(2) Theoretical Hours per Week	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week				
Date of Descrip Preparation	ption	12/2/2024	12/2/2024				
Course Coordi	nator's Name						
Course Objecti	ives	Familiarizing the study sciences, including the Understanding plant d methods.	Familiarizing the students with Entomology and related sciences, including the benefits and harms of insects. Understanding plant diseases and their treatment methods.				
Teaching and I Methods	Learning	Delivering theoretical methods: (whiteboard, educational video pres Applying practical lec interaction with field of	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects				
Assessment Methods		Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.					
Infrastructure		Required Textbook: General Entomology by Dr. IbrahimQadouri Al-Qaddou.Main References (Sources): Fungi Book by Dr. IbrahimAziz Al-Suhaili.Recommended books and references (scientific journals, reports).Electronic references, internet websites.					
Evaluation of the course		Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.					
Course structur	re:						
Week	Hours	Name of the unit or subject	Method of Education	Evaluation method			
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Introduction to Entomology	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific			

			experiments	Reports
	(2) hours	Feeding Methods of	Theoretical	Theoretical
	(2) nours	Insects and Factors	lectures	quiz
The second	(2) hours	aiding Survival	Practical lectures	Practical quiz
	(3) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Insect Reproduction	Theoretical	Theoretical
	(2) nours	Methods	lectures	quiz
The third	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
			experiments	Reports
	(2) hours	Environmental Factors	Theoretical	Theoretical
	theoretical	Influencing Insect Life	lectures	quiz
The fourth	(3) hours	and Activity	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Methods of	Theoretical	Theoretical
	theoretical	Controlling Palm/Fruit	lectures	quiz
The fifth	(3) hours practical	and Cucumber Pests	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours	Economic	Theoretical	Theoretical
		Significance and	lectures	quiz
The sixth	(3) hours	Important Factors in	Practical lectures	Practical quiz
	practical	Iraq	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Nature of Life and	Theoretical	Theoretical
	theoretical	Damages by	lectures	quiz
The Seventh	(3) hours	Agricultural Rodents	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Economic Importance	Theoretical	Theoretical
	theoretical	of Pests	lectures	quiz
The eighth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	pruetieur		experiments	Reports
	(2) hours	Definitions of Disease	Theoretical	Theoretical
The ninth	theoretical	Terms	lectures	quiz
	(3) hours		Practical lectures	Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Causes of Parasitic	Theoretical	Theoretical
	(2) nours	Plant Diseases	lectures	quiz
The tenth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Causes of Non-	Theoretical	Theoretical
	theoretical	Parasitic Diseases	lectures	quiz
The eleventh	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Disease Development	Theoretical	Theoretical
	(2) nours	Years and Spread	lectures	quiz
The twelfth	(3) hours practical	Methods	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours	Methods of Plant	Theoretical	Theoretical
	(2) Hours	Disease Control	lectures	quiz
The thirteenth	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	General	Theoretical	Theoretical
The	(2) nours	Characteristics of the	lectures	quiz
Fourtoonth	(2) hours	Class Insecta and	Practical lectures	Practical quiz
гопцеенин	(3) nours	Insect Orders	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Feeding Methods of	Theoretical	Theoretical
	(2) nours	Insects and Factors	lectures	quiz
The fifteenth	(2) hours	aiding Survival	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of Animal Production
Course Code	ANPR 114
Number of Credit Units	3.5

Available Atter	ndance Modes	Attendance: Yes	Attendance: Yes			
Level - Semest	ter	First Year - Autumn S	First Year - Autumn Semester			
Total Hours of	Instruction	(2) Theoretical Hours	(2) Theoretical Hours $+$ (3) Practical Hours $=$ (5) Hours			
Total Hours of Instruction		per Week				
Date of Descri	ption	12/2/2024				
Preparation		12/2/2024				
Course Coordi	nator's Name					
		Defining the economi	c importance of ani	mal production		
		as well as its general r	elevance.			
Course Object	ives	Relationship between	animal production	and plant		
		production.		1		
		Delivering theoretical	lectures using the f	following		
	- ·	methods: (whiteboard	, data projector, inte	eractive lecture,		
Teaching and I	Learning	educational video pres	sentation).			
Methods		Applying practical lec	tures through obser	vations and		
		interaction with field	or laboratory aspect	S.		
		Conducting daily guid	k tests.			
		Evaluating students th	Evaluating students through scientific reports and oral			
		questions	questions			
Assessment M	ethods	Conducting monthly evams				
		Conducting monthly Conducting	Conducting monthly exams.			
		Conducting final evan	Conducting final avem			
		Producting Infan exam.				
		Najih Tawfia Ghazal	$r_{\rm m}$ others 1070 M	I Toduction by		
		Majio Tawing Oliazara Majio Deferences (Seu	Najib Tawfiq Ghazal and others, 1979, Mosul University.			
		Cost Production and I	Main References (Sources): Fundamentals of Sheep and			
Infrastructure		Dr. Zuhoin Ealthri Al	Goat Production and Rearing by Dr. Jalal Elia Al-Qass,			
		Dr. Zunair Faknri Al-J	Janni, and Dr. Daib			
		Recommended books	and references (scie	entific journals,		
		reports).	reports).			
		Electronic references, internet websites.				
		Theoretical Exam (30	Theoretical Exam (30 points) + Practical Exam (20			
Evaluation of t	the course	points) = (50 points) C	Continuous Assessm	hent + (50)		
		points) Final Exam.	points) Final Exam.			
Course structu	re:					
Week	Hours	Unit or Topic Name	Method of	Evaluation		
			Education	method		
The first	(2) hours	Economic Importance	Theoretical	Theoretical		
1110 11150	theoretical	of Animal Products	lectures	quiz		

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The second	theoretical	Cattle and Buffalo	Practical lectures	Practical quiz
	(3) hours	Breeds	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The third	theoretical	Cattle Breeds and	Practical lectures	Practical quiz
	(3) hours	Types	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	T 4 1 4 4	lectures	quiz
The fourth	(3) hours	Introduction to	Practical lectures	Practical quiz
	practical	Reproduction in Cattle	Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifth	theoretical	Care of Young Calves	Practical lectures	Practical quiz
	(3) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) h array		Theoretical	Theoretical
	(2) nours	Concept of Nutrition	lectures	quiz
The sixth	(2) have	Concept of Nutrition	Practical lectures	Practical quiz
	(3) hours	for Ruminant Animals	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Mille Production from	lectures	quiz
The Seventh	(2) hours	Cattle and Puffelees	Practical lectures	Practical quiz
	(3) nouis	Caule and Dunaloes	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) Hours	Basic Daily, Weekly,	lectures	quiz
The eighth	(2) hours	and Seasonal Field	Practical lectures	Practical quiz
	(3) nours	Operations	Laboratory	Scientific
	practical		experiments	Reports
The ninth	(2) hours	Field Records and	Theoretical	Theoretical

	theoretical	Understanding	lectures	quiz
	(3) hours	Production	Practical lectures	Practical quiz
	practical	Information	Laboratory	Scientific
			experiments	Reports
	(2) have		Theoretical	Theoretical
	(2) nours		lectures	quiz
The tenth	(2) have	Housing and Its Types	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical		lectures	quiz
The eleventh	(3) hours	Buffaloes	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) hours theoretical (3) hours	Sheep and Goat Rearing	lectures	quiz
The twelfth			Practical lectures	Practical quiz
			Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) hours theoretical (3) hours practical	Economic Importance	lectures	quiz
The thirteenth		of Sheep and Goat	Practical lectures	Practical quiz
		Products	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Classification and	lectures	quiz
Fourtoonth	(2) hours	Classification and	Practical lectures	Practical quiz
Fourteenth	(3) nours	Classification Methods	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Penroduction in	lectures	quiz
The fifteenth	(3) hours	Puminant Animala	Practical lectures	Practical quiz
	(3) hours practical	Ruminant Animals	Laboratory	Scientific
			experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of statistics
Course Code	STAT 115

Number of Cre	edit Units	3.5	3.5			
Available Atter	ndance Modes	Attendance: Yes	Attendance: Yes			
Level - Semest	ter	First Year - Autumn S	First Year - Autumn Semester			
Total Hours of Instruction		(2) Theoretical Hours	s + (3) Practical Hou	rs = (5) Hours		
	instr <b>uct</b> ion	per Week				
Date of Descrip	ption	12/2/2024				
Preparation						
Course Coordi	nator's Name					
		Definition of the prin	ciples of statistics an	nd methods of		
Course Objecti	Wes	statistical sampling.				
	IVES	Understanding the me	ost important statisti	cal measures		
		used.				
		Delivering theoretical	l lectures using the f	following		
Tasahing and I		methods: (whiteboard	l, data projector, inte	eractive lecture,		
Teaching and I	Learning	educational video pre	esentation).			
Methods		Applying practical le	ctures through obser	vations and		
		interaction with field	or laboratory aspect	s.		
		Conducting daily qui	Conducting daily quick tests.			
		Evaluating students the	Evaluating students through scientific reports and oral			
	.1 1	questions.				
Assessment M	ethods	Conducting monthly exams.				
		Conducting practical exams.				
		Conducting final exam.				
		Required Textbook: I	Required Textbook: Introduction to Statistics. 1984. by			
		Dr. Khashae Mahmou	Dr. Khashae Mahmoud Al-Arawi, Mosul University			
Infrastructure		Recommended books	and references (scie	entific journals,		
		reports).	reports).			
		Electronic references, internet websites.				
		Theoretical Exam (30 points) + Practical Exam (20				
		points) = (50 points)	points = (50 points) Continuous Assessment + (50			
Evaluation of t	he course	points) Final Exam.		× ×		
		1 /				
Course structur	re:					
W/1-	Uoura	Unit or Tonia Nama	Method of	Evaluation		
WCCK	110015	Onit of Topic Name	Education	method		
	(2) hours		Theoretical	Theoretical		
The first	theoretical	Noture of Statistics	lectures	quiz		
1 ne first	(3) hours	Inature of Statistics	Practical lectures	Practical quiz		
	practical		Laboratory	Scientific		
L	-	1	· ·	1		

			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Tabular Presentation	lectures	quiz
The second	(2) hours	and Graphical	Practical lectures	Practical quiz
	(3) nours	Representation	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Fraguanau	lectures	quiz
The third	(2) hours	Distribution Table	Practical lectures	Practical quiz
	(3) nours	Distribution Table	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Relative Frequency	lectures	quiz
The fourth	(3) hours	Distribution Table	Practical lectures	Practical quiz
	(5) nours	Distribution Table	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Cumulative Distributions	Theoretical	Theoretical
	(2) hours theoretical (3) hours practical		lectures	quiz
The fifth			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Measures of Central	lectures	quiz
The sixth	(3) hours	Tendency and	Practical lectures	Practical quiz
	practical	Dispersion	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Measures of	lectures	quiz
The Seventh	(3) hours	dispersion and	Practical lectures	Practical quiz
	practical	variation.	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Principles of	lectures	quiz
The eighth	(3) hours	Probability Theory	Practical lectures	Practical quiz
	nractical		Laboratory	Scientific
	Practical		experiments	Reports
	(2) hours	Probability	Theoretical	Theoretical
The ninth	theoretical	Distribution	lectures	quiz
	(3) hours		Practical lectures	Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours		lectures	quiz
The tenth	(2) here $(2)$	<b>Binomial Distribution</b>	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours	Multinomial	lectures	quiz
The eleventh	theoretical	Probability	Practical lectures	Practical quiz
	(3) nours	Distribution	Laboratory	Scientific
	practical		experiments	Reports
	(2) have		Theoretical	Theoretical
	(2) nours		lectures	quiz
The twelfth	(3) hours practical	Normal Distribution	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>		Theoretical	Theoretical
			lectures	quiz
The thirteenth		Hypothesis Testing	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
Fourtoonth	(2) hours	Chi-Square Test	Practical lectures	Practical quiz
routteentii	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
The fifteenth	(2) hours		Theoretical	Theoretical
	(2) nours	Decreasion and Simula	lectures	quiz
	(2) hours	Correlation	Practical lectures	Practical quiz
	(3) hours practical		Laboratory	Scientific
			experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Computer applications (1).
Course Code	COMA 102
Number of Credit Units	1.5

Available Atter	ndance Modes	Attendance: Yes			
Level - Semester		First Year - Autumn Semester			
Total Hours of Instruction		(3) Practical Hours =	(3) Practical Hours = (3) Hours per Week		
Date of Description Preparation		12/2/2024			
Course Coordin	nator's Name				
Course Objectives		Understanding the cor functions, and familiat technologies, software work and task comple	Understanding the components of a computer, their functions, and familiarization with computer technologies, software, and necessary applications for work and task completion.		
Teaching and Learning Methods		Delivering theoretical methods: (whiteboard educational video pres Applying practical lec interaction with field of	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects		
Assessment Methods		Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.			
Infrastructure		Required Textbook: Systematic Computer Book. Main References (Sources): Guide to Using Office Software. Recommended books and references (scientific journals, reports). Electronic references, internet websites.			
Evaluation of the course		Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.			
Course structur	re:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	(3) hours practical	What is a computer? Computer Features Computer Components Types of Computers	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	

The second	(3) hours practical	Main Components of a Personal Computer	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	(3) hours practical	Operating Systems and Their Types	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	(3) hours practical	Information Networks	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	(3) hours practical	Telephone Networks and the World of Computers	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	(3) hours practical	Internet	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	(3) hours practical	Computers in Our Daily Lives	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	(3) hours practical	Insurance, Copyrights, and Laws	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	(3) hours practical	Working with Menus and Icons	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific

			experiments	Reports
			Theoretical	Theoretical
	(2) have	Desistan Origini	lectures	quiz
The tenth	(3) nours	Leursh Menu	Practical lectures	Practical quiz
	practical	Launen Menu	Laboratory	Scientific
			experiments	Reports
			Theoretical	Theoretical
	(2) hours	Windows Evalorer	lectures	quiz
The eleventh	(3) nours	Program	Practical lectures	Practical quiz
	practical	Flogram	Laboratory	Scientific
			experiments	Reports
			Theoretical	Theoretical
	(2) hours	Using Some Built-in	lectures	quiz
The twelfth	practical	Programs with	Practical lectures	Practical quiz
		Windows	Laboratory	Scientific
			experiments	Reports
	(3) hours practical		Theoretical	Theoretical
		Optimizing Screen	lectures	quiz
The thirteenth		Fonts for LCD or	Practical lectures	Practical quiz
		Laptop Displays	Laboratory	Scientific
			experiments	Reports
			Theoretical	Theoretical
The	(3) hours	Understanding and	lectures	quiz
Fourteenth	(3) nours	Activating Windows	Practical lectures	Practical quiz
Fourteentin	practical	XP's Firewall	Laboratory	Scientific
			experiments	Reports
			Theoretical	Theoretical
	(3) hours		lectures	quiz
The fifteenth	practical	Dynamic Disk	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	English language (1)
Course Code	ENGL 101
Number of Credit Units	2
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year - Autumn Semester

Total Hours of Instruction		(2) Theoretical Hours	= (2) Hours per W	leek	
Date of Description Preparation		12/2/2024	12/2/2024		
Course Coordi	inator's Name				
Course Object	ives	Understanding the En vocabulary, writing st	glish language, its yle, and reading sk	tenses, ills.	
Teaching and Learning Methods		Delivering theoretical methods: (whiteboard educational video pre	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation).		
Assessment Methods		<ul> <li>Conducting daily quid</li> <li>Evaluating students the</li> <li>questions.</li> <li>Conducting monthly of</li> <li>Conducting final example.</li> </ul>	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting final exam		
Infrastructure		Required Textbook: S Main References (Sou textbooks. Writing Academic En Recommended books reports). Electronic references,	Required Textbook: Systematic English Language Book. Main References (Sources): Authentic language textbooks. Writing Academic English, Level 1 by Alice Oshima Recommended books and references (scientific journals, reports). Electronic references internet websites		
Evaluation of the course		Theory Exam (50 points) + Daily Exam = (50 points) Effort + (50 points) Final Exam			
Course structu	re:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	(2) hours theoretical	English preposition	Theoretical lectures	Theoretical exam	
The second	(2) hours theoretical	Passive voice	Theoretical lectures	Theoretical exam	
The third	(2) hours theoretical	Negative	Theoretical lectures	Theoretical exam	
The fourth	(2) hours theoretical	If clause ( conditional) sentences	Theoretical lectures	Theoretical exam	
The fifth	(2) hours theoretical	Kinds of sentences	Theoretical lectures	Theoretical exam	
The sixth	(2) hours theoretical	A- Simple tense	Theoretical lectures	Theoretical exam	
The Seventh	(2) hours	B-compound tense	Theoretical	Theoretical	

	theoretical		lectures	exam
T1 1/1	(2) hours	a complex tense	Theoretical	Theoretical
The eignth	theoretical	c- complex tense	lectures	exam
The ninth	(2) hours	The use of so 'and	Theoretical	Theoretical
	theoretical	neither'	lectures	exam
The tenth	(2) hours	Singular	Theoretical	Theoretical
I ne tenth	theoretical	Singular	lectures	exam
The alguanth	(2) hours	plural	Theoretical	Theoretical
The eleventh	theoretical		lectures	exam
The twelfth	(2) hours	How to answer	Theoretical	Theoretical
The twellth	theoretical	causations	lectures	exam
The thirteenth	(2) hours	Number + Roman	Theoretical	Theoretical
	theoretical	Numerals	lectures	exam
The	(2) hours	Every day sentences	Theoretical	Theoretical
Fourteenth	theoretical	Every day sentences	lectures	exam
The fifteenth	(2) hours	The yerb to be	Theoretical	Theoretical
	theoretical	I ne verb to be	lectures	exam

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Human rights
Course Code	HURI 103
Number of Credit Units	1
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year - Autumn Semester
Total Hours of Instruction	(1) Theoretical Hours = (1) Hours per Week
Date of Description	12/2/2024
Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	Understanding human rights and their respective
Course Objectives	systems, as well as defining public and private freedoms.
Teaching and Learning	Delivering theoretical lectures using the following
Methods	methods: (whiteboard, data projector, interactive lecture,
Wethous	educational video presentation).
	Conducting daily quick tests.
	Evaluating students through scientific reports and oral
Assessment Methods	questions.
	Conducting monthly exams.
	Conducting final exam.

Infrastructure		<ul> <li>Required Textbook: S</li> <li>Main References (So and freedoms.</li> <li>Recommended books reports).</li> <li>Electronic references</li> </ul>	Required Textbook: Systematic Book. Main References (Sources): Authentic books on rights and freedoms. Recommended books and references (scientific journals, reports). Electronic references, internet websites.		
Evaluation of t	the course	Theory Exam (50 poi Effort + (50 points) F	nts) + Daily Exam inal Exam.	= (50 points)	
Course structu	re:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	(1) hours theoretical	Definition of Human Rights	Theoretical lectures	Theoretical exam	
The second	(1) hours theoretical	Origin and Evolution of the Concept of Human Rights	Theoretical lectures	Theoretical exam	
The third	(1) hours theoretical	Overview of Human Rights in Ancient Civilizations (Mesopotamian Civilization, Nile Valley Civilization)	Theoretical lectures	Theoretical exam	
The fourth	(1) hours theoretical	Human Rights in Divine Religions	Theoretical lectures	Theoretical exam	
The fifth	(1) hours theoretical	Human Rights and Their Relationship with Other Variables	Theoretical lectures	Theoretical exam	
The sixth	(1) hours theoretical	The Relationship between Rights and Law	Theoretical lectures	Theoretical exam	
The Seventh	(1) hours theoretical	The Relationship between Rights and Duties	Theoretical lectures	Theoretical exam	
The eighth	(1) hours theoretical	Fundamental Human Rights	Theoretical lectures	Theoretical exam	
The ninth	(1) hours	The Impact of	Theoretical	Theoretical	

	theoretical	Globalization on	lectures	exam
		Human Rights		
The tenth	(1) hours theoretical	Major International Declarations and Treaties on Human Rights	Theoretical lectures	Theoretical exam
The eleventh	(1) hours theoretical	Universal Declaration of Human Rights (1948)	Theoretical lectures	Theoretical exam
The twelfth	(1) hours theoretical	Cairo Declaration on Human Rights in Islam	Theoretical lectures	Theoretical exam
The thirteenth	(1) hours theoretical	Human Rights in International Treaties and Laws	Theoretical lectures	Theoretical exam
The Fourteenth	(1) hours theoretical	International Covenant on Civil and Political Rights	Theoretical lectures	Theoretical exam
The fifteenth	(1) hours theoretical	Financial and Administrative Corruption	Theoretical lectures	Theoretical exam

Educational Institution	College of Agriculture - Wasit University	
Scientific Department / Center	Animal Production	
Course Name	Organic chemistry	
Course Code	ORCH 120	
Number of Credit Units	3.5	
Available Attendance Modes	Attendance: Yes	
Level - Semester	First Year - Spring Semester	
Total Hours of Instruction	(2) Theoretical Hours $+$ (3) Practical Hours $=$ (5) Hours	
Total Hours of histraction	per Week	
Date of Description	12/2/2024	
Preparation		
Course Coordinator's Name		
	Understanding the Importance of Chemistry in	
Course Objectives	Describing the Structure, Properties, and Reactions of	
	Compounds and Organic Materials	
Teaching and Learning	Delivering theoretical lectures using the following	

Methods		methods: (whiteboard, data projector, interactive lecture, educational video presentation)			
		Applying practical lectures through observations and			
		interaction with field or laboratory aspects.			
		Conducting daily quic	Conducting daily quick tests.		
Assessment Methods		Evaluating students through scientific reports and oral			
		questions.			
		Conducting monthly exams.			
		Conducting practical exams.			
		Conducting final exam.			
Infrastructure		Required Textbooks: Organic Chemistry by Abdul Ilah			
		Al-Abdo	Al-Abdo		
		Recommended books and references (scientific journals,			
		reports).			
		Electronic references, internet websites.			
		Theoretical Exam (30 points) + Practical Exam (20			
Evaluation of t	he course	points) = (50 points) C	points) = (50 points) Continuous Assessment + (50)		
		points) Final Exam.	points) Final Exam.		
Course structur					
Course structure:			Mathadaf	Evoluction	
Week	Hours	Unit or Topic Name	Education	Evaluation	
		Introduction to		method	
		Organic Chemistry -			
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Importance of Bonds -	Theoretical	Theoretical	
		Hybridization -	lectures	quiz	
The first		Possibilities of C-C $\pi$ -	Practical lectures Laboratory experiments	Practical quiz	
		Bond Splitting - Major		Scientific	
		Reactions in Organic		Reports	
		Chemistry			
		Alkanes - Definition -			
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Nomenclature -	Theoretical	Theoretical	
The second		Examples - Sp3	lectures	quiz	
		Hybridization -	Practical lectures	Practical quiz	
		Rotational Motion -	Laboratory	Scientific	
		Preparation -	experiments	Reports	
		Reactions			
The third	(2) hours	Alkenes - Definition -	Theoretical	Theoretical	
	theoretical	Nomenclature -	lectures	quiz	

	(3) hours practical	Examples - Sp2 Hybridization - Formation of Double Bonds - Preparation – Reactions	Practical lectures Laboratory experiments	Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Compounds Containing Multiple Double Bonds - Examples - Dyenes - Types - Reactions	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Alkynes - Definition - Nomenclature - Examples - Sp Hybridization - Formation of Triple Bonds - Preparation - Reactions	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Alicyclic Aliphatic Compounds - Definition - Major Rings - Preparation - Major Reactions	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	First Theoretical Exam	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Aromatic Compounds - Definition - Nomenclature - Calculation of Electronic Resonance Energy - Formation of Aromatic Rings - Activity and Orientation - Preparation - Reactions	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	(2) hours	Aliphatic and	Theoretical	Theoretical

	theoretical	Aromatic Halides -	lectures	quiz
	(3) hours	Definition -	Practical lectures	Practical quiz
	practical	Nomenclature -	Laboratory	Scientific
	_	Examples -	experiments	Reports
		Preparation -		-
		Reactions (SN1, SN2,		
		E1, E2)		
		Nucleophilic	Theoretical	Theoretical
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Substitution in Aryl	lectures	quiz
		Halides	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours	Alcohols, Phenols, and	Theoretical	Theoretical
The eleventh	theoretical	Ethers - Definition -	lectures	quiz
	(3) hours	Nomenclature -	Practical lectures	Practical quiz
	practical	Preparation -	Laboratory	Scientific
	Freedom	Reactions	experiments	Reports
		Aldehvdes and		
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Ketones - Definition -		
		Examples -		
		Nomenclature -	Theoretical	Theoretical
		Carbonyl Group	lectures	quiz
The twelfth		Preparation	Practical lectures	Practical quiz
		Reactions Nitrogen	Laboratory	Scientific
		Derivatives of	experiments	Reports
		Aldohydog and		
		Katanas		
		Second Theoretical	Theoretical	Theoretical
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>			
		Exam	Due et a el le eterne e	quiz
			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Amines - Definition -	Theoretical	Theoretical
The Fourteenth		Types - Nomenclature	lectures	quiz
		- Examples -	Practical lectures	Practical quiz
		Preparation -	Laboratory	Scientific
		Reactions	experiments	Keports
The fifteenth	(2) hours	Carboxylic Acids -	Theoretical	Theoretical
	theoretical	Definition - Examples	lectures	quiz
(3) hours	- Nomenclature -	Practical lectures	Practical quiz	
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practical	Carboxyl Group -	Laboratory	Scientific	
	Preparation -	experiments	Reports	
	Reactions			

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of Field Crops
Course Code	PCSC 119
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year - Spring Semester
Total Hours of Instruction	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week
Date of Description Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	Understanding Major Field Crops and Their Interactions with Other Factors
Teaching and Learning Methods	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.
Assessment Methods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.
Infrastructure	Book: Principles of Field Crops by Dr. Majid Mohsen Al- Ansari Recommended books and references (scientific journals, reports). Electronic references, internet websites.
Evaluation of the course	Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.

Course structure:					
Week	Hours		Method of	Evaluation	
			Education	method	
	(2) hours	Definition, origin, and	Theoretical	Theoretical	
	theoretical	development of field	lectures	quiz	
The first	(3) hours	crops	Practical lectures	Practical quiz	
	practical		Laboratory	Scientific	
	1		experiments	Reports	
		Classification of field	Theoretical	Theoretical	
	(2) hours	crops based on	lectures	quiz	
The second	theoretical	economic use,	Practical lectures	Practical quiz	
	(3) hours	growing season,	Laboratory	Scientific	
	practical	duration in the field,	experiments	Reports	
		and other uses	- The come time 1	- Theorem 1	
	(2) hours	Botanical description	I neoretical	Ineoretical	
The 41 1	theoretical	of major families of	Due et a el le eterne e	quiz	
The third	(3) hours	field crops such as	Practical lectures	Practical quiz	
	practical	grasses, legumes, and	Laboratory	Scientific Demonstra	
	(2) hours	Environmental factors	Theoretical	Theoretical	
	(2) nours	and their impact on the	looturos		
The fourth	(3) hours	and then impact on the	Practical lectures	Quiz Practical quiz	
	(3) nours	growin or neid crops	I aboratory	Scientific	
	practical		experiments	Reports	
		Biological factors -	Theoretical	Theoretical	
	(2) hours	light temperature	lectures	auiz	
The fifth	theoretical	humidity	Practical lectures	Practical quiz	
	(3) hours	inalinality	Laboratory	Scientific	
	practical		experiments	Reports	
		Soil factors including			
	(2) hours	composition, texture,	Theoretical	Theoretical	
	theoretical	fertility, and solution	lectures	quiz	
The sixth	(3) hours	reaction; types of	Practical lectures	Practical quiz	
	practical	crops based on salt	Laboratory	Scientific	
		tolerance	experiments	Keports	
	(2) hours	Water Relationship	Theoretical	Theoretical	
The Seventh	theoretical	with Field Crop	lectures	quiz	
	(3) hours	Growth	Practical lectures	Practical quiz	

	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Biological Factors	Theoretical	Theoretical
	(2) nours	with Microorganisms	lectures	quiz
The eighth	(2) h areas		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
		Land Preparation for	Theoretical	Theoretical
	(2) hours	Agriculture and	lectures	quiz
The ninth	theoretical	Conducting Seasonal	Practical lectures	Practical quiz
	(3) hours	Examinations	Laboratory	Scientific
	practical		experiments	Reports
		Seeds and Grains:	1	L
		Germination Testing.		
		Purity. Necessary		
	(2) hours	Conditions for Crop	Theoretical	Theoretical
	theoretical	Seeds Prepared for	lectures	quiz
The tenth	(3) hours	Cultivation with an	Practical lectures	Practical quiz
	(5) nours	Overview of Grain	Laboratory	Scientific
	practical	Grading Drying	experiments	Reports
		Storage and		
		Morketing		
		Woods: Definition		
	(2) hours	Served Easters	Theoretical	Theoretical
	theoretical (3) hours practical	Spread Factors,	lectures	quiz
The eleventh		Damages Caused,	Practical lectures	Practical quiz
		Control Methods, with	Laboratory	Scientific
		a Mention of Major	experiments	Reports
		weeds in the Region		_
		Crop Kotation: Key	<b>T1</b>	T1
	(2) hours	Considerations in	Theoretical	I heoretical
<b>F1</b> 101	theoretical	Evaluating Crop	lectures	quiz
The twelfth	(3) hours	Rotations, Types of	Practical lectures	Practical quiz
	practical	Crop Rotations, and	Laboratory	Scientific
		Their Benefits with	experiments	Reports
		Illustrative Examples		
	(2) hours	Brief Introduction to	Theoretical	Theoretical
The thirteenth	theoretical	Field Crop Cultivation	lectures	quiz
	(3) hours	Methods	Practical lectures	Practical quiz
	practical		Laboratory	Scientific

			experiments	Reports
	(2) hours	Years of Production	Theoretical	Theoretical
The	theoretical	and Multiplication of	lectures	quiz
Fourtoonth	(2) hours	Improved Seeds	Practical lectures	Practical quiz
Fourteentin	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Brief Overview of	Theoretical	Theoretical
	(2) nours	Major Field Crops in	lectures	quiz
The fifteenth	(2) hours	Iraq in Tabular Form	Practical lectures	Practical quiz
			Laboratory	Scientific
	practical		experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Survey
Course Code	SUV 118
Number of Credit Units	2.5
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year – Spring Semester
Total Hours of Instruction	(1) Theoretical Hours + (3) Practical Hours = (4) Hours per Week
Date of Description	12/2/2024
Preparation	
Course Coordinator's Name	
	To introduce students to the concepts of area,
Course Objectives	measurement systems, and drawing scales. Students will
	learn about surveying systems, how to calculate point
	elevations, and height differences.
	Delivering theoretical lectures using the following
Teaching and Learning	methods: (whiteboard, data projector, interactive lecture,
Methods	educational video presentation).
Welloub	Applying practical lectures through observations and
	interaction with field or laboratory aspects.
	Conducting daily quick tests.
	Evaluating students through scientific reports and oral
Assessment Methods	questions.
	Conducting monthly exams.
	Conducting practical exams.

		Conducting final exan	n.		
Infrastructure		The required textbook: Flat Surface Area: Between Theory and Application by Dr. Mohannad Ahmed Khalil. Recommended books and references (scientific journals, reports). Electronic references, internet websites.			
Evaluation of	the course	Theoretical Exam (30 points) = (50 points) C points) Final Exam.	Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.		
Course structu	ire:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Area Definition / Survey Types / Requirements for Good Surveying / Importance of Surveying in Agricultural Work	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The second	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Measurement Systems / Units of Measurement / Errors and Mistakes	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The third	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Tape Surveying / Station Selection Criteria	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The fourth	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Errors in Surveying Process / Methods of Correction and Avoidance	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The fifth	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Drawing Scale / Types and Classifications / Determining Factors	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific	

			experiments	Reports
	(1) hours	Areas / Regular and	Theoretical	Theoretical
	(1) Hours	Irregular Shapes /	lectures	quiz
The sixth	(3) hours	Coordinate-based Area	Practical lectures	Practical quiz
	(3) Hours	Calculation	Laboratory	Scientific
	practical		experiments	Reports
	(1) hours	Leveling /	Theoretical	Theoretical
	(1) Hours	Terminology /	lectures	quiz
The Seventh	(3) hours	Adjustment Types /	Practical lectures	Practical quiz
	(3) Hours	Uses of Leveling	Laboratory	Scientific
	practical	Equipment	experiments	Reports
	(1) hours	Types of Leveling /	Theoretical	Theoretical
	theoretical	Curvature and	lectures	quiz
The eighth	(3) hours	Refraction Phenomena	Practical lectures	Practical quiz
	(5) nours	and Their Corrections	Laboratory	Scientific
	practical		experiments	Reports
	(1) hours	Methods for	Theoretical	Theoretical
	(1) hours theoretical (3) hours	Calculating Point	lectures	quiz
The ninth		Elevations and Height	Practical lectures	Practical quiz
		Differences / Direct	Laboratory	Scientific
	practical	and Indirect Methods	experiments	Reports
		Longitudinal	Theoretical	Theoretical
	(1) hours	Sectioning / Definition	lectures	auiz
The tenth	theoretical	/ Steps / Central Axis	Practical lectures	Practical quiz
	(3) hours	Determination / Point	Laboratory	Scientific
	practical	Grouping / Scale of	experiments	Reports
		Drawing	experiments	
		Point Elevations	Theoretical	Theoretical
	(1) hours	Calculation / Distance	lectures	quiz
The eleventh	theoretical	Measurement /	Practical lectures	Practical ouiz
	(3) hours	Plotting on Graph	Laboratory	Scientific
	practical	Paper / Design vs.	experiments	Reports
		Actual Sectioning		
The twelfth		Excavation Depth and	Theoretical	Theoretical
	(1) hours	Fill Depth Calculation	lectures	quiz
	theoretical	/ Parcel and Fill Area	Practical lectures	Practical ouiz
	(3) hours	Calculation / Volume	Laboratory	Scientific
	practical	Calculations / Actual	experiments	Reports
		Excavation and Fill		

The thirteenth	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Volume Calculation / Project Economics Evaluation using Calculations Topographic Maps / Representation Techniques	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Contour Lines Definition and Usage / Contour Interval Determination / Contour Lines Plotting / Contour Interval Factors / Contour Line Properties / Contour Line Drawing Methods	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(1) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Various Applications and Problems in Land Division / Reviews / Theodolite Instrument Budget / Usage / Horizontal and Vertical Angle Measurement	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of Poultry
Course Code	PRPO 117
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year - Spring Semester
Total Hours of Instruction	(2) Theoretical Hours $+$ (3) Practical Hours $=$ (5) Hours
Total Hours of Histraction	per Week

Date of Descri	ption	12/2/2024	12/2/2024		
Preparation	notor's Nomo				
Course Coold		Introduction to Doultr	y Types and Econe	mia Importance	
Course Object.	IVES	Delivering the entire	y, Types, and Econo		
Teaching and I Methods	Learning	<ul> <li>Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation).</li> <li>Applying practical lectures through observations and interaction with field or laboratory aspects.</li> </ul>			
Assessment M	ethods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams.			
Infrastructure Evaluation of t	the course	Required Books: "Poultry Production" by Dr. Hamdi Al- Fayyad and Jamil Mohammed Saeed.Main References (Sources): "Fundamentals of Poultry Production" by Dr. Mohammed Ali Maki Jasim. Recommended books and references (scientific journals, reports).Electronic references, internet websites.Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam			
Course structu	ro.				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Composition of Chicken Organs and Their Vital Functions	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Genetic Principles in Poultry	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	

		Incubation and	Theoretical	Theoretical
	(2) hours	Hatchery Management	lectures	quiz
The third	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Basics of Poultry	Theoretical	Theoretical
	theoretical	Nutrition	lectures	quiz
The fourth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1	Poultry Diseases and	Theoretical	Theoretical
	(2) nours	Parasites	lectures	quiz
The fifth	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Nutritional Deficiency	Theoretical	Theoretical
	(2) hours	Diseases	lectures	quiz
The sixth	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Parasitic Diseases	Theoretical	Theoretical
	(2) nours		lectures	quiz
The Seventh	theoretical		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Biosecurity Measures	Theoretical	Theoretical
	(2) nours	for Disease Prevention	lectures	quiz
The eighth	(2) have		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Current Status of	Theoretical	Theoretical
	(2) nours	Poultry Meat	lectures	quiz
The ninth	(2) hours	Production	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Geographic	Theoretical	Theoretical
The tenth	theoretical	Classification	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific

			experiments	Reports
	(2) hours	Types of Incubation	Theoretical	Theoretical
	theoretical		lectures	quiz
The eleventh	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Examples of	Theoretical	Theoretical
	(2) nours	Calculating Poultry	lectures	quiz
The twelfth	(3) hours	Feeds for Broilers and	Practical lectures	Practical quiz
	(3) nours	Layers	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Brooding of Chicks	Theoretical	Theoretical
	(2) nours		lectures	quiz
The thirteenth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Requirements for	Theoretical	Theoretical
The	(2) nours	Poultry Housing	lectures	quiz
Fourteenth	(3) hours		Practical lectures	Practical quiz
Fourteentii	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Poultry Nutrition	Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifteenth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Zoology
Course Code	ZOOL 116
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	First Year - Spring Semester
Total Hours of Instruction	(2) Theoretical Hours $+$ (3) Practical Hours $=$ (5) Hours
Total Hours of Instruction	per Week
Date of Description	12/2/2024

Preparation					
Course Coordi	nator's Name				
Course Objectives		The student should be relationship with othe	The student should become familiar with zoology and its relationship with other sciences.		
Teaching and Learning Methods		<ul> <li>Delivering theoretical methods: (whiteboard educational video pre Applying practical led interaction with field</li> </ul>	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects		
Assessment M	ethods	Conducting daily quid Evaluating students the questions. Conducting monthly of Conducting practical Conducting final example	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.		
Infrastructure		The required textbook is "General Zoology" by Dr. George Haddad. Recommended books and references (scientific journals, reports). Electronic references, internet websites. Theoretical Exam (30 points) + Practical Exam (20			
Evaluation of t	the course	points) = (50 points) Continuous Assessment + (50 points) Final Exam.			
Course structu	re:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	General Introduction to Zoology and its Relations	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Scientific Research Methods	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The third	(2) hours theoretical	Origin of Life and Theories	Theoretical lectures	Theoretical quiz	

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	-		experiments	Reports
	(2) hours	Protoplasm	Theoretical	Theoretical
	theoretical		lectures	quiz
The fourth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1	Cytoplasm	Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifth	(2) h areas		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Cell Division and Its	Theoretical	Theoretical
	(2) nours	Causes	lectures	quiz
The sixth	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Biological Eggs and	Theoretical	Theoretical
	(2) nours	Their Classification	lectures	quiz
The Seventh	(2) h areas		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Enzymes and Their	Theoretical	Theoretical
	(2) Hours	Role in Organisms	lectures	quiz
The eighth	(2) hours		Practical lectures	Practical quiz
	(3) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Chemical	Theoretical	Theoretical
	(2) nours	Coordination in	lectures	quiz
The ninth	(2) hours	Biology and Nervous	Practical lectures	Practical quiz
	(3) Hours	System Formation	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Organic Evolution	Theoretical	Theoretical
	(2) nours		lectures	quiz
The tenth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
The eleventh	(2) hours	Environmental	Theoretical	Theoretical

	theoretical	Science	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Light Microscope	Theoretical	Theoretical
	(2) nours		lectures	quiz
The twelfth	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Electron Microscope	Theoretical	Theoretical
	(2) nours		lectures	quiz
The thirteenth	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Preparing a Slide for	Theoretical	Theoretical
The	(2) nours	Examination	lectures	quiz
Fourtoonth	(3) hours		Practical lectures	Practical quiz
Fourteentii	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Plant and Animal Cells	Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifteenth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports

Educational Institution	College of Agriculture - Wasit University	
Scientific Department / Center	Animal Production	
Course Name	Mathematics	
Course Code	MATH 106	
Number of Credit Units	2	
Available Attendance Modes	Attendance: Yes	
Level - Semester	First Year - Spring Semester	
Total Hours of Instruction	(2) Theoretical Hours = (2) Hours per Week	
Date of Description	12/2/2024	
Preparation	12/2/2024	
Course Coordinator's Name		
Course Objectives	For students to become familiar with the arithmetic	
Course Objectives	operations and equations related to important	

		mathematical laws.			
Teaching and Learning Methods		Delivering theoretical lectures using the following			
		methods: (whiteboard,	, data projector, int	eractive lecture,	
		educational video pres	sentation).		
		Conducting daily quic	k tests.		
		Evaluating students th	rough scientific rep	ports and oral	
Assessment M	lethods	questions.	questions.		
		Conducting monthly e	exams.		
		Conducting final exam	$\frac{1}{1}$	1 D 1	
		Required Textbooks: N	Mathematics Curric	culum Book.	
		Primary References (S	Sources): Original t	books on	
Infrastructure		mathematics.			
		Recommended books	and references (sci	entific journals,	
		Flootronio references	internet websites		
		Theoretical Exam (50	$\frac{1}{1}$ mether websites.	m = (50  points)	
Evaluation of	the course	Continuous Assessme	Continuous Assessment + (50 points) + Gauy Exam = (50 points)		
Evaluation of the course			Continuous Assessment + (50 points) Final Exam.		
Course structure:					
Week	Hours	Unit or Tonic Name	Method of	Evaluation	
	Tiours		Education	method	
	(2) hours	Definition of matrices and their types	Theoretical	Theoretical	
The first	theoretical		lectures	quiz	
The second	(2) hours	Operations on matrices	Theoretical	Theoretical	
	theoretical		lectures	quiz	
The third	(2) hours	Matrix equality /	Theoretical	Theoretical	
	theoretical	Exercises	The tectures	quiz	
The fourth	(2) hours	Ranges and their types	I heoretical	Theoretical	
	(2) hours	Limits and motheds of	Theoretical		
The fifth	(2) nours	Limits and methods of		Theoretical	
	(2) hours		Theoretical	Theoretical	
The sixth	(2) nours	Continuity	lectures		
	(2) hours	Derivative / Derivative	Theoretical	Theoretical	
The Seventh	(2) nours	theories	lectures		
	(2) hours	Exercises on	Theoretical	Theoretical	
The eighth	theoretical	derivatives	lectures	auiz	
The ninth	(2) hours	Trigonometric	Theoretical	Theoretical	
			Incoronour	incoronour	

	theoretical	functions	lectures	quiz
The tenth	(2) hours	Function data shifts	Theoretical	Theoretical
	theoretical	Function data sinits	lectures	quiz
The eleventh	(2) hours	Integration	Theoretical	Theoretical
	theoretical	Integration	lectures	quiz
The twelfth	(2) hours	Definition of matrices	Theoretical	Theoretical
	theoretical	and their types	lectures	quiz
The thirteenth	(2) hours	Operations on matrices	Theoretical	Theoretical
	theoretical		lectures	quiz
The	(2) hours	Matrix equality /	Theoretical	Theoretical
Fourteenth	theoretical	Exercises	lectures	quiz
The fifteenth	(2) hours	Definition of matrices	Theoretical	Theoretical
The Inteenth	theoretical	and their types	lectures	quiz

Educational Institution	College of Agriculture - Wasit University	
Scientific Department / Center	Animal Production	
Course Name	Computer Applications (2)	
Course Code	COMA 105	
Number of Credit Units	1.5	
Available Attendance Modes	Attendance: Yes	
Level - Semester	First Year - Spring Semester	
Total Hours of Instruction	(3) Practical Hours = (3) Hours per Week	
Date of Description	12/2/2024	
Preparation		
Course Coordinator's Name		
Course Objectives	For students to get acquainted with Office programs like	
Course objectives	Word, Excel and PowerPoint	
	Delivering theoretical lectures using the following	
Teaching and Learning	methods: (whiteboard, data projector, interactive lecture,	
Methods	educational video presentation).	
Methods	Applying practical lectures through observations and	
	interaction with field or laboratory aspects.	
	Conducting daily quick tests.	
	Evaluating students through scientific reports and oral	
Assessment Methods	questions.	
	Conducting monthly exams.	
	Conducting practical exams.	

		Conducting final exam	n.	
		Primary References (Sources): Primary Source Books		
Infrastructure		Recommended books and references (scientific journals,		
		reports).	reports).	
		Electronic references,	internet websites.	
		Theoretical Exam (30	points) + Practical	Exam (20
	1	points) = (50 points) (	Continuous Assessm	ment + (50)
Evaluation of	the course	points) Final Exam.		
Course structu	re:			
Week	Hours	Unit or Topic Name	Method of	Evaluation
	110015	Onit of Tople Plane	Education	method
	(1) hours	Microsoft Word 2007	Theoretical	
	theoretical	Program and Its	lectures	Theoretical
The first	(2) hours	Interface	Practical lectures	quiz
	(2) nours		Laboratory	Practical quiz
	practical		experiments	
	(1) hours	The Office Button and	Theoretical	
	(1) nours	Its Contents	lectures	Theoretical
The second	(2) hours practical		Practical lectures	quiz
			Laboratory	Practical quiz
			experiments	
	(1) hours	Program Toolbars	Theoretical	
	(1) nours		lectures	Theoretical
The third	(2) hours		Practical lectures	quiz
	(2) nours		Laboratory	Practical quiz
	practical		experiments	
	(1) hours	Home Tab and Its	Theoretical	
	theoretical	Groups	lectures	Theoretical
The fourth	(2) hours		Practical lectures	quiz
	(2) nours		Laboratory	Practical quiz
	practical		experiments	
The fifth	(1) hours	Insert Tab and Its	Theoretical	
	theoretical	Groups	lectures	Theoretical
	(2) hours		Practical lectures	quiz
	nractical		Laboratory	Practical quiz
	practical		experiments	
The sixth	(1) hours	Page Layout Tab and	Theoretical	Theoretical
	theoretical	Its Groups	lectures	quiz

	(2) hours practical		Practical lectures Laboratory experiments	Practical quiz
The Seventh	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	References Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The eighth	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	Mailings Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The ninth	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	Review Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The tenth	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	View Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The eleventh	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	Introduction to Excel 2007 Program	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The twelfth	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	Design Tab from Equation Tools	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The thirteenth	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	Using Some Keyboard Keys in Office 2007 Program	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz
The	(1) hours	Design Tab from	Theoretical	Theoretical

Fourteenth	theoretical	Equation Tools	lectures	quiz
	(2) hours		Practical lectures	Practical quiz
	practical		Laboratory	
			experiments	
The fifteenth	<ul><li>(1) hours</li><li>theoretical</li><li>(2) hours</li><li>practical</li></ul>	Formatting Tab from Picture Tools	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz

Educational Institution	College of Agriculture - Wasit University	
Scientific Department / Center	Animal Production	
Course Name	Arabic language	
Course Code	ARAL 104	
Number of Credit Units	2	
Available Attendance Modes	Attendance: Yes	
Level - Semester	First Year - Spring Semester	
Total Hours of Instruction	(2) Theoretical Hours = $(2)$ Hours per Week	
Date of Description	12/2/2024	
Preparation	12/2/2024	
Course Coordinator's Name		
Course Objectives	To introduce students to grammar, syntax, and eloquence	
Course objectives	in the Holy Quran.	
Teaching and Learning	Delivering theoretical lectures using the following	
Methods	methods: (whiteboard, data projector, interactive lecture,	
Wethous	educational video presentation).	
	Conducting daily quick tests.	
	Evaluating students through scientific reports and oral	
Assessment Methods	questions.	
	Conducting monthly exams.	
	Conducting final exam.	
	Required textbooks: "Arabic Language" by Dr. Rafid	
	Sabah Al-Tamimi and Tughreed Fadel Abbas.	
Infrastructure	Primary references (sources): Original books.	
limastructure	Recommended books and references (scientific journals,	
	reports).	
	Electronic references, internet websites.	
Evaluation of the course	Theoretical Exam (50 points) + Daily Exam = (50 points)	
	Continuous Assessment + (50 points) Final Exam.	

Course structu	re:			
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method
The first	(2) hours theoretical	Introduction to the history of the Arabic language.	Theoretical lectures	Theoretical quiz
The second	(2) hours theoretical	Division of Arabic grammar: Nominatives (Marfu'at) and their explanation.	Theoretical lectures	Theoretical quiz
The third	(2) hours theoretical	Predicate (Khabar) and its role in Arabic grammar.	Theoretical lectures	Theoretical quiz
The fourth	(2) hours theoretical	Noun of being (Ism Kana) and its usage.	Theoretical lectures	Theoretical quiz
The fifth	(2) hours theoretical	Sisters of the noun of being and their functions.	Theoretical lectures	Theoretical quiz
The sixth	(2) hours theoretical	Application of nominatives in sentences.	Theoretical lectures	Theoretical quiz
The Seventh	(2) hours theoretical	Accusatives (Mansubat) and their explanation.	Theoretical lectures	Theoretical quiz
The eighth	(2) hours theoretical	Object (Maful bihi) and Absolute Object (Maful lahu).	Theoretical lectures	Theoretical quiz
The ninth	(2) hours theoretical	Application of accusatives in sentences.	Theoretical lectures	Theoretical quiz
The tenth	(2) hours theoretical	Circumstantial adjunct (Hal) and its significance.	Theoretical lectures	Theoretical quiz
The eleventh	(2) hours theoretical	Vocative (Munadi) and its usage.	Theoretical lectures	Theoretical quiz
The twelfth	(2) hours theoretical	Introduction to numerals in Arabic.	Theoretical lectures	Theoretical quiz
The thirteenth	(2) hours	Morphological scale	Theoretical	Theoretical

	theoretical	(Mizan sarfi) and practical application.	lectures	quiz
The Fourteenth	(2) hours theoretical	Perfect verb (Fi'l sahih) and its distinction from other verbs.	Theoretical lectures	Theoretical quiz
The fifteenth	(2) hours theoretical	Spelling rules and punctuation marks in Arabic writing.	Theoretical lectures	Theoretical quiz

<b>Educational Institution</b>	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	biochemistry
Course Code	BICH 211
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week
Date of Description	12/2/2024
Preparation	
Course Coordinator's Name	Dr. Hyder Najy Resun
	The student should recognize the importance of
Course Objectives	biochemistry, study carbohydrates, study amino acids,
	study lipids, and study nucleic acids.
	Delivering theoretical lectures using the following
Teaching and Learning	methods: (whiteboard, data projector, interactive lecture,
Methods	educational video presentation).
Withous	Applying practical lectures through observations and
	interaction with field or laboratory aspects.
	Conducting daily quick tests.
	Evaluating students through scientific reports and oral
Assessment Methods	questions.
Assessment Methods	Conducting monthly exams.
	Conducting practical exams.
	Conducting final exam.

Infrastructure Evaluation of the course		Required Textbooks: Principles of Biochemistry by Dr.Ali Al-Dawoodi.Primary References (Sources): Biochemistry bylehningerRecommended books and references (scientific journals, reports).Electronic references, internet websites.Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.		
Course structu	ire:			
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Introduction, Cell	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Carbohydrates - Definition - Categories	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Monosaccharides	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Oligosaccharides	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Polysaccharides	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

	(2) have	Amino Acids -	Theoretical	Theoretical
	(2) nours	Categories - Reactions	lectures	quiz
The sixth	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) have	Proteins - Structure -	Theoretical	Theoretical
	(2) nours	Synthesis - Categories	lectures	quiz
The Seventh	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Fatty Acids -	Theoretical	Theoretical
	(2) nours	Categories - Reactions	lectures	quiz
The eighth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Simple Lipids -	Theoretical	Theoretical
	(2) nours	Structure - Categories	lectures	quiz
The ninth	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Complex and Derived	Theoretical	Theoretical
	theoretical	Lipids - Structure -	lectures	quiz
The tenth (3) hours	(3) hours	Categories	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Nucleic Acids,	Theoretical	Theoretical
	theoretical	Importance, Structure,	lectures	quiz
The eleventh	(3) hours	Categories	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Enzymes,	Theoretical	Theoretical
	(2) nours	Characteristics,	lectures	quiz
The twelfth	(3) hours	Factors Affecting	Practical lectures	Practical quiz
	practical	Them	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Important Reactions	Theoretical	Theoretical
The thirteenth	theoretical		lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific

			experiments	Reports
	(2) hours	Biochemical Pathways	Theoretical	Theoretical
The	(2) nours		lectures	quiz
Fourtoonth	(2) hours		Practical lectures	Practical quiz
practical		Laboratory	Scientific	
		experiments	Reports	
	(2) hours	Energy Production	Theoretical	Theoretical
The fifteenth (2) hours theoretical (3) hours practical	(2) nours	Pathways	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
		experiments	Reports	

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Sanitation of Animal Products
Course Code	SAAP 212
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week
Date of Description Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	The student should understand the concept of animal product health, recognize the signs of products unfit for consumption, and understand the mechanisms for protecting humans from diseases and preventing them
Teaching and Learning Methods	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.
Assessment Methods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.

Infrastructure		Recommended books and references (scientific journals, reports). Electronic references, internet websites.		
Evaluation of the course		Theoretical Exam (30 points) = (50 points) C points) Final Exam.	points) + Practical Continuous Assessm	Exam (20 nent + (50
Course structu	re:			
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The concept of animal product health and its relationship to community health	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The importance of health supervision on meat and its products	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Essential principles to be followed in producing meat fit for consumption	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Precautions to be taken during animal transportation	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The harms resulting from animal transportation and their impact on meat health	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Necessary considerations when selecting a slaughterhouse	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific

		location	experiments	Reports
	(2) hours	Examination of	Theoretical	Theoretical
	(2) mours the parent is $-1$	animals before and	lectures	quiz
The Seventh	(2) hours	after slaughter	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Conditions required	Theoretical	Theoretical
	(2) nours	for complete bleeding	lectures	quiz
The eighth	(3) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Specifications for	Theoretical	Theoretical
	(2) nours	meat and fat from	lectures	quiz
The ninth	(3) hours	different animals in	Practical lectures	Practical quiz
	(5) nours	livestock slaughter	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Factors affecting	Theoretical	Theoretical
	(2) nours	bacterial growth and	lectures	quiz
The tenth	(3) hours practical	effectiveness in meats	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours	Types of bacteria that	Theoretical	Theoretical
	theoretical	can be found in meats	lectures	quiz
The eleventh	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Chemical residues in	Theoretical	Theoretical
	theoretical	meats	lectures	quiz
The twelfth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Signs of poor bleeding	Theoretical	Theoretical
The thirteenth	(2) nours	in slaughtered animals	lectures	quiz
	(3) hours	during laboratory	Practical lectures	Practical quiz
	practical	examination	Laboratory	Scientific
	Practical		experiments	Reports
The	(2) hours	Meat examination for	Theoretical	Theoretical
Fourteenth	theoretical	oxidation and disease	lectures	quiz
rourteentn	(3) hours	absence	Practical lectures	Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
The fifteenth(2) hours theoretical (3) hours practical	The concept of animal	Theoretical	Theoretical	
	(2) nours	product health and its	lectures	quiz
	relationship to	Practical lectures	Practical quiz	
	(3) nours	community health	Laboratory	Scientific
		experiments	Reports	

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Ichthyology
Course Code	ICHT 213
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week
Date of Description Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	Introduce the student to the basic principles of fish and their internal organs, familiarize them with the different types of fish in various environments, explain how fish grow and methods to estimate their ages, and provide insight into their needs
Teaching and Learning Methods	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.
Assessment Methods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.
Infrastructure	Recommended books and references (scientific journals, reports). Electronic references, internet websites.

Evaluation of the courseTheoretical Exam (30 points) + Practi points) = (50 points) Continuous Asse points) Final Exam.				Exam (20 nent + (50	
Course structure:					
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Fish Classification	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	External Appearance of Fish	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Embryology in Fish	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Life Years After Hatching	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Food and Nutrition	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Age and Growth	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports	
The Seventh	(2) hours theoretical	Fish Aggregations	Theoretical lectures	Theoretical quiz	

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	-		experiments	Reports
	(2) have	Fertility in Fish	Theoretical	Theoretical
	(2) nours		lectures	quiz
The eighth	(2) have		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Water Pollution and Its	Theoretical	Theoretical
	(2) nours	Impact on Fish	lectures	quiz
The ninth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Water as a Habitat for	Theoretical	Theoretical
	(2) nours	Fish	lectures	quiz
The tenth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Natural Diet of Fish	Theoretical	Theoretical
	theoretical		lectures	quiz
The eleventh	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Natural Fish	Theoretical	Theoretical
	(2) nours	Productivity	lectures	quiz
The twelfth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Ornamental Fish	Theoretical	Theoretical
	theoretical		lectures	quiz
The thirteenth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Setting Up	Theoretical	Theoretical
The	theoretical	Ornamental Fish	lectures	quiz
Fourteenth	(3) hours	Tanks	Practical lectures	Practical quiz
	nractical		Laboratory	Scientific
	Practical		experiments	Reports
The fifteenth	(2) hours	Some Iraqi Fish	Theoretical	Theoretical

theoretical	Species and	lectures	quiz
(3) hours	Identification	Practical lectures	Practical quiz
practical		Laboratory	Scientific
		experiments	Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of Horticulture
Course Code	PHSC 214
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week
Date of Description Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	To provide the student with an understanding of horticulture, including the classification of horticultural plants, establishing and maintaining gardens, and the importance of fruits and vegetables.
Teaching and Learning Methods	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.
Assessment Methods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.
Infrastructure	Recommended books and references (scientific journals, reports). Electronic references, internet websites.
Evaluation of the course	Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.

Course structu	re:			
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Horticulture, the history of tissue science, economic and nutritional importance.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Classification of horticultural plants	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Suitable environmental factors and their impact on horticultural crop production (light, temperature, humidity, soil)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Methods of horticultural plant propagation (sexual and asexual propagation, tissue culture)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Nurseries, field cultivation patterns (for fruits, vegetables, ornamental, medicinal, and aromatic plants)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Agricultural operations (irrigation, fertilization, pruning, thinning, pest and weed control, etc.)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	(2) hours theoretical	Cultivation under controlled	Theoretical lectures	Theoretical quiz

	(3) hours	environments	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) have	Harvesting,	Theoretical	Theoretical
	(2) nours	harvesting, marketing	lectures	quiz
The eighth	(2) have		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Storage and	Theoretical	Theoretical
	(2) nours	preservation	lectures	quiz
The ninth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Overview of plant	Theoretical	Theoretical
	(2) nours	breeding and	lectures	quiz
The tenth	(2) hours	improvement in	Practical lectures	Practical quiz
	(5) nours	horticultural plants	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Examples of fruit	Theoretical	Theoretical
	theoretical	trees (deciduous,	lectures	quiz
The eleventh	(3) hours	evergreen)	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Examples of strategic	Theoretical	Theoretical
	(2) nours	vegetable crops	lectures	quiz
The twelfth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Examples of	Theoretical	Theoretical
	(2) nours	ornamental plants and	lectures	quiz
The thirteenth	(3) hours	landscape design,	Practical lectures	Practical quiz
	practical	including shrubs,	Laboratory	Scientific
	practical	perennials	experiments	Reports
	(2) hours	Examples of	Theoretical	Theoretical
The	theoretical	medicinal and	lectures	quiz
Fourteenth	(3) hours	aromatic plants	Practical lectures	Practical quiz
	nractical		Laboratory	Scientific
	Practical		experiments	Reports
The fifteenth	(2) hours	Introduction to fields	Theoretical	Theoretical

theoretical	and horticultural	lectures	quiz
(3) hours	facilities: gardens,	Practical lectures	Practical quiz
practical	orchards, fields,	Laboratory	Scientific
	plastic and	experiments	Reports
	glasshouse		

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of Microbiology
Course Code	PRMI 215
Number of Credit Units	3.5
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours + (3) Practical Hours = (5) Hours per Week
Date of Description Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	To introduce students to microbiology, the classification of microorganisms, and the importance of microbiology.
Teaching and Learning Methods	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.
Assessment Methods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam.
Infrastructure	Recommended books and references (scientific journals, reports). Electronic references, internet websites.
Evaluation of the course	Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.
Course structure:	

XX7 1	11		Method of	Evaluation
Week	Hours	Unit or Topic Name	Education	method
	(2) hours	A historical overview	Theoretical	Theoretical
		of microbiology and	lectures	quiz
The first	theoretical	the scientists who	Practical lectures	Practical quiz
	(3) hours	contributed to its	Laboratory	Scientific
	practical	development.	experiments	Reports
	(2) 1	Bacteria	Theoretical	Theoretical
	(2) nours	(morphological	lectures	quiz
The second	(2) h com	characteristics and	Practical lectures	Practical quiz
	(3) nours	functional anatomy)	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Fungi (molds and	Theoretical	Theoretical
	(2) nours	yeasts)	lectures	quiz
The third	(2) h areas		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Algae	Theoretical	Theoretical
	theoretical		lectures	quiz
The fourth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Viruses	Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Pathogenic	Theoretical	Theoretical
	(2) nours	microorganisms	lectures	quiz
The sixth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Microorganisms in	Theoretical	Theoretical
	(2) nouis	water and wastewater	lectures	quiz
The Seventh	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
The eighth	(2) hours	Preserving cultures of	Theoretical	Theoretical
	theoretical	microorganisms	lectures	quiz

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) have	Introduction to	Theoretical	Theoretical
	(2) nours	microbiology	lectures	quiz
The ninth	(2) hours	laboratory equipment	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Preparation of culture	Theoretical	Theoretical
	(2) nours	media	lectures	quiz
The tenth	(3) hours		Practical lectures	Practical quiz
	(5) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Sterilization	Theoretical	Theoretical
	theoretical		lectures	quiz
The eleventh	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours	Simple staining	Theoretical	Theoretical
	theoretical		lectures	quiz
The twelfth			Practical lectures	Practical quiz
	(5) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Differential staining	Theoretical	Theoretical
	(2) nours	(Gram staining)	lectures	quiz
The thirteenth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Structural staining	Theoretical	Theoretical
The	theoretical	(spore staining)	lectures	quiz
Fourteenth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Isolation of	Theoretical	Theoretical
	theoretical	microorganisms	lectures	quiz
The fifteenth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	rueneur		experiments	Reports

Educational In	Educational Institution College of Agriculture - Wasit University				
Scientific Dep	oartment / Center	Animal Production			
Course Name		Animal Production N	Aachinery		
Course Code		APME 216			
Number of Cr	edit Units	3.5			
Available Atte	endance Modes	Attendance: Yes			
Level - Semes	ter	Second Year - Autun	nn Semester		
Total Hours of	fInstruction	(2) Theoretical Hour per Week	s + (3) Practical H	fours = (5) Hours	
Date of Description	iption	12/2/2024			
Course Coord	inator's Name				
Course Object	tives	To introduce the student to the use of advanced machinery for increasing production through modern techniques in field management and operation, increasing output, reducing manual labor, and expanding horizontally and vertically			
Teaching and Methods	Learning	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.			
Assessment M	lethods	nods Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam			
Infrastructure		Recommended books and references (scientific journals, reports). Electronic references, internet websites.			
Evaluation of the course		Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.			
Course structu	ire:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	(2) hours	Electric fencing	Theoretical	Theoretical	
	Y				

	theoretical		lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	1		experiments	Reports
		Psycho-metric chart	Theoretical	Theoretical
	(2) hours		lectures	quiz
The second	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
		Controlling	Theoretical	Theoretical
	(2) hours	environmental	lectures	quiz
The third	theoretical	conditions in animal	Practical lectures	Practical quiz
	(3) hours	shelters	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Heating in animal	Theoretical	Theoretical
	theoretical	shelters	lectures	auiz
The fourth	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	praetical		experiments	Reports
		Control and warning	Theoretical	Theoretical
	(2) hours	systems used in	lectures	auiz
The fifth	theoretical	ventilation systems	Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
		Preparing agricultural	Theoretical	Theoretical
	(2) hours	buildings with water	lectures	auiz
The sixth	theoretical	supply	Practical lectures	Practical quiz
	(3) hours	Suppry	Laboratory	Scientific
	practical		experiments	Reports
		Milking equipment	Theoretical	Theoretical
	(2) hours	and systems	lectures	
The Seventh	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
		Cooling devices and	Theoretical	Theoretical
	(2) hours	their uses	lectures	
The eighth	theoretical		Practical lectures	Practical ouiz
	(3) hours		I aboratory	Scientific
	practical		experiments	Reports
			experiments	reports
The ninth(2) hours theoretical (3) hours practicalequipmentlectures Practical lectur Laboratory experimentsThe ninth(2) hours practicalComponents of electric wool shearing machinesTheoretical Practical lecturesThe tenth(2) hours theoretical (3) hours practicalComponents of electric wool shearing machinesTheoretical Practical lectures	quiz es Practical quiz Scientific Reports Theoretical quiz es Practical quiz			
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The ninththeoretical (3) hours practicalPractical lectur Laboratory experimentsThe tenth(2) hours theoretical (3) hours practicalComponents of electric wool shearing machinesPractical lectur Laboratory experiments	es Practical quiz Scientific Reports Theoretical quiz es Practical quiz			
(3) hours practicalLaboratory experiments(2) hours theoretical (3) hours practicalComponents of electric wool shearing machinesTheoretical lectures(3) hours practicalPractical lectures Laboratory	Scientific Reports Theoretical quiz es Practical quiz			
practicalexperiments(2) hours theoretical (3) hours practicalComponents of electric wool shearing machinesTheoretical lectures(3) hours practicalPractical lectur Laboratory	Reports Theoretical quiz es Practical quiz			
(2) hours theoretical (3) hours practicalComponents of electric wool shearing machinesTheoretical lectures Practical lectur Laboratory	Theoretical quiz es Practical quiz			
The tenth(2) hours theoretical (3) hours practicalelectric wool shearing machineslectures Practical lectur Laboratory	quiz es Practical quiz			
The tenth (3) hours machines Practical lectur practical	es Practical quiz			
practical				
	Scientific			
experiments	Reports			
(2) hours Waste disposal Theoretical	Theoretical			
theoretical equipment lectures	quiz			
The eleventh(3) hoursPractical lectur	es Practical quiz			
practical Laboratory	Scientific			
experiments	Reports			
(2) hours Equipment, devices, Theoretical	Theoretical			
theoretical and means used in lectures	quiz			
The twelfth (3) hours waste management Practical lectur	es Practical quiz			
practical Laboratory	Scientific			
experiments	Reports			
(2) hours Hatcheries and egg Theoretical	Theoretical			
theoretical packaging equipment lectures	quiz			
The thirteenth (3) hours Practical lectur	es Practical quiz			
practical	Scientific			
experiments	Reports			
(2) hours Treatment of eggs Theoretical	Theoretical			
The theoretical before placing them in lectures	quiz			
Fourteenth (3) hours hatcheries Practical lectur	es Practical quiz			
routeentii (5) nouis Laboratory	Scientific			
experiments	Reports			
(2) hours Animal slaughtering Theoretical	Theoretical			
theoretical equipment and meat lectures	quiz			
The fifteenth (3) hours processing Practical lectur	es Practical quiz			
practical	Scientific			
experiments	Reports			

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Principles of Agricultural Extension

Course Code		PRAE 217			
Number of Cro	edit Units	2	2		
Available Atte	ndance Modes	Attendance: Yes			
Level - Semes	ter	Second Year - Autum	nn Semester		
Total Hours of	Instruction	(2) Theoretical Hour	s = (2) Hours per	Week	
Date of Descri	ption	12/2/2024			
Preparation		12/2/2024			
Course Coordi	nator's Name				
Course Object	ives	Introduction to Agric Administrative Guida Field Demonstration	cultural Extension ance, Counseling	, the Functions of Methods, and	
Teaching and I Methods	Learning	Delivering theoretica methods: (whiteboar educational video pre	Il lectures using th d, data projector, i esentation).	ne following interactive lecture,	
Assessment M	ethods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting final exam.			
Infrastructure		Recommended books and references (scientific journals, reports). Electronic references, internet websites.			
Evaluation of the courseTheoretical Exam (50 points) = (50 points) Continu Assessment + (50 points) Final Exam.			ints) Continuous		
Course structu	re:				
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The first	(2) hours theoretical	A historical overview of agricultural guidance and the scientists who contributed to its development.	Theoretical lectures	Theoretical quiz Scientific Reports	
The second	(2) hours theoretical	Definition of agricultural guidance.	Theoretical lectures	Theoretical quiz Scientific Reports	
i ne third	(2) nours	Importance of	Ineoretical	Ineoretical	

	theoretical	agricultural guidance.	lectures	quiz
				Scientific
				Reports
	(2) hours	Principles of		Theoretical
The fourth	theoretical	agricultural guidance.	Theoretical	quiz
			lectures	Scientific
				Reports
	(2) hours	Objectives of		Theoretical
The fifth	theoretical	agricultural guidance.	Theoretical	quiz
			lectures	Scientific
				Reports
	(2) hours	Communication.		Theoretical
The givth	theoretical		Theoretical	quiz
The sixui			lectures	Scientific
				Reports
	(2) hours	Rural leadership.		Theoretical
	theoretical		Theoretical	quiz
The Seventh			lectures	Scientific
				Reports
	(2) hours	Adoption and		Theoretical
	theoretical	dissemination of		quiz
The eighth		agricultural	Theoretical	Scientific
C		innovations	lectures	Reports
		(technologies).		1
	(2) hours	Planning agricultural		Theoretical
	theoretical	guidance programs.	Theoretical	quiz
The ninth			lectures	Scientific
				Reports
	(2) hours	Methods of		Theoretical
	theoretical	agricultural guidance	Theoretical	quiz
The tenth		and counseling.	lectures	Scientific
				Reports
	(2) hours	Evaluation of		Theoretical
The eleventh	theoretical	agricultural guidance	Theoretical	
	liteoreticui	nrograms	lectures	Scientific
		programs.	lectures	Reports
	(2) hours	A gricultural guidance		Theoretical
The twelfth	(2) nours	in Iraq and its years of	Theoretical	
		development	lectures	yuiz Scientific
		development.		Scientific

				Reports
		Field visits to the		Theoretical
The thirteenth	(2) hours	guidance organization.	Theoretical	quiz
The unreenth	theoretical		lecture	Scientific
				Reports
		Sites for implementing		Theoretical
The	(2) hours	agricultural guidance	Theoretical	quiz
Fourteenth	theoretical	activities.	lectures	Scientific
				Reports
		The role of guidance		Theoretical
The fifteenth	(2) hours	in enhancing	Theoretical	quiz
	theoretical	production.	lectures	Scientific
				Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	Computer Applications
Course Code	COMA 202
Number of Credit Units	1.5
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(3) Practical Hours = (3) Hours per Week
Date of Description	12/2/2024
Preparation	
Course Coordinator's Name	
Course Objectives	- Familiarize the student with office programs, including
Course Objectives	Excel, Database management using Excel.
	Delivering theoretical lectures using the following
Teaching and Learning	methods: (whiteboard, data projector, interactive lecture,
Mathada	educational video presentation).
Methods	Applying practical lectures through observations and
	interaction with field or laboratory aspects.
	Conducting daily quick tests.
	Evaluating students through scientific reports and oral
Assessment Methods	questions.
Assessment Methods	Conducting monthly exams.
	Conducting practical exams.
	Conducting final exam.

Infrastructure Evaluation of the course		Required Textbook: "Computers and OfficeApplications" by Dr. Hashem Abdul Kareem.Main References (Sources): "Electronic ComputerProgramming" books by Dr. Abdullatif Abd.Recommended books and references (scientific journals,reports).Electronic references, internet websites.Theoretical Exam (30 points) + Practical Exam (20points) = (50 points) Continuous Assessment + (50points) Final Exam.		
Course structu	re:			
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Microsoft Word 2007 Program and Its Interface	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Office Button and Its Contents	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Program Ribbons	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Home Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Insert Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

	(2) hours		Theoretical lectures	Theoretical quiz
The sixth	theoretical	Introduction to Excel	Practical lectures	Practical quiz
	(3) hours	2007 Program	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours	Some Concepts and	lectures	quiz
The Seventh	theoretical	Terminologies in	Practical lectures	Practical quiz
	(3) hours	Excel 2007	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1,		Theoretical	Theoretical
	(2) hours		lectures	quiz
The eighth	theoretical	Home Tab and Its	Practical lectures	Practical quiz
	(3) hours	Groups	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The ninth	(3) hours practical	Groups	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours	2) hours heoretical 2) hours 3) hours	lectures	quiz
The tenth	(3) hours		Practical lectures	Practical quiz
		Program	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	II	lectures	quiz
The eleventh	(3) hours	Home Tab and Its	Practical lectures	Practical quiz
	practical	Groups	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The twelfth	(2) nours	Drowing Tools Format	lectures	quiz
	(2) hours	Taalhar	Practical lectures	Practical quiz
	(3) nours	1001081	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The thirt anth	theoretical	- Insert Tab and Its	lectures	quiz
I ne thirteenth	(3) hours	Groups	Practical lectures	Practical quiz
	practical		Laboratory	Scientific

			experiments	Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Design Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Animations Tab and Its Groups	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

Educational Institution	College of Agriculture - Wasit University
Scientific Department / Center	Animal Production
Course Name	English Language (2)
Course Code	PRAE 217
Number of Credit Units	2
Available Attendance Modes	Attendance: Yes
Level - Semester	Second Year - Autumn Semester
Total Hours of Instruction	(2) Theoretical Hours = (2) Hours per Week
Date of Description Preparation	12/2/2024
Course Coordinator's Name	
Course Objectives	Introduction to Agricultural Extension, the Functions of Understanding English at the intermediate level, including its tenses, vocabulary, writing style, and reading comprehension.
Teaching and Learning Methods	Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation).
Assessment Methods	Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting final exam.
Infrastructure	Required textbooks: Systematic English Language Book. Writing Academic English, Level 2 by Alice Oshima. Recommended books and references (scientific journals, reports).

Evaluation of the courseTheoretical Exam (50 points) = (50 points) Continuous Assessment + (50 points) Final Exam.Course structure:WeekHoursUnit or Topic NameMethod of EducationEvaluation methodThe first(2) hours theoreticalEnglish prepositionTheoretical lecturesTheoretical quiz Scientific ReportsThe second(2) hours theoreticalPassive voiceTheoretical lecturesTheoretical quiz Scientific ReportsThe third(2) hours theoreticalNegativeTheoretical lecturesTheoretical quiz Scientific ReportsThe fourth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe fifth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe fifth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe fifth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quiz Scientific ReportsThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quiz Scientific ReportsThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quiz Scientific ReportsThe sixth(2) hours theoreticalA- Simple tenseTheoretical	Electronic references, internet websites.					
Course structure:Unit or Topic NameMethod of EducationEvaluation methodWeekHoursUnit or Topic NameMethod of EducationEvaluation methodThe first(2) hours theoreticalEnglish prepositionTheoretical lecturesTheoretical quizThe first(2) hours theoreticalPassive voiceTheoretical lecturesTheoretical quizThe second(2) hours theoreticalPassive voiceTheoretical lecturesTheoretical quizThe third(2) hours theoreticalNegativeTheoretical lecturesTheoretical quizThe fourth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quizThe fifth(2) hours theoreticalIf clause (conditional) sentencesTheoretical quizTheoretical quizThe fifth(2) hours theoreticalKinds of sentencesTheoretical lecturesTheoretical quizThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quizThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quizThe sixth(2) hours theoreticalB-compound tenseTheoretical lecturesTheoretical quizThe sighth(2) hours theoreticalB-compound tenseTheoretical lecturesTheoretical quizThe eighth(2) hours theoreticalC- complex tenseTheoretical lecturesTheoretical<	Evaluation of the courseTheoretical Exam (50 points) = (50 points) ContinuousAssessment + (50 points) Final Exam.					
WeekHoursUnit or Topic NameMethod of EducationEvaluation methodThe first(2) hours theoreticalEnglish prepositionTheoretical lecturesTheoretical guizTheoretical quizThe second(2) hours theoreticalPassive voiceTheoretical lecturesTheoretical guizTheoretical quizThe third(2) hours theoreticalPassive voiceTheoretical lecturesTheoretical guizTheoretical quizThe third(2) hours theoreticalNegativeTheoretical lecturesTheoretical guizTheoretical quizThe fourth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical guizThe fifth(2) hours theoreticalIf clause (conditional) sentencesTheoretical quizTheoretical quizThe fifth(2) hours theoreticalKinds of sentencesTheoretical lecturesTheoretical quizThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quizThe Seventh(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quizThe sixth(2) hours theoreticalB-compound tenseTheoretical lecturesTheoretical quizThe seventh(2) hours theoreticalB-compound tenseTheoretical lecturesTheoretical quizThe eighth(2) hours theoreticalC- complex tenseTheoretical lecturesTheoretical q	Course structu	Course structure:				
The first         (2) hours theoretical         English preposition         Theoretical lectures         Theoretical quiz Scientific Reports           The second         (2) hours theoretical         Passive voice         Theoretical lectures         Theoretical quiz           The second         (2) hours theoretical         Passive voice         Theoretical lectures         Theoretical quiz           The third         (2) hours theoretical         Negative         Theoretical lectures         Theoretical quiz           The third         (2) hours theoretical         If clause (conditional) sentences         Theoretical lectures         Theoretical quiz           The fifth         (2) hours theoretical         If clause (conditional) sentences         Theoretical quiz         Theoretical quiz           The fifth         (2) hours theoretical         Kinds of sentences         Theoretical quiz         Theoretical quiz           The sixth         (2) hours theoretical         A- Simple tense         Theoretical lectures         Theoretical quiz           The Seventh         (2) hours theoretical         A- Simple tense         Theoretical lectures         Theoretical quiz           The Seventh         (2) hours theoretical         B-compound tense         Theoretical lectures         Theoretical quiz           The oretical         (2) hours theoretical         Comp	Week	Hours	Unit or Topic Name	Method of Education	Evaluation method	
The second(2) hours theoreticalPassive voiceTheoretical lecturesTheoretical quiz Scientific ReportsThe third(2) hours theoreticalNegativeTheoretical lecturesTheoretical quiz Scientific ReportsThe third(2) hours theoreticalNegativeTheoretical lecturesTheoretical quiz Scientific ReportsThe fourth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe fifth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe fifth(2) hours theoreticalKinds of sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quiz Scientific ReportsThe Seventh(2) hours theoreticalB-compound tenseTheoretical lecturesTheoretical quiz Scientific ReportsThe eighth(2) hours theoreticalC- complex tenseTheoretical lecturesTheoretical quiz	The first	(2) hours theoretical	English preposition	Theoretical lectures	Theoretical quiz Scientific Reports	
The third(2) hours theoretical (2) hours theoreticalNegativeTheoretical lecturesTheoretical quiz Scientific ReportsThe fourth(2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific 	The second	(2) hours theoretical	Passive voice	Theoretical lectures	Theoretical quiz Scientific Reports	
The fourth(2) hours theoretical (2) hours theoreticalIf clause (conditional) sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe fifth(2) hours theoreticalKinds of sentencesTheoretical lecturesTheoretical quiz Scientific 	The third	(2) hours theoretical	Negative	Theoretical lectures	Theoretical quiz Scientific Reports	
The fifth(2) hours theoretical (2) hours theoreticalKinds of sentencesTheoretical lecturesTheoretical quiz Scientific ReportsThe sixth(2) hours theoreticalA- Simple tenseTheoretical lecturesTheoretical quiz Scientific ReportsThe sixth(2) hours 	The fourth	(2) hours theoretical	If clause (conditional) sentences	Theoretical lectures	Theoretical quiz Scientific Reports	
The sixth(2) hours theoretical -A- Simple tenseTheoretical -Theoretical quiz Scientific ReportsThe sixth(2) hours theoretical -B-compound tenseTheoretical -Theoretical quiz -Theoretical -The seventh(2) hours 	The fifth	(2) hours theoretical	Kinds of sentences	Theoretical lectures	Theoretical quiz Scientific Reports	
(2) hours theoretical -(2) hours -Theoretical -Theoretical -Theoretical -B-compound tenseTheoretical -Interventionquiz -Theoretical -InterventionReportsTheoretical -InterventionTheoretical -Theoretical -The eighth(2) hours 	The sixth	(2) hours theoretical	A- Simple tense	Theoretical lectures	Theoretical quiz Scientific Reports	
(2) hours theoretical(2) hours c- complex tenseTheoretical lecturesTheoretical quiz	The Seventh	(2) hours theoretical	B-compound tense	Theoretical lectures	Theoretical quiz Scientific Reports	
Scientific	The eighth	(2) hours theoretical	c- complex tense	Theoretical lectures	Theoretical quiz Scientific	

				Reports	
	(2) hours			Theoretical	
<b>T1</b> 1	theoretical	The use of so 'and	Theoretical	quiz	
I ne ninth		neither'	lectures	Scientific	
				Reports	
	(2) hours			Theoretical	
	theoretical	C:	Theoretical	quiz	
i ne tentn		Singular	lectures	Scientific	
				Reports	
	(2) hours			Theoretical	
The elementh	theoretical	<i>m</i> ]	Theoretical	quiz	
The eleventh		piurai	lectures	Scientific	
				Reports	
	(2) hours			Theoretical	
The twelfth	theoretical	How to answer	Theoretical	quiz	
The twentin		causations	lectures	Scientific	
				Reports	
				Theoretical	
The thirteenth	(2) hours theoretical	Number + Roman Numerals	Theoretical	quiz	
			lecture	Scientific	
				Reports	
				Theoretical	
The	(2) hours	Every day sentences	Theoretical lectures	quiz	
Fourteenth	theoretical			Scientific	
				Reports	
				Theoretical	
The fifteenth	(2) hours	The verb to be	Theoretical	quiz	
	theoretical		lectures	Scientific	
				Reports	
Educational Institution		College of Agricultur	College of Agriculture - Wasit University		
Scientific Depa	artment / Center	Animal Production			
Course Name		Genetics			
Course Code		GENE 218			
Number of Cre	edit Units	3.5			
Available Attendance Modes		Attendance: Yes			
Level - Semest	ter	Second Year - Spring Semester			
Total Hours of Instruction		(2) Theoretical Hours	(2) Theoretical Hours + (3) Practical Hours = (5) Hours		
		per Week			
Date of Descri	ption	12/2/2024			

Preparation					
Course Coordi	nator's Name				
Course Objectives		The student should be familiar with understanding the concept of genetics, Mendel's laws, and the concept of dominance, its types, and genetic mutations, recognize the concept of genetics, Mendel's laws, understanding dominance and its types, and genetic mutations.			
Teaching and Learning Methods		Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects.			
Assessment Methods			Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam		
Infrastructure			The required textbook: "Genetics" by Dr. Abbas Hassan Mughir. Recommended books and references (scientific journals, reports). Electronic references, internet websites.		
Evaluation of	the course		Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.		
Course structu	re:				
Week	Hours	J	Jnit or Topic Name	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Ι	ntroduction	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	1	Nucleic Acids	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific

			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Replication and	lectures	quiz
The third	(2) hours	Synthesis of Nucleic	Practical lectures	Practical quiz
	(3) nours	Acids	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Mondoliun Principlos	Theoretical	Theoretical
	theoretical	Sagragation	lectures	quiz
The fourth	(3) hours	independent	Practical lectures	Practical quiz
	practical	assortment	Laboratory	Scientific
		assortment	experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Dominance and	lectures	quiz
The fifth	(3) hours	statistical testing	Practical lectures	Practical quiz
	practical	statistical testing	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Dominance Relation	e Relation ble Alleles Haboratory Heoretical Iectures Practical lectures Laboratory Heoretical quiz Practical quiz Scientific	quiz
The sixth	(3) hours	and multiple Alleles	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Environmental effects	lectures	quiz
The Seventh	(3) hours	and gene expression	Practical lectures	Practical quiz
	practical		Laboratory	ReportsTheoreticalquizPractical quizScientificReportsTheoretical quizPractical quizScientificReportsTheoretical quizPractical quizScientificReportsTheoretical quizScientificReportsTheoretical quizPractical quiz
	practical		experiments	
	(2) hours		Theoretical	Theoretical
	theoretical	Gene Interaction and	lectures	quiz
The eighth	(3) hours	Lethality	Practical lectures	Practical quiz
	practical	Louianty	Laboratory	Scientific
	pruetieur		experiments	Reports
	(2) hours		Theoretical	Theoretical
The ninth	theoretical	Sex determination and	lectures	quiz
	(3) hours	Sex Linkage	Practical lectures	Practical quiz
	practical	Sex Ellikage	Laboratory	Scientific
	praetieur		experiments	Reports
	(2) hours	Maternal effects and	Theoretical	Theoretical
The tenth	theoretical	cytoplasmia	lectures	quiz
	(3) hours		Practical lectures	Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical		lectures	quiz
The eleventh	(3) hours	Inharitanaa	Practical lectures	Practical quiz
	practical	mileritance	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Linkage and	lectures	quiz
The twelfth	(2) hours	recombination and	Practical lectures	Practical quiz
	(3) nours	gene mapping"	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	chromosome variation in number	Theoretical	Theoretical
	(2) nours		lectures	quiz
The thirteenth	(2) hours		Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	ahangas in	lectures	quiz
Fourtoonth	(2) hours	changes in	Practical lectures	Practical quiz
Fourteentin	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifteenth	(2) hours	Mutations	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports

Educational Institution	College of Agriculture - Wasit University	
Scientific Department /	Animal Production	
Center	Annual Floduction	
Course Name	Feed crops and pastures	
Course Code	FOCR 219	
Number of Credit Units	3.5	
Available Attendance Modes	Attendance: Yes	
Level - Semester	Second Year - Spring Semester	
Total Hours of Instruction	(2) Theoretical Hours $+$ (3) Practical Hours $=$ (5) Hours	
Total Hours of Histraction	per Week	
Date of Description	12/2/2024	

Preparation				
Course Coordi	nator's Name			
Course Objectives		To introduce students to the science of forage field crops and understand the principles of this science, plant types, the importance of this science, and to identify the most important families		
Teaching and Learning Methods		Delivering theoretical lectures using the following methods: (whiteboard, data projector, interactive lecture, educational video presentation). Applying practical lectures through observations and interaction with field or laboratory aspects		
Assessment Methods		Conducting daily quick tests. Evaluating students through scientific reports and oral questions. Conducting monthly exams. Conducting practical exams. Conducting final exam		
Infrastructure		Required textbooks: "Forage Crops" by Dr. Hamid Kharrabit. Main references (sources): "Production of Forage Crops" by Dr. Ahmed Abu Al-Najja. Recommended books and references (scientific journals, reports). Electronic references, internet websites.		
Evaluation of t	he course	Theoretical Exam (30 points) + Practical Exam (20 points) = (50 points) Continuous Assessment + (50 points) Final Exam.		
Course structur	re:			
Week	Hours	Unit or Topic Name	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The economic importance of forage crops, some important terms, and the agricultural importance of forage crops.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	(2) hours	Economic	Theoretical	Theoretical

	theoretical	Importance:	lectures	quiz
	(3) hours	a. Importance in	Practical lectures	Practical quiz
	practical	agricultural cycles.	Laboratory	Scientific
		b. Importance in soil	experiments	Reports
		maintenance.		
		c. Importance in		
		reclaiming saline		
		soils.		
		Types of Forage		
		Crops:		
		a. Legumes,		
		including: clover,		
		alfalfa, annual clover,		
		true clovers like	Theoretical	Theoretical
	(2) hours	Egyptian clover, red	lasturas	
The third	theoretical	clover, Iranian clover,	Dreatical lasturas	quiz Dreatical quiz
The unita	(3) hours	white clover, vetch,	I ab anotamy	Practical quiz
	practical	and forage peas. Also	Laboratory	Scientific
		includes the sweet	experiments	Reports
		clover group		
		(melilot), birdsfoot		
		trefoil, mash, forage		
		beans, and soybeans		
		for fodder.		
		b. Grasses, including:		
		barley, oats, sorghum		
		forage, sudangrass,		
		yellow corn, white		
	(2) hours	corn, sorghum Sudan	Theoretical	Theoretical
	(2) nours	grass hybrid. For	lectures	
The fourth	(2) hours	each of the above	Dractical last	quiz Dractical ani-
I ne Iourth	(3) nours	crops: Importance	racucal lectures	Practical quiz
	practical	and benefits, native		Scientific Demostr
		habitat, suitable	experiments	Keports
		environment,		
		nutritional value,		
		varieties, and seed		
		production.		
The fifth	(2) hours	Forage Mixtures:	Theoretical	Theoretical

	theoretical	Types, advantages,	lectures	quiz
	(3) hours	and benefits.	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1	Forage crop	Theoretical	Theoretical
	(2) nours	cultivation.	lectures	quiz
The sixth	theoretical		Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	Classification of	Theoretical	Theoretical
	(2) hours	fodder: a. Dry bales,	lectures	quiz
The Seventh	theoretical	b. Silage.	Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
		Forage crop	Theoretical	Theoretical
	(2) hours	production	lectures	quiz
The eighth	theoretical	automation.	Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
		Importance of natural		
		pastures and their		
	(2) 1	distribution, natural	Theoretical	Theoretical
	(2) nours	pastures and their	lectures	quiz
The ninth	(2) have	relation to other	Practical lectures	Practical quiz
	(3) nours	sciences, types of	Laboratory	Scientific
	practical	natural pastures,	experiments	Reports
		characteristics of		
		good pastures.		
		Natural factors		
	(2) hours	affecting pastures,	Theoretical	Theoretical
	(2) nours	environmental	lectures	quiz
The tenth	(3) hours	factors, soil factors,	Practical lectures	Practical quiz
	(3) Hours	biological factors, fire	Laboratory	Scientific
		factors, and locational	experiments	Reports
		factors.		
	(2) hours	Grazing management,	Theoretical	Theoretical
The eleventh	theoretical	plant cover	lectures	quiz
	(3) hours	components in	Practical lectures	Practical quiz
	practical	pasture lands.	Laboratory	Scientific

			experiments	Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Effect of grazing on the forage plants' biomass, root growth, soil, grazing intensity, effect on forage plant reproduction, and impact on plant cover composition.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Grazing systems, continuous protection in grazing.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Status of natural pastures, assessment of pasture status, classification of pasture conditions, direction of status.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Harmful and toxic plants in pasture lands, natural preserves.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

433- Educational		
institution:	Collage of Agriculture-Wasit University	
434- Scientific department	A nimel production	
/ Center:	Animal production	
435- Course name:	Fish rearing and production	
436- Course code:	HPRE 220	
437-Number of academic	2.5	
units:	5.5	
438- Available forms of	Draganaa	
attendance:	Fresence	
439- Semester / year:	The second year - the spring semester	
440- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	

hours (total):		week			
441- Date of	preparation of	12 / 2 / 2024			
this descripti	on:				
442- Name o administrator	of the course r:	Dr. Ali Ayad Hussein			
		It is necessary for the stud	lent to get acquainte	ed with the	
443- Course	obiectives	methods of raising fish in	different ponds, to	know how the	
	5	fish grow inside the pond	s, the methods of fe	eding them, and	
		the means of raising fish			
		The purpose of providing	theoretical lectures	to deliver	
		information to students th	rough the following	g means:	
444- Teachin	ig and learning	(blackboard, data projecto	or, interactive lectur	e, educational	
methods:		video presentation).			
		The application of practic	al lectures through	observations	
		and interaction with field	or laboratory aspec	ts.	
		Take quick daily exams.			
		The evaluation of students through the submission of			
445- Evaluat	ion methods.	Scientific Reports and oral questions.			
	non methods.	Take the monthly exams.			
		Conducting practical examinations.			
		Just take the final exam.			
		Required course books: fundamentals of fish breeding and			
		production Dr. Mahfouz Hussein Mohamed			
		From the main references (sources): books of food and			
446- Infrasti	ructure:	nutrition of fish Dr. Telfan anad Ahmad			
		Books and references that are recommended (scientific			
		journals, reports).			
		Find electronic references, Internet sites.			
447- Evalua	tion of the	Theoretical exam (30 points) + practical exam (20 points) =			
course:		(50  points) + (50  points)	) final exam		
448- Course	structure:				
Week	Hours	Name of the unit or	Method of	Evaluation	
week Hours		subject	Education	method	
		A brief history of the	Theoretical	Theoretical	
The first	(2) hours	importance of fish	I heoretical		
	theoretical	farming and rapid	Practical lectures	Yuiz Practical auiz	
	(3) hours	development	I aboratory	Scientific	
	practical	Definition of fish	experiments	Reports	
		farming, types and	experiments	Kepons	
	1	1	•	J	

		sharing of fish farming Objectives of fish farming"		
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Features of breeding fish in comparison with farm animals Conditions to be met in breeding fish Culture systems	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Basic components of fish farming Different fish farming methods –breeding ponds	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Scientific and practical bases for the establishment of soil breeding ponds	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Types of soil breeding ponds construction of types of ponds- supplying ponds with water - gates, drainage ditches and drainage of pond water"	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Feeding and feeding of fish, goals, precautions Division of fish according to their nutrition	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li><li>(2) hours</li></ul>	Natural food, its composition, calculation, development Complementary food, artificial cancellation. Components of the	Theoretical lectures Practical lectures Laboratory experiments Theoretical	Theoretical quiz Practical quiz Scientific Reports Theoretical

	theoretical (3) hours practical	relays, their manufacture and estimation of their efficiency. Fish needs protein, carbohydrates and fats	lectures Practical lectures Laboratory experiments	quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Factors affecting the nutrition and nutrition of fish the relationship of food to growth"	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Energy, vitamins, mineral salts. Methods of providing food for domesticated fish	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Productivity of Ponds, Natural productivity and its components, fish harvest and increasing its production are the means to increase fish productivity"	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Reproduction, factors affecting it and its types. Natural and artificial reproduction by desire	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The characteristics of fish prepared for reproduction , the abundance of common carp fish in Iraq and its calculations"	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	<ol> <li>Fertilization, its</li> <li>types and conditions</li> <li>Fertilization goals</li> <li>and needs of breeding</li> </ol>	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific

		<ul><li>ponds</li><li>3. The effect of</li><li>fertilization on fish</li></ul>	experiments	Reports
		growth rates"		
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Fish diseases and characteristics of infected fish factors leading to the spread of the disease bacterial and viral diseases diseases methods of disease identification and methods of disease treatment	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

449- Educational	Collage of Agriculture-Wasit University	
institution:		
450- Scientific department	Animal production	
/ Center:		
451- Course name:	Dairy science	
452- Course code:	PDSC 221	
453-Number of academic units:	3.5	
454- Available forms of attendance:	Presence	
455- Semester / year:	The second year - the spring semester	
456- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
457- Date of preparation of	12/2/2024	
this description:	12/2/2024	
458- Name of the course	Dr. Heider Neij Beson	
administrator:	DI. Haldel Naji Kaseli	
	It is necessary for the student to get acquainted with the	
	structure and loading of the major and minor milk	
450 0 1: 4:	components, the effect of thermal coefficients on milk	
459- Course objectives	blindness and its components, the effect of each of the	
	components blindness of the manufacturing processes of	
	milk derivatives	
460- Teaching and learning	The purpose of providing theoretical lectures to deliver	

methods:		<ul> <li>information to students through the following means:</li> <li>(blackboard, data projector, interactive lecture, educational video presentation).</li> <li>The application of practical lectures through observations</li> </ul>			
		and interaction with field	ld or laboratory aspe	ects.	
		Take quick daily exams			
		The evaluation of stude	nts through the subn	nission of	
461 Evoluor	tion mothoday	Scientific Reports and oral questions.			
401- Evalua	uon methous.	Take the monthly exam	S.		
		Conducting practical ex	aminations.		
		Just take the final exam	•		
		The required textbooks:	the book of princip	les of dairy Dr.	
		Jassim Mohammed			
162 Infract	miatura	Main references (source	es): milk products bo	ooks	
402- mnast	Iuciuic.	Books and references the	nat are recommended	d (scientific	
		journals, reports).			
		Find electronic reference	es, Internet sites.		
463- Evalua	tion of the	Theoretical exam (30 points) + practical exam (20 points) =			
course:		(50 points) + (50 points) final exam			
464- Course	e structure:				
Week	Hours	Name of the unit or	Method of	Evaluation	
	Tiours	subject	Education	method	
	(2) hours		Theoretical	Theoretical	
	(2) nours	Examination of milk	lectures	quiz	
The first	(3) hours	components	Practical lectures	Practical quiz	
	nractical		Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	theoretical	Estimation of acidity	lectures	quiz	
The second	(3) hours	in milk	Practical lectures	Practical quiz	
	practical		Laboratory	Scientific	
practical			experiments	Reports	
	(2) hours	Microscopic	Theoretical	Theoretical	
The third	theoretical	examination of fat	lectures	quiz	
	(3) hours	and estimation of fat	Practical lectures	Practical quiz	
	practical	percentage	Laboratory	Scientific	
	r	r	experiments	Reports	
The fourth	(2) hours	Babcock and Kerber	Theoretical	Theoretical	
	theoretical		lectures	quiz	

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	-		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours	G	lectures	quiz
The fifth	theoretical	Specific weight and	Practical lectures	Practical quiz
	(3) hours	milk cheats	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The sixth	theoretical	Sorting milk	Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
T1	(2) nours	Cheese making (soft	lectures	quiz
The	theoretical	+ricotta +Cois Blanca	Practical lectures	Practical quiz
Seventh	(3) hours	+halloumi +cooked)	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
The eighth	(2) nours	Butter industry and	lectures	quiz
	theoretical	factors affecting	Practical lectures	Practical quiz
	(3) nours	vegetables	Laboratory	Scientific
	practical		experiments	Reports
	(2) have		Theoretical	Theoretical
	(2) nours	Daimy and water isa	lectures	quiz
The ninth	(2) have	Daily and water ice	Practical lectures	Practical quiz
	(5) nours	cream industry	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours		lectures	quiz
The tenth	(3) hours	Milk enzymes	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	Microbiology of mills	lectures	quiz
1 ne	(3) hours	and mills products	Practical lectures	Practical quiz
	practical	and milk products	Laboratory	Scientific
			experiments	Reports
The twelfth	(2) hours	Cheese products	Theoretical	Theoretical

	theoretical		lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
thirteenth	(2) hours	Sour-milk yogurt	Practical lectures	Practical quiz
timteentii	(3) nours practical		Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Butter production	Theoretical	Theoretical
The			lectures	quiz
Fourteenth			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
The fifteenth	(2) 1		Theoretical	Theoretical
	(2) nours	Treatment of mills in	lectures	quiz
	(3) hours	laboratories	Practical lectures	Practical quiz
	practical	laboratories	Laboratory	Scientific
			experiments	Reports

465- Educational institution:	Collage of Agriculture-Wasit University
466- Scientific department / Center:	Animal production
467- Course name:	Agricultural economics principles
468- Course code:	PRAE 222
469-Number of academic units:	2
470- Available forms of attendance:	Presence
471- Semester / year:	The second year - the spring semester
472- Number of academic hours (total):	(2) hours theoretical = (2) hours per week
473- Date of preparation of this description:	12 / 2 / 2024
474- Name of the course administrator:	Sara Ali Hussain
475- Course objectives	The aim is to familiarize the student with economics and the role of agricultural activity in the national economy,

		marketing and agricultural f	inance as well as	agricultural
		The purpose of providing theoretical lectures is to convey		
476- Teachir	ng and learning	information to students thro	ugh the following	means:
methods:		(blackboard, data projector,	interactive lecture	e, video tutorial
		presentation ).		
		Take quick daily exams.		
		The evaluation of students t	hrough the submis	ssion of
477- Evaluat	tion methods:	Scientific Reports and oral or	questions.	
		Take the monthly exams.		
		Just take the final exam.		
		The required prescribed boc	oks: The Book of a	agricultural
		extension science, Dr. Abdu	llah the Samurai I	Dr. Adnan
		Hussein		
478- Infrast	ructure:	The main references (source	es) are: books	
		Books and references that an	re recommended (	scientific
		journals, reports).		
		Find electronic references, Internet sites.		
479- Evalua	tion of the	Theoretical exam (30 points) + practical exam (20 points) =		
course:		(50  points) + (50  points) final exam		
480- Course structure:			1	
Week	Hours	Name of the unit or	Method of	Evaluation
		subject	Education	method
		General concepts /		
The first	(2) hours	manifestations of	Theoretical	Theoretical
	theoretical	economic life / economic	lectures	quiz
		problem.		
The second	(2) hours	Theory of consumer	Theoretical	Theoretical
	theoretical	behavior	lectures	quiz
The third	(2) hours	The modern theory of	Theoretical	Theoretical
	theoretical	consumer balance	lectures	quiz
	(2) hours	Supply and demand	Theoretical	Theoretical
The fourth	(2) notifs	(individual demand)	lectures	
	theoretical	table and demand curve		Yuiz
The fifth	(2) hours	Elasticity of demand and	Theoretical	Theoretical
	theoretical	influencing factors	lectures	quiz
The sixth	(2) hours	Display / table and	Theoretical	Theoretical
	theoretical	display curve	lectures	quiz
The	(2) hours	Elasticity of supply and	Theoretical	Theoretical

Seventh	theoretical	influencing factors	lectures	quiz
The eighth	(2) hours	Demand, supply and	Theoretical	Theoretical
The eighth	theoretical	price determination	lectures	quiz
The ninth	(2) hours	Agricultural production	Theoretical	Theoretical
The minun	theoretical	and production elements	lectures	quiz
The tenth	(2) hours	The law of diminishing	Theoretical	Theoretical
The tenth	theoretical	returns and its years	lectures	quiz
The	(2) hours	General economics and	Theoretical	Theoretical
eleventh	theoretical	agricultural economics	lectures	quiz
The twelfth	(2) hours theoretical	The role of agricultural activity in the national economy	Theoretical lectures	Theoretical quiz
The thirteenth	(2) hours theoretical	Branches of agricultural economics / economics of agricultural production	Theoretical lectures	Theoretical quiz
The Fourteenth	(2) hours theoretical	Agricultural prices, agricultural marketing, financing and agricultural credit	Theoretical lectures	Theoretical quiz
The fifteenth	(2) hours theoretical	Department of agricultural business, agricultural cooperation, Agricultural Policy and development	Theoretical lectures	Theoretical quiz

481- Educational		
institution:	Collage of Agriculture-Wasit University	
482- Scientific department		
/ Center:	Animal production	
483- Course name:	Freedom and democracy	
484- Course code:	FRDE 204	
485-Number of academic	1	
units:		
486- Available forms of	Drasanca	
attendance:	Fresence	
487- Semester / year:	The second year - the spring semester	
488- Number of academic	(1) hours the emotion $l = (1)$ hours non-vector	
hours (total):	(1) hours theoretical – (1) hours per week	

489- Date of preparation of this description:12 / 2 / 2024				
490- Name of the course administrator:		Amer Karim hadal		
491- Course	objectives	The aim of the student is to get acquainted with the types of public freedoms and to get acquainted with the rights and duties of society		
492- Teaching and learning methods:		The purpose of providing theoretical lectures to deliver information to students through the following means: (blackboard, data projector, interactive lecture, educational video presentation)		
493- Evaluation methods:		Take quick daily exams.The evaluation of students through the submission ofScientific Reports and oral questions.Take the monthly exams.Just take the final exam.		
494- Infrastructure:		The required prescribed books: The Book of agricultural extension science, Dr. Abdullah the Samurai Dr. Adnan Hussein The main references (sources) are: books Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.		
495- Evalua	tion of the	Theoretical exam (30 points) + practical exam (20 points) = $(50 \text{ points}) + (50 \text{ points})$ final exam		
course:		(50  points) + (50  points)	tinal exam	
490- Course	e structure:	Nouse of the state	N(-41-1-C	E1-
Week	Hours	subject	Education	method
The first	(1) hours theoretical	Definition of freedom and its meanings	Theoretical lectures	Theoretical quiz
The second	(1) hours theoretical	Distinction between freedom and anarchism	Theoretical lectures	Theoretical quiz
The third	(1) hours theoretical	A study in the most important civil liberties	Theoretical lectures	Theoretical quiz
The fourth	(1) hours theoretical	A study in the most important political freedoms	Theoretical lectures	Theoretical quiz
The fifth	(1) hours theoretical	What is meant by democracy, the historical	Theoretical lectures	Theoretical quiz

		dimension		
T1:41.	(1) hours	Forms of democracy	Theoretical	Theoretical
The sixth	theoretical		lectures	quiz
The	(1) hours	Democratic state	Theoretical	Theoretical
Seventh	theoretical	standards	lectures	quiz
The eighth	(1) hours	The democratic	Theoretical	Theoretical
The eighti	theoretical	constitution	lectures	quiz
The ninth	(1) hours	The state and its forms	Theoretical	Theoretical
The minur	theoretical		lectures	quiz
The tenth	(1) hours	Types of systems	Theoretical	Theoretical
The tenth	theoretical		lectures	quiz
The eleventh	(1) hours theoretical	The institutions that democratic countries need	Theoretical lectures	Theoretical quiz
The twelfth	(1) hours theoretical	Democratic elections (concept-conditions- requirements-purposes)	Theoretical lectures	Theoretical quiz
The	(1) hours	Parties and electoral	Theoretical	Theoretical
thirteenth	theoretical	systems	lectures	quiz
The Fourteenth	(1) hours theoretical	Agricultural prices, agricultural marketing, financing and agricultural credit	Theoretical lectures	Theoretical quiz
The fifteenth	(1) hours theoretical	Pressure groups ( what they are, types, means) Minority representation in democratic governance	Theoretical lectures	Theoretical quiz

497- Educational	College of Agriculture Wegit University	
institution:	Conage of Agriculture- wasit Oniversity	
498- Scientific department	A nimel and duction	
/ Center:	Annual production	
499- Course name:	Computer applications (4)	
500 Course code:	COMA 203	
501-Number of academic	15	
units:	1.5	
502- Available forms of	Draganaa	
attendance:		

503- Semes	03- Semester / year: The second year - the autmun semester			
504- Numbe	mber of academic (2) hours theoretical $+$ (3) hours practical $=$ (5) hours pe			(5) hours per
hours (total):		week		
505- Date o	f preparation of	12/2/2024		
this descript	tion:			
506- Name	of the course	Dr. Huda lifta		
administrato	or:	Di. Hudu IIIu		
		The student should famil	iarize himself with the	ne Office
507- Course	e objectives	programs, including the	SPSS statistical analy	sis program
		How to manage database	es using Excel	
		The purpose of providing	g theoretical lectures	to deliver
508- Teachi	ng and learning	information to students t	hrough the following	means:
methods:		(blackboard, data project	tor, interactive lecture	e, educational
		video presentation).		
		Take quick daily exams.		
		The evaluation of studen	ts through the submi	ssion of
509- Evalua	tion methods:	Scientific Reports and or	al questions.	
		Take the monthly exams.		
		Conducting practical examinations.		
		Just take the final exam.		
		Required course books: computer book and its Office		
		applications Dr. Hashim Abdulkarim		
		The main references (sources): electronic computer		
510- Infrast	tructure:	programming books by Dr. Abdul Latif Abdul		
		Books and references that	at are recommended (	scientific
		journals, reports).		
		Find electronic references, Internet sites.		
511- Evalua	ation of the	Theoretical exam (30 points) + practical exam (20 points) =		
course:		(50  points) + (50  point)	s ) final exam	
512- Cours	e structure:			
Week	Hours	Name of the unit or	Method of	Evaluation
		subject	Education	method
	(2) hours		Theoretical	Theoretical
	theoretical	Types of files that	lectures	quiz
The first	(3) hours	make up the SPSS	Practical lectures	Practical quiz
	practical	program	Laboratory	Scientific
	1		experiments	Reports
The	(2) hours	How to run the SPSS	Theoretical	Theoretical
second	theoretical	program	lectures	quiz

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	CDCC and support	lectures	quiz
The third	(2) have	SPSS program	Practical lectures	Practical quiz
	(5) nours	windows	Laboratory	Scientific
	practical	acticalIacticalSPSS program) hourswindowsacticalData editor Data) hoursData editor Data(acticalData editor Data) hoursData editor Data(acticalData menu commands(acticalData menu commands(acticalTransform menu(boursCommands(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT(commandsT<	experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Data aditar Data	lectures	quiz
The fourth	(3) hours	Data editor Data	Practical lectures	Practical quiz
	practical	Editor	Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifth	theoretical	View menu commands	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The sixth	(2) have	Data menu commands	Practical lectures	Practical quiz
	(5) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	On anotions nonformed	Theoretical	Theoretical
The	(2) Hours	operations performed	lectures	quiz
Sourth	(2) hours	off variables and then	Practical lectures	Practical quiz
Seventin	(3) nouis	Editor window	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Transform menu	lectures	quiz
The eighth	(2) hours	aommanda	Practical lectures	Practical quiz
	(3) nours	commanus	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Statistical analysis of	Theoretical	Theoretical
	(2) nours	data through the	lectures	quiz
The ninth	(2) hours	analyza manu	Practical lectures	Practical quiz
	practical	commands	Laboratory	Scientific
	practical	commanus	experiments	Reports
The tenth	(2) hours	Descriptive Statistics	Theoretical	Theoretical

	theoretical	descriptive Statistics	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
The	(2) hours theoretical	First : Frequency	Theoretical lectures	Theoretical quiz
eleventh	(3) hours	frequency distribution	Practical lectures	Practical quiz
		tables	experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Second : descriptive	lectures	quiz
twelfth	(3) hours	statistics Measure	Practical lectures	Practical quiz
twentin	(5) nours	Descriptive Statistics	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Testing the differences	lectures	quiz
thirteenth	(3) hours	between the averages	Practical lectures	Practical quiz
	(5) nours	using the T-Test	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	First T Test of	lectures	quiz
Fourteenth	(3) hours	independent samples	Practical lectures	Practical quiz
Pourteentin	(5) nours	independent samples	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Second: T-Test for	lectures	quiz
fifteenth	(3) hours	non-independent	Practical lectures	Practical quiz
	(3) Hours	samples	Laboratory	Scientific
	practical		experiments	Reports

## The Third year:

513- Educational		
institution:	Collage of Agriculture- wasit University	
514- Scientific department	A nimel production	
/ Center:	Animal production	
515- Course name:	Animal physiology	
516 Course code:	ANPH 311	
517-Number of academic	3.5	

units:				
518- Availat	518- Available forms of Presence			
attendance:		Tresence		
519- Semest	ter / year:	The third year - the autumn semester		
520- Numbe	er of academic	(2) hours theoretical $+(3)$	) hours practical = (	(5) hours per
hours (total)	):	week		
521- Date of this descript	f preparation of ion:	12 / 2 / 2024		
522- Name of administrate	of the course or:	Dr. Mohammed Abdul Ar	nir Rashid	
523- Course	objectives	It is necessary for the stud features of animal physic working functions of orga acquainted with the physi	dent to get acquainte logy, to get acquaint ans and body system ology of body system	d with the ed with the s, to get ms.
524- Teaching and learning methods:The purpose of providing theoretical lectures to deliver information to students through the following means: (blackboard, data projector, interactive lecture, education video presentation). The application of practical lectures through observation			to deliver means: e, educational observations s.	
525- Evaluation methods:Take quick daily exams. The evaluation of students through the submission of Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations.		ssion of		
526- Infrastructure:Among the required prescribed books: The Book of ani physiology Dr. Zia Hassan Al-Hasani The main references (sources) are: books of organ philo Books and references that are recommended (scientific journals, reports).Find electronic referencesInternet sites		ook of animal rgan philology scientific		
527- Evaluation of the		Theoretical exam (30 points) + practical exam (20 points) =		
course:		(50  points) + (50  points)	) final exam	
528- Course structure:				
Week	Hours	Name of the unit or subject	Method of Education	Evaluation method
	(2) hours	Types of files that	Theoretical	Theoretical
The first	theoretical	make up the SPSS	lectures	quiz

	(3) hours	program	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) have		Theoretical	Theoretical
<b>T</b> 1	(2) nours		lectures	quiz
Ine	theoretical	How to run the SPSS	Practical lectures	Practical quiz
second	(3) nours	program	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours	SDSS was super	lectures	quiz
The third	(2) have	SPSS program	Practical lectures	Practical quiz
	(5) nours	windows	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical		lectures	quiz
The fourth	(3) hours	Data editor Data Editor	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours		lectures	quiz
The fifth	(2) have	View menu commands	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) Hours		lectures	quiz
The sixth	(2) hours	Data menu commands	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	Operations performed	Theoretical	Theoretical
The	(2) nours	on variables and their	lectures	quiz
Soventh	(2) hours	attributes in the Data	Practical lectures	Practical quiz
Seventii	(3) nours	Editor window	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Transform menu	lectures	quiz
The eighth	(3) hours	commands	Practical lectures	Practical quiz
	nractical		Laboratory	Scientific
	Practical		experiments	Reports
The ninth	(2) hours	Statistical analysis of	Theoretical	Theoretical

	theoretical	data through the	lectures	quiz
	(3) hours	analyze menu	Practical lectures	Practical quiz
	practical	commands	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Decominitive Statistics	lectures	quiz
The tenth	(2) hours	descriptive Statistics	Practical lectures	Practical quiz
	(5) HOUIS	descriptive statistics	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours	First · Fragueney	Theoretical	Theoretical
The	theoretical	Distribution Tabled	lectures	quiz
aloyonth	(3) hours	fraguanay distribution	Practical lectures	Practical quiz
elevenui	practical	tables	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	C) noursSecond : descriptivelectureaeoreticalstatistics MeasurePracticalb) hoursDescriptive StatisticsLaboration	lectures	quiz
twelfth	(3) hours		Practical lectures	Practical quiz
twentin	(5) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Testing the differences	lectures	quiz
thirteenth	(3) hours	between the averages	Practical lectures	Practical quiz
	(5) nours	using the T-Test	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	First T - Test of	lectures	quiz
Fourteenth	(3) hours	independent samples	Practical lectures	Practical quiz
Tourteentii	(5) nours	independent samples	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	Second: T-Test for	lectures	quiz
fifteenth	(3) hours	non-independent	Practical lectures	Practical quiz
	nractical	samples	Laboratory	Scientific
	practical		experiments	Reports

529- Educational institution:	Collage of Agriculture-Wasit University
530- Scientific department	Animal production

531- Course name: Hatching and hatchery management	
532 Course code:HMHA 312	
533-Number of academic 2.5	
units:	
534- Available forms of Presence	
attendance:	
535- Semester / year:The third year - the autumn semester	
536- Number of academic (2) hours theoretical $+$ (3) hours practical $=$ (5) hours pr	per
hours (total): week	
537- Date of preparation of 12/2/2024	
this description:	
538- Name of the course Dr. Mohammad Ali Makki Jassim	
administrator:	
The student should get acquainted with hatching, the	
539 Course objectives components of the hatching process, hatching methods,	the
quality of hatched chicks and the economic feasibility of	of the
hatching laboratory	
The purpose of providing theoretical lectures to deliver	
information to students through the following means:	
540- Teaching and learning (blackboard, data projector, interactive lecture, education	onal
methods: video presentation).	
The application of practical lectures through observation	ns
and interaction with field or laboratory aspects.	
Take quick daily exams.	
The evaluation of students through the submission of	
5.41 Evaluation methoda. Scientific Reports and oral questions.	
Take the monthly exams.	
Conducting practical examinations.	
Just take the final exam.	
Required prescribed books   hatching and hatchery	
management book by Dr. Glass satisfaction	
The main references (sources) are: books	
Books and references that are recommended (scientific	
journals, reports).	
Find electronic references, Internet sites.	
543- Evaluation of the Theoretical exam (30 points) + practical exam (20 points)	nts ) =
course: (50 points) + (50 points) final exam	
544- Course structure:	

Week	Hours	Name of the unit or	Method of	Evaluation
WEEK	TIOUIS	subject	Education	method
	(2) hours		Theoretical	Theoretical
	(2) nours	History of artificial	lectures	quiz
The first	(2) have	spawning and its	Practical lectures	Practical quiz
	(3) nours	development	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1	The male reproductive	Theoretical	Theoretical
	(2) nours	system, its anatomy,	lectures	quiz
The second	theoretical	sexual maturity in	Practical lectures	Practical quiz
	(3) hours	Roosters, fertility and	Laboratory	Scientific
	practical	factors affecting it	experiments	Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The female reproductive system, its anatomy, the structure of the egg, the effect of lighting on egg production	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Treatment of eggs before hatching (collection, transportation, selection, storage and heating of eggs)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Components of the hatching process (treatment of eggs in the hatchery)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Years of embryonic development (laying models of hatching eggs in the hatchery and breaking it to monitor embryonic development )	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	Vital monitoring during the hatching process	Theoretical lectures Practical lectures	Theoretical quiz Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1	II.4.1.1	Theoretical	Theoretical
	(2) nours	Hatching methods and	lectures	quiz
The eighth	theoretical	natchery types	Practical lectures	Practical quiz
	(3) hours	(building design and	Laboratory	Scientific
	practical	hatchery management)	experiments	Reports
			Theoretical	Theoretical
	(2) hours	Sanitary management	lectures	quiz
The ninth	theoretical	of hatcheries and	Practical lectures	Practical quiz
	(3) hours	biosecurity	Laboratory	Scientific
	practical	5	experiments	Reports
			Theoretical	Theoretical
	(2) hours	Sources of hatching	lectures	quiz
The tenth	theoretical	eggs and care of	Practical lectures	Practical quiz
	(3) hours	maternal flocks	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Nutrition, heredity and	lectures	quiz
The	(3) hours	their relationship to	Practical lectures	Practical quiz
eleventh	practical	hatching	Laboratory	Scientific
	1	C	experiments	Reports
		Identification and	Theoretical	Theoretical
	(2) hours	evaluation of the	lectures	quiz
The twelfth	theoretical	quality of hatched	Practical lectures	Practical quiz
	(3) hours	chicks and their	Laboratory	Scientific
	practical	marketing	experiments	Reports
			Theoretical	Theoretical
701	(2) hours	Economic feasibility of	lectures	quiz
The	theoretical	the hatching coefficient	Practical lectures	Practical quiz
thirteenth	(3) hours	(cost, revenue and	Laboratory	Scientific
	practical	profit calculation(	experiments	Reports
			Theoretical	Theoretical
<b>T</b> 1	(2) hours	History of artificial	lectures	quiz
The	theoretical	spawning and its	Practical lectures	Practical quiz
Fourteenth	(3) hours	development	Laboratory	Scientific
	practical		experiments	Reports
The	(2) hours	The male reproductive	Theoretical	Theoretical
fifteenth	theoretical	system, its anatomy,	lectures	quiz
(3) hours	sexual maturity in	Practical lectures	Practical quiz	
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practical	Roosters, fertility and	Laboratory	Scientific	
	factors affecting it	experiments	Reports	

545- Educational	Collage of Agriculture-Wasit University
institution:	
546- Scientific department	Animal production
/ Center:	Anima production
547- Course name:	Animal nutrition
548 Course code:	ANNU 313
549-Number of academic	2 5
units:	3.5
550- Available forms of	Presence
attendance:	
551- Semester / year:	The third year - the autumn semester
552- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per
hours (total):	week
553- Date of preparation of	12 / 2 / 2024
this description:	
554- Name of the course	Dr. Mohammed Abdul Amir Rashid
administrator:	
	It is necessary for the student to get acquainted with animal
555- Course objectives	nutrition, food elements, including carbohydrates, fats,
	proteins, vitamins and mineral elements
	The purpose of providing theoretical lectures to deliver
	information to students through the following means:
556- Teaching and learning	(blackboard, data projector, interactive lecture, educational
methods:	video presentation).
	The application of practical lectures through observations
	and interaction with field or laboratory aspects.
	Take quick daily exams.
	The evolution of students through the submission of
	The evaluation of students through the submission of
557- Evaluation methods	Scientific Reports and oral questions.
557- Evaluation methods:	Scientific Reports and oral questions. Take the monthly exams.
557- Evaluation methods:	Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations.
557- Evaluation methods:	Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam.
557- Evaluation methods:	Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam. The required prescribed books $\Box$ animal nutrition book, Dr.
<ul><li>557- Evaluation methods:</li><li>558- Infrastructure:</li></ul>	<ul> <li>The evaluation of students through the submission of</li> <li>Scientific Reports and oral questions.</li> <li>Take the monthly exams.</li> <li>Conducting practical examinations.</li> <li>Just take the final exam.</li> <li>The required prescribed books □ animal nutrition book, Dr.</li> <li>Shaker Abdul Amir Al Attar</li> </ul>

The main references (sources) are: books Books and references that are recommended (scientific journals, reports). Find electronic references. Internet sites.				(scientific
559- Evaluat	tion of the	Theoretical exam (30 point	$\frac{1}{1}$ (nts) + practical example	n(20  points) =
course.		(50  points) + (50  points)	) final exam	( <b>_</b> 0 points)
560- Course	structure.		)	
Week	Hours	Name of the unit or subject	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	<ul> <li>"Food / animal body structure/ plant structure/ the role of water and its needs in Animal body/ properties and functions of water/ energy ."</li> </ul>	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	"Digestive processes in animals / gastrointestinal tract / false ruminants	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Types of digestion / enzymes / qualities of enzymes / microbial digestion of carbohydrates / "	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	"Saliva production / saliva functions / factors affecting quantity and quality	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Saliva / factors affecting digestion	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	(2) hours theoretical	Saliva production / saliva functions /	Theoretical lectures	Theoretical quiz

	(3) hours practical	factors affecting quantity and quality	Practical lectures Laboratory experiments	Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Saliva / factors affecting digestion	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Second: proteins / classification of proteins/amino acids / properties of proteins	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Metabolism of proteins in the rumen/ enzymatic	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	digestion of proteins	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Felids classification of felids / lipid properties/ digestion of felids in the rumen	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Inorganic elements / essential or necessary inorganic elements	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Vitamins /nutritional needs of various nutrients	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The	(2) nours	Methods for	Theoretical	meoretical

Fourteenth	theoretical	estimating nutrients	lectures	quiz
	(3) hours	in the Bush	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) Hours	Diala signi value	lectures	quiz
fifteenth	(2) hours	biological value	Practical lectures	Practical quiz
meenth	(5) nours	protein needs	Laboratory	Scientific
	practical		experiments	Reports

561- Educational	Collage of Agriculture-Wasit University	
institution:	Conage of Agriculture- wash Oniversity	
562- Scientific department	Animal production	
/ Center:		
563- Course name:	Economics of animal production	
564 Course code:	APEC 314	
565-Number of academic	3	
units:	5	
566- Available forms of	Presence	
attendance:	Tresence	
567- Semester / year:	The third year - the autumn semester	
568- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
569- Date of preparation of	12/2/2024	
this description:	12/2/2024	
570- Name of the course	Rahah Amen fshak	
administrator:	Kubub / Milen Ishuk	
	The aim of the student is to get acquainted with the	
571- Course objectives	generalization of the economy and to know the relationships	
	between resources and agricultural production	
	The purpose of providing theoretical lectures to deliver	
572- Teaching and learning	information to students through the following means:	
methods:	(blackboard, data projector, interactive lecture, educational	
	video presentation).	
	Take quick daily exams.	
573- Evaluation methods:	The evaluation of students through the submission of	
	Scientific Reports and oral questions.	
	Take the monthly exams.	

		Just take the final exam.			
		The required textbooks: the book of animal production			
		economics, Dr. Salem Tawfiq Al-Najafi			
571 Infract	miatura	The main references (sources) are: books			
5/4- IIIIasi	luciule.	Books and references that as	re recommended (	scientific	
		journals, reports).			
		Find electronic references, I	nternet sites.		
575- Evalua	tion of the	Theoretical exam (50 points	s = (50  points) +	(50 points)	
course:		final exam			
576- Course	e structure:				
Wash	Haung	Name of the unit or	Method of	Evaluation	
WEEK	nours	subject	Education	method	
The first	(3) hours	Introductory topics in	Theoretical	Theoretical	
The first	theoretical	economics	lectures	quiz	
The second	(3) hours	The economy of animal	Theoretical	Theoretical	
The second	theoretical	production	lectures	quiz	
	(2) have	Relations between	Theoretical	Theoretical	
The third	(3) hours theoretical	resources and agricultural	lectures	Theoretical	
		production		quiz	
The fourth	(3) hours	Price relations and	Theoretical	Theoretical	
	theoretical	selection indicators	lectures	quiz	
		Productive relations in			
The fifth	(3) hours theoretical	the case of using more	Theoretical	Theoretical	
		than one productive	lectures	quiz	
		element			
	(3) hours	Optimal axial	Theoretical	Theoretical	
The sixth	(3) Hours	combination and cost	lasturas		
	theoretical	reduction	icclures	quiz	
The	(2) hours	Distribution of resources	Theoretical	Theoretical	
Savanth	(3) Hours	between different	lectures		
Seventin	theoretical	production projects	lectures	quiz	
	(3) hours	Production costs of	Theoretical	Theoretical	
The eighth	(5) nours	animal production	lectures		
	theoretical	projects	lectures	quiz	
		Agricultural Costs and			
The ninth	(3) hours	maximum profits for	Theoretical	Theoretical	
	theoretical	animal production	lectures	quiz	
		projects			
The tenth	(3) hours	Agricultural Cost Curves	Theoretical	Theoretical	

	theoretical		lectures	quiz
The	(3) hours	Statistical estimation of	Theoretical	Theoretical
eleventh	theoretical	Agricultural Costs	lectures	quiz
The twolfth	(3) hours	Feed economics and	Theoretical	Theoretical
The twellth	theoretical	natural pastures	lectures	quiz
The	(3) hours	Measures of economic	Theoretical	Theoretical
thirteenth	theoretical	efficiency	lectures	quiz
The	(3) hours	Marketing of animal	Theoretical	Theoretical
Fourteenth	theoretical	products	lectures	quiz
The	(3) hours	Introductory topics in	Theoretical	Theoretical
fifteenth	theoretical	economics	lectures	quiz

577- Educational	Collage of Agriculture Wasit University		
institution:	Conage of Agriculture- wasit Oniversity		
578- Scientific department	Animal production		
/ Center:			
579- Course name:	Ecology and animal behavior		
580 Course code:	AEBE 315		
581-Number of academic	2		
units:	2		
582- Available forms of	Presence		
attendance:			
583- Semester / year:	The third year - the autumn semester		
584- Number of academic	(2) hours theoretical $=$ (2) hours per week		
hours (total):	(2) nours medicated $-(2)$ nours per week		
585- Date of preparation of	12/2/2024		
this description:			
586- Name of the course	Sarah Kata		
administrator:	Sarah Kata		
	The aim of the student is to learn about ecology, the role of		
587- Course objectives	Ecology in animal life, the behaviors of farm animals and		
	ways of communication between animals		
	The purpose of providing theoretical lectures to deliver		
588- Teaching and learning	information to students through the following means:		
methods:	(blackboard, data projector, interactive lecture, educational		
	video presentation).		
589- Evaluation methods:	Take quick daily exams.		

		The evaluation of students to Scientific Reports and oral of Take the monthly exams. Just take the final exam. One of the required books is	hrough the submi questions. s the animal beha	ssion of vior book by
590- Infrastructure:		Dr. Talal Boutros, Dr. Zia Khalil Ibrahim The main references (sources) are: books Books and references that are recommended (scientific journals, reports). Find electronic references. Internet sites		
591- Evalua	tion of the	Theoretical exam (50 points	s) = (50  points) -	+(50 points)
course:		final exam		
592- Course	e structure:			
Week	Hours	Name of the unit or subject	Method of Education	Evaluation method
The first	(2) hours theoretical	Definitions of Ecology, historical development of Ecology, sections of Ecology, collective ecology, subjectivity, the importance of atmospheric conditions for agriculture and animal husbandry, climate, societies, laws of animal distribution on the globe	Theoretical lectures	Theoretical quiz
The second	(2) hours theoretical	The influence of physical factors in the animal's environment, the temperature rate, the decreasing temperature rate, factors affecting temperatures	Theoretical lectures	Theoretical quiz
The third	(2) hours theoretical	Sources of heat in the animal's body, heat loss, solar radiation reflected from clouds, air temperature and thermal	Theoretical lectures	Theoretical quiz

The fourth	(2) hours theoretical	radiation, the fate of radiation autumning on Earth , heat gained from solar radiation The cover of the animal's body and the role of the surrounding skin and hair , thermal reflection in poultry, humidity, the importance of humidity for the physiological	Theoretical lectures	Theoretical quiz
The fifth	(2) hours theoretical	state of the animalThermal equilibrium,heat sources acquired asa result of metabolicactivity of internalorgans , energy producedby hormones , heat loss	Theoretical lectures	Theoretical quiz
The sixth	(2) hours theoretical	Pregnancy, heat loss by conduction and evaporation, animal distress, thermoregulation, sweating, how to regulate heat by sweating, control devices Body temperature, daily temperature changes	Theoretical lectures	Theoretical quiz
The Seventh	(2) hours theoretical	Critical temperature, environmental factors, fertility, beauty and desert environment, calves and ecology, thermal insulation of calves and critical heat, hormones and thermoregulation , sensory perception of temperatures	Theoretical lectures	Theoretical quiz

The eighth	(2) hours theoretical	The role of the hypothalamus and its centers, pathological disorders as a result of thermoregulation, trophic levels and thermoregulation, energy measurement, direct and indirect pricing, factors affecting the basal metabolism, the influence of weather conditions on nutritional utilization	Theoretical lectures	Theoretical quiz
The ninth	(2) hours theoretical	About the concept of animal behavior, differences of behavior between varieties, domestication, comfort and welfare of the animal, How can social behavior problems be analyzed, general behaviors in cattle	Theoretical lectures	Theoretical quiz
The tenth	(2) hours theoretical	Birthing behavior (before and after), the bond between the cow and the newborn, the cow's behavior towards the newborn, the newborn's behavior towards the mother, artificial care, social ranking in calves	Theoretical lectures	Theoretical quiz
The eleventh	(2) hours theoretical	Lactation problems, adoption of calves by lactating cows, treatment of surplus calves, behavior when breeding	Theoretical lectures	Theoretical quiz

		signs of estrus, insemination		
The twelfth	(2) hours theoretical	Rumination behavior and drinking water, sleeping, driving, social overcoming, problems of large herds, behavior during milking, training of herds, behavior of sheep and goats	Theoretical lectures	Theoretical quiz
The thirteenth	(2) hours theoretical	Behavioral overview of poultry, jungle chickens, nervous system, senses, sight, smell, laying eggs, social behavior	Theoretical lectures	Theoretical quiz
The Fourteenth	(2) hours theoretical	Behavior in the embryonic years, behavior at hatching , tracking, fear , the ratio between feed and water , learning and ability to memorize, activity and movement, social behavior	Theoretical lectures	Theoretical quiz
The fifteenth	(2) hours theoretical	Migratory behaviors of birds, distinguishing individuals, pecking, social ladder, sand pigeons, grooming and feather care, sleeping, caution, beak trimming, crushed eggs, laying eggs on the ground, catching birds, transportation and slaughter	Theoretical lectures	Theoretical quiz

593- EducationalCollage of Agriculture-Wasit University

institution:	
594- Scientific department / Center:	Animal production
595- Course name:	Design and analysis of experiments
596 Course code:	EXDA 316
597-Number of academic units:	3.5
598- Available forms of attendance:	Presence
599- Semester / year:	The third year - the autumn semester
600- Number of academic hours (total):	(2) hours theoretical + (3) hours practical = (5) hours per week
601- Date of preparation of this description:	12 / 2 / 2024
602- Name of the course administrator:	Dr. Riyad Jabbar Mansour
603- Course objectives	It is necessary for the student to get acquainted with many types of designs, as for each experiment, how to test the morale of each mathematical model, tests are conducted before the experiment and tests are proposed after the experiment
604- Teaching and learning methods:	The purpose of providing theoretical lectures to deliver information to students through the following means: (blackboard, data projector, interactive lecture, educational video presentation). The application of practical lectures through observations and interaction with field or laboratory aspects.
605- Evaluation methods:	Take quick daily exams. The evaluation of students through the submission of Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam.
606- Infrastructure:	Required course books: The Book of design and analysis of agricultural experiments Dr. Khasha Mohammed Al-Rawi Main references (sources): introduction to statistics by Dr. Khasha Mohammed Al-Rawi Books and references that are recommended (scientific journals, reports).

		Find electronic references	, Internet sites.			
607- Evaluation of the		Theoretical exam (30 points) + practical exam (20 points) =				
course:		(50 points) + (50 points) final exam				
608- Cours	e structure:					
W/1-	TT	Name of the unit or	Method of	Evaluation		
week	Hours	subject	Education	method		
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Some statistical terms and concepts related to the science of design and analysis of experiments	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports		
	(2) hours		Theoretical	Theoretical		
The	(2) nours	Complete random	lectures	quiz		
second	(3) hours	design	Practical lectures	Practical quiz		
second	practical		Laboratory	Scientific		
	practical		experiments	Reports		
	(2) hours	Sector design	Theoretical	Theoretical		
	(2) hours theoretical (3) hours practical		lectures	quiz		
The third			Practical lectures	Practical quiz		
			Laboratory	Scientific		
	Francisco		experiments	Reports		
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>		Theoretical	Theoretical		
		Multiple comparisons of	lectures	quiz		
The fourth		averages	Practical lectures	Practical quiz		
			Laboratory	Scientific		
			experiments	Reports		
	(2) hours		Theoretical	Theoretical		
<b>T</b> 1 (101	theoretical	Some statistical	lectures	quiz		
The fifth	(3) hours	concepts	Practical lectures	Practical quiz		
	practical		Laboratory	Scientific		
	-		experiments	Reports		
	(2) hours		I heoretical	I heoretical		
The size 1	theoretical	Design of complete	Dreatical last	quiz		
The sixth	(3) hours	random sectors	I aboratory	Practical quiz		
	practical		Laboratory	Deports		
The	(2) hours		Theoretical	Theoretical		
1110 Seventh	(2) nours	Latin square design	lectures			
Seventh	ineoretical		iectures	quiz		

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	-		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The eighth	theoretical	Analysis of covariance	Practical lectures	Practical quiz
riie eightii	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The ninth	(2) hereit	Analysis of covariance	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours		lectures	quiz
The tenth	(2) hours	Single contrast analysis	Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical (3) hours practical	Alanova schedule	lectures	quiz
lavonth			Practical lectures	Practical quiz
eleventii			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
1 llc	(2) hours	Testing hypotheses	Practical lectures	Practical quiz
twentin	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
thirteenth	(3) hours	The Duncan test	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	The least significant	lectures	quiz
Fourteenth	(3) hours	difference test	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports
The	(2) hours	Toki's test	Theoretical	Theoretical

fifteenth	theoretical	lectu	ures	quiz
	(3) hours	Prac	ctical lectures	Practical quiz
	practical	Lab	oratory	Scientific
		expe	eriments	Reports

609- Educational	Collage of Agriculture-Wasit University
institution:	Conage of Agriculture- wast Oniversity
610- Scientific department	Animal production
/ Center:	Annual production
611- Course name:	Medical and veterinary insects
612- Course code:	MVIN 317
613-Number of academic	2.5
units:	5.5
614- Available forms of attendance:	Presence
615- Semester / year:	The third year - the autumn semester
616- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per
hours (total):	week
617- Date of preparation of	12/2/2024
this description:	12/2/2024
618- Name of the course	Dr. Oais Meri
administrator:	DI. Qais Meri
	The aim of the student is to familiarize himself with the
619- Course objectives	concept of medical and Veterinary Entomology, to learn
01) Course objectives	about the mechanisms of protecting agricultural animals and
	humans from diseases and to prevent
	The purpose of providing theoretical lectures to deliver
	information to students through the following means:
620- Teaching and learning	(blackboard, data projector, interactive lecture, educational
methods:	video presentation).
	Apply practical lectures through observations and interaction
	with field or Laboratory aspects.
	Take quick daily exams.
	The evaluation of students through the submission of
621- Evaluation methods:	Scientific Reports and oral questions.
	Take the monthly exams.
	Conducting practical examinations.
	Just take the final exam.
622- Infrastructure:	The required prescribed books $\Box$ The Book of medical and

		veterinary entomology I	Dr. Jalil Abu al-Ha			
		The main references (sources) are: books				
		Books and references the	at are recommended	(scientific		
		journals, reports).				
		Find electronic reference	es, Internet sites.			
623- Evalua	tion of the	Theoretical exam (30 po	ints) + practical examines	m(20  points) =		
course:		(50  points) + (50  point)	s) final exam			
624- Course	e structure:					
Week	Hours	Name of the unit or	Method of	Evaluation		
WEEK	110015	subject	Education	method		
	(2) hours		Theoretical	Theoretical		
	(2) nours	The veterinary	lectures	quiz		
The first	(2) hours	importance of insects	Practical lectures	Practical quiz		
	(3) Hours	importance of msects	Laboratory	Scientific		
	practical		experiments	Reports		
	(2) hours		Theoretical	Theoretical		
	(2) nours	Insects are carriers of pathogens	lectures	quiz		
The second	(3) hours practical		Practical lectures	Practical quiz		
			Laboratory	Scientific		
			experiments	Reports		
	(2) hours		Theoretical	Theoretical		
	(2) hours theoretical (3) hours practical	Ectoparasites : sucking lice	lectures	quiz		
The third			Practical lectures	Practical quiz		
			Laboratory	Scientific		
			experiments	Reports		
	(2) hours		Theoretical	Theoretical		
	theoretical	Estamonositas e nodant	lectures	quiz		
The fourth	(3) hours	Lieo	Practical lectures	Practical quiz		
	practical	IICC	Laboratory	Scientific		
			experiments	Reports		
	(2) hours		Theoretical	Theoretical		
	(2) nours	The medical and	lectures	quiz		
The fifth	(2) hours	veterinary importance	Practical lectures	Practical quiz		
	(3) Hours	of fleas	Laboratory	Scientific		
	practical		experiments	Reports		
	(2) hours		Theoretical	Theoretical		
The givth	theoretical	The veterinary	lectures	quiz		
	(3) hours	importance of flies	Practical lectures	Practical quiz		
	practical		Laboratory	Scientific		

			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	The veterinary	lectures	quiz
1 ne Souonth	(2) hours	importance of blood-	Practical lectures	Practical quiz
Seventin	(3) nours	sucking flies	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Internal parasites :	lectures	quiz
The eighth	(3) hours	myiasis and	Practical lectures	Practical quiz
	(3) nours	toxoplasmosis	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Veterinary importance	lectures	quiz
The ninth	(3) hours	of tick parasites	Practical lectures	Practical quiz
	(3) nours	of the parasites	Laboratory	Scientific
	practical		experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>		Theoretical	Theoretical
		Ticks are carriers of pathogens	lectures	quiz
The tenth			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	The veterinary	lectures	quiz
eleventh	(3) hours	importance of Dream	Practical lectures	Practical quiz
eleventii	practical	parasites	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Insects are carriers of	lectures	quiz
The twelfth	(3) hours	nathogens	Practical lectures	Practical quiz
	(3) nours	pathogens	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
thirteenth	(2) hours	Babesia	Practical lectures	Practical quiz
unnteentin	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
The	(2) hours		Theoretical	Theoretical
Fourteenth	theoretical	Theileria	lectures	quiz
	(3) hours		Practical lectures	Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
(2) 1	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
fifteenth (3) hours practical	(2) hours	Trypanosoma	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports

625- Educational institution:	Collage of Agriculture-Wasit University
626- Scientific department /	Animal production
Center:	
627- Course name:	Poultry physiology
628- Course code:	POPH 318
629-Number of academic	3.5
units:	5.5
630- Available forms of	Drasanca
attendance:	
631- Semester / year:	The third year - the autumn semester
632- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours
hours (total):	per week
633- Date of preparation of	12/2/2024
this description:	
634- Name of the course	Dr. Mohammad Ali Makki Jassim
administrator:	DI. Wohanimad Ali Wakki Jassini
	The aim of the student is to identify the components of
635- Course objectives	blood in poultry birds, the lymphatic system, and various
	body systems in poultry birds
	The purpose of providing theoretical lectures to deliver
	information to students through the following means:
636- Teaching and learning	(blackboard, data projector, interactive lecture,
methods:	educational video presentation).
	The application of practical lectures through observations
	and interaction with field or laboratory aspects.
	Take quick daily exams.
	The evaluation of students through the submission of
637- Evaluation methods:	Scientific Reports and oral questions.
	Take the monthly exams.
	Conducting practical examinations.

Just take the final exam.								
		Among the required prescribed books: The Book of						
		poultry birds, Dr. Dia Al-Hasani						
638 Infras	tructure		The main references (	sources):				
030- 1111/48	iluctule.		Books and references	that are recommend	led (scientific			
			journals, reports).					
			Find electron	Find electron				
639- Evalu	ation of the cours	e:	Theoretical exam (30) $= (50, \text{ points}) + (50)$	points) + practical e	exam (20 points			
640 Cours	e structure.		) = (30  points) + (30  points)	points ) iniai exam	L			
		N	ame of the unit or	Method of	Evaluation			
Week	Hours	110	biect	Education	method			
		Su		Theoretical	Theoretical			
	(2) hours			lectures	auiz			
The first	theoretical	Bo	ody fluids	Practical lectures	Practical quiz			
	(3) hours			Laboratory	Scientific			
	practical			experiments	Reports			
				Theoretical	Theoretical			
	(2) hours	Body fluids and blood		lectures	auiz			
The	theoretical			Practical lectures	Practical ouiz			
second	(3) hours practical			Laboratory	Scientific			
				experiments	Reports			
				Theoretical	Theoretical			
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	The heart		lectures	quiz			
The third				Practical lectures	Practical quiz			
				Laboratory	Scientific			
	practical			experiments	Reports			
	(2) hours			Theoretical	Theoretical			
	theoretical	п	• , ,	lectures	quiz			
The fourth	(3) hours	K	espiratory system	Practical lectures	Practical quiz			
	practical			Laboratory	Scientific			
				experiments	Reports			
	(2) here			Theoretical	Theoretical			
	(2) nours	D	animatam anatam	lectures	quiz			
The fifth	(2) hours	K	spiratory system	Practical lectures	Practical quiz			
	(5) nours			Laboratory	Scientific			
	practical			experiments	Reports			
The sixth	(2) hours	U	rinary system	Theoretical	Theoretical			
	theoretical			lectures	quiz			

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	-		experiments	Reports
	(2) 1		Theoretical	Theoretical
<b>T</b> 1	(2) hours		lectures	quiz
The	theoretical	lest l lectures(1 - 6)	Practical lectures	Practical quiz
Seventh	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours		lectures	quiz
The eighth	theoretical	Thermoregulation	Practical lectures	Practical quiz
	(3) hours	device	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The ninth	theoretical	Digestive system	Practical lectures	Practical quiz
	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	The female reproductive system	Theoretical	Theoretical
			lectures	quiz
The tenth			Practical lectures	Practical quiz
			Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	The female reproductive	lectures	quiz
	(3) hours	The female reproductive	Practical lectures	Practical quiz
eleventii	practical	system	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	The male reproductive	lectures	quiz
twolfth	(2) hours	avetom	Practical lectures	Practical quiz
twentin	(3) nours	system	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Test 2 lectures $(7, 11)$	lectures	quiz
thirtaanth	(2) hours	1est 2 lectures(7 - 11)	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
The	(2) hours	Endocrinology	Theoretical	Theoretical

Fourteenth	theoretical		lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) Hours		lectures	quiz
fifteenth	(2) hours	Nervous system	Practical lectures	Practical quiz
meenth	(5) nours		Laboratory	Scientific
	practical		experiments	Reports

641- Educational	Collage of Agriculture-Wasit University	
institution:	Conage of Agriculture- wasit Oniversity	
642- Scientific department	Animal production	
/ Center:	Annual production	
643- Course name:	Poultry products technology	
644- Course code:	POPT 319	
645-Number of academic	2.5	
units:	5.5	
646- Available forms of	Dragon og	
attendance:	Presence	
647- Semester / year:	The third year - the spring semester	
648- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
649- Date of preparation of	12/2/2024	
this description:	12/2/2024	
650- Name of the course	Dr. Abdul Asl Forbon Foro	
administrator:	DI. Abdul Aal Fallali Feza	
	The student should learn about the importance of the poultry	
651- Course objectives	industry and know the nutritional value of poultry products,	
	whether eggs or meat	
	The purpose of providing theoretical lectures to deliver	
	information to students through the following means:	
652- Teaching and learning	(blackboard, data projector, interactive lecture, educational	
methods:	video presentation).	
	The application of practical lectures through observations	
	and interaction with field or laboratory aspects.	
653- Evaluation methods:	Take quick daily exams.	

The evaluation of students through the submission of Scientific Reports and oral questions.Take the monthly exams.Conducting practical examinations.Just take the final exam.			sion of	
654- Infrastructure:		Among the required textbooks: the book of technology of poultry products Dr. Hamdi Al Fayyad The main references (sources) are: books Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.		
655- Evalua course:	tion of the	Theoretical exam (30 point (50 points) + (50 points	nts) + practical exam ) final exam	(20 points ) =
656- Course	structure:	Name of the unit or	Method of	Evaluation
Week	Hours	subject	Education	method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The poultry industry in the new Iraq and the role of the state in achieving food security	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Nutritional value of eggs	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Qualitative measurements of eggs	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Chemistry of eggs and egg products	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific

				Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Egg microbiology	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Egg storage and marketing	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Functional characteristics of eggs	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Chemical properties of eggs	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Poultry meat preparation processes	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Quality of poultry meat	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	(2) hours theoretical	Storage of poultry meat	Theoretical lectures	Theoretical quiz

	(3) hours		Practical lectures	Practical
	practical		Laboratory experiments	quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Microorganisms that grow on poultry products	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Ways of cooking poultry meat	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Sensory tests	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The importance of the availability of types of poultry products	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

657- Educational institution:	Collage of Agriculture-Wasit University
658- Scientific department / Center:	Animal production
659- Course name:	Feed and feed stuff
660- Course code:	FEFE 320
661-Number of academic units:	3.5

662- Availa attendance:	ble forms of	Presence			
663- Semes	ter / year:	The third year - the spring semester			
664- Numbe	er of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per			
hours (total)	):	week			
665- Date o this descript	f preparation of tion:	12 / 2 / 2024			
666- Name administrate	of the course	Dr. Mohammed Abdul Am	nir Rashid		
667- Course	e objectives	It is necessary for the stud concept of animal feed, co digestion assessment	ent to get acquainted parse and concentrate	with the d feed,	
		The purpose of providing	theoretical lectures to	o deliver	
		information to students the	rough the following 1	means:	
668- Teachi	ng and learning	(blackboard, data projecto	r, interactive lecture,	educational	
methods:		video presentation).			
		The application of practical lectures through observations			
		and interaction with field or laboratory aspects.			
		Take quick daily exams.			
		The evaluation of students through the submission of			
660 Evolue	tion mathada	Scientific Reports and oral questions.			
009-Evalua	ation methods.	Take the monthly exams.			
		Conducting practical examinations.			
		Just take the final exam.			
		The required prescribed books $\Box$ The Book of feed and			
		relations of Dr. Mohamed Riad			
670 Infras	tructure	Main references (sources): nutrition books			
070- mmas	inucture.	Books and references that are recommended (scientific			
		journals, reports).			
		Find electronic references, Internet sites.			
671- Evalu	ation of the	Theoretical exam (30 points) + practical exam (20 points) =			
course:		(50  points) + (50  points)	) final exam		
672- Cours	e structure:				
Week	Hours	Name of the unit or	Method of	Evaluation	
	110015	subject	Education	method	
	(2) hours	Feed stuff / types of	Theoretical	Theoretical	
The first	theoretical	Feed stuffs /	lectures	quiz	
	(3) hours	specifications of ideal	Practical lectures	Practical	
	practical	Feed stuffs	Laboratory	quiz	

			experiments	Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Steps of Feed stuff formation	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Factors affecting the nutritional value of feed materials	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Improving the nutritional value of low- quality feed materials	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The first exam	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Feed classification/concentrat ed /coarse	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Food additives	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	(2) hours	Feed	Theoretical	Theoretical

	theoretical (3) hours practical	manufacturing/silage manufacturing/threshing manufacturing	lectures Practical lectures Laboratory experiments	quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Evaluation of feed materials	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The second exam	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Nutritional requirements/protein requirements	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Energy requirements/ requirements for mineral elements and vitamins	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The needs of dairy cows/ the needs of beef cows	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Sheep needs / goat needs	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz

			experiments	Scientific
				Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Business needs / wool production needs	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

673- Educational	Collage of Agriculture-Wasit University	
674- Scientific department	Animal production	
/ Center:		
6/5- Course name:	Animal diseases	
676- Course code:	ANDI 321	
677-Number of academic	3.5	
units:		
678- Available forms of	Drasanca	
attendance:	Tresence	
679- Semester / year:	The third year - the spring semester	
680- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
681- Date of preparation of	12/2/2024	
this description:		
682- Name of the course	Almond Sodale Shool	
administrator:	Anned Sadek Shael	
	The aim of the student is to familiarize himself with the	
	science of Animal Pathology, identify the blindness of	
683- Course objectives	pathological signs and the mechanics of the course of	
	diseases, the mechanisms of protecting agricultural animals	
	and humans from diseases and preventing them.	
	The purpose of providing theoretical lectures to deliver	
	information to students through the following means:	
684- Teaching and learning	(blackboard, data projector, interactive lecture, educational	
methods:	video presentation).	
	The application of practical lectures through observations	
	and interaction with field or laboratory aspects.	

		Take quick daily exams			
685- Evaluation methods:		The evaluation of students through the submission of			
		Scientific Reports and oral questions			
		Take the monthly exemp			
		Conducting practical evan	ningtions		
		Lust take the final exam	limations.		
		The required prescribed by	ooka. The Dook of A	nimal	
		Dethology Dr. Mortoza At	ouks. The Dook of A		
		The main references (sour	autoria de la coltra		
686- Infrastr	ucture:	The main references (sour	ces) are: books	ai antifi a	
		Books and references that	are recommended (s	scientific	
		journais, reports).	T		
		Find electronic references	, Internet sites.	(20 $(1)$	
68/- Evaluat	tion of the	Theoretical exam $(30 \text{ point})$	r(s) + practical exam	(20  points) =	
course:		(50  points) + (50  points)	) final exam		
688- Course	structure:				
Week	Hours	Name of the unit or	Method of	Evaluation	
		subject	Education	method	
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Introduction to Animal Pathology	Theoretical lectures Practical lectures Laboratory experiments	Theoretical	
				quiz	
The first				Practical	
				quiz	
				Scientific	
				Reports	
			Theoretical	Theoretical	
	(2) hours	Animal diseases and	lectures	quiz	
The second	theoretical	resources of the	Practical lectures	Practical	
	(3) hours	economy	Laboratory	quiz	
	practical	conomy	experiments	Scientific	
				Reports	
			Theoretical	Theoretical	
	(2) hours	Classification of	lectures	quiz	
The third	theoretical	disassas by their	Practical lasturas	Practical	
The unit	(3) hours	historical sticle sy	Laboratory	quiz	
	practical	biological etiology		Scientific	
			experiments	Reports	
	(2) hours		Theoretical	Theoretical	
The format	theoretical	Dow motorials	lectures	quiz	
The fourth	(3) hours	Raw materials	Practical lectures	Practical	
	practical		Laboratory	quiz	

			experiments	Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Forms of the disease	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Etiology of the disease	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	How to stop the disease /defensive means	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Immunity	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Pathological relationships	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The most important bacterial field diseases	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The	(2) hours	The most important	Theoretical	Theoretical

eleventh	theoretical	viral field diseases	lectures	quiz
	(3) hours		Practical lectures	Practical
	practical		Laboratory	quiz
			experiments	Scientific
				Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The most important external parasitic diseases	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Hematogenous parasitic diseases	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Internal parasitic diseases	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Actinomycosis mushroom disease	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

689- Educational	Collage of Agriculture-Wasit University
institution:	Conage of Agriculture- wast Oniversity
690- Scientific department	Animal production
/ Center:	Animal production
691- Course name:	Animal breeding
692- Course code:	ANBR 322
693-Number of academic	3.5
units:	5.5

694- Availab attendance:	le forms of	Presence		
695- Semest	er / year:	The third year - the spring semester		
696- Number	r of academic	(2) hours theoretical $+(3)$	) hours practical = $($	5) hours per
hours (total):	:	week		
697- Date of this descripti	preparation of ion:	12 / 2 / 2024		
698- Name of the course administrator:Dr. Ghassan Mohammed Hassan				
699- Course	objectives	The aim of the student is t animal husbandry and imp internal and external educ	to get acquainted with provement, types of s ation	h the basics of selection,
		The purpose of providing	theoretical lectures to	o deliver
		information to students the	rough the following	means:
700- Teachin	ng and learning	(blackboard, data projecto	r, interactive lecture,	educational
methods:		video presentation).		
		The application of practical lectures through observations		
		and interaction with field or laboratory aspects.		
		Take quick daily exams.		
		The evaluation of students through the submission of		
701 Evaluat	ion methods.	Scientific Reports and oral questions.		
701- Evaluat	non methous.	Take the monthly exams.		
		Conducting practical examinations.		
		Just take the final exam.		
		The required prescribed books $\Box$ The Book of animal		
		breeding and improvement, Dr. Salah Jalal, Dr. Hassan		
		Karam		
702- Infrastr	ructure:	Main references (sources): genetics books		
		Books and references that are recommended (scientific		
		journals, reports).		
		Find electronic references, Internet sites.		
703- Evalua	tion of the	Theoretical exam (30 points) + practical exam (20 points) =		
course:		(50  points) + (50  points)	) final exam	
704- Course structure:				
Week	Hours	Name of the unit or	Method of	Evaluation
Week	110015	subject	Education	method
	(2) hours	The foundations of	Theoretical	Theoretical
The first	theoretical	animal breeding and	lectures	quiz
	(3) hours	improvement	Practical lectures	Practical

	practical		Laboratory experiments	quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	A brief history of the development of the science of animal husbandry and improvement	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	What is the science of animal breeding and improvement	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Definition of the breed	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Environment and heredity-similarity and contrast-the effect of a common environment – the effect of a common genetic source	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Types of variability- environmental, genetic	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Quantitative and qualitative qualities and differences between them	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific

				Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Gene replication – factors affecting it	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Genetic variability – division of genetic variability	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The genetic equivalent	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The iterative coefficient	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Methods for estimating the genetic equivalent – the frequency coefficient	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Identical twins and the estimation of their genetic equivalent	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	(2) hours theoretical	Why appreciate the genetic equivalent	Theoretical lectures	Theoretical quiz

	(3) hours		Practical lectures	Practical
	practical		Laboratory	quiz
			experiments	Scientific
				Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Genetic and phenotypic Association	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

705- Educational	Collage of Agriculture-Wasit University	
institution:	Conage of Agriculture- wash Oniversity	
706- Scientific department	Animal production	
/ Center:	Animal production	
707- Course name:	Animal physiology	
708- Course code:	REPH 323	
709-Number of academic	2 5	
units:	3.3	
710- Available forms of	Presence	
attendance:	riesence	
711- Semester / year:	The third year - the spring semester	
712- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
713- Date of preparation of	12/2/2024	
this description:	12/2/2024	
714- Name of the course	Dr. Mohammed Abdul Amir Bashid	
administrator:	Di. Monamined Abdul Alim Kashid	
	The aim is for the student to learn about reproduction and	
715- Course objectives	related hormones, sexual maturity, sperm and egg	
	transmission, fertilization, pregnancy and childbirth	
	The purpose of providing theoretical lectures to deliver	
	information to students through the following means:	
716- Teaching and learning	(blackboard, data projector, interactive lecture, educational	
methods:	video presentation).	
	The application of practical lectures through observations	
	and interaction with field or laboratory aspects.	
717 Evaluation methods:	Take quick daily exams.	
	The evaluation of students through the submission of	

		Scientific Reports and or	al questions.		
		Conducting practical examinations			
		Conducting practical examinations.			
		The required gragewiked	h a a l ra ana, 41 a h a a l r	of non no du otivo	
		The required prescribed	books are: the book		
		Ishaq	insemination Dr. M	unammad All	
718- Infrast	ructure:	The main references (sources) are: books			
		Books and references that	at are recommended	(scientific	
		journals, reports).			
		Find electronic reference	es, Internet sites.		
719- Evalua	tion of the	Theoretical exam (30 po	ints) + practical examines	m(20  points) =	
course:		(50  points) + (50  point)	s) final exam		
720- Course	e structure:		·		
XX7 1	11	Name of the unit or	Method of	Evaluation	
week	Hours	subject	Education	method	
	(2) 1		Theoretical	Theoretical	
	(2) nours	<b>T</b> 1 1 1 4	lectures	quiz	
The first	theoretical (3) hours practical	The male reproductive system	Practical lectures	Practical quiz	
			Laboratory	Scientific	
			experiments	Reports	
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Its anatomy,	Theoretical	Theoretical	
		functions,	lectures	quiz	
The second		organization and	Practical lectures	Practical quiz	
		process of formation	Laboratory	Scientific	
		of spermatozoa	experiments	Reports	
	(2) 1		Theoretical	Theoretical	
	(2) hours	TT1 C 1	lectures	quiz	
The third	theoretical	I ne remale	Practical lectures	Practical quiz	
	(3) hours	reproductive system	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	theoretical	Its anatomy, functions,	lectures	quiz	
The fourth	(3) hours	organization and	Practical lectures	Practical quiz	
	practical	process of oogenesis".	Laboratory	Scientific	
			experiments	Reports	
	(2) hours	Donnaductiva	Theoretical	Theoretical	
The fifth	theoretical	reproductive	lectures	quiz	
	(3) hours	regulating normones	Practical lectures	Practical quiz	

	practical		Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>		Theoretical	Theoretical
		Endocrine glands,	lectures	quiz
The sixth		nypoinaiamus,	Practical lectures	Practical quiz
		pituitary gland, pineal	Laboratory	Scientific
	practical	gland Etc.	experiments	Reports
	(2) 1		Theoretical	Theoretical
<b>T</b> 1	(2) hours		lectures	quiz
The	theoretical	Puberty and sexual	Practical lectures	Practical quiz
Seventh	(3) hours	maturity	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The eighth	theoretical	Reproductive cycle	Practical lectures	Practical quiz
, C	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	Gamete production and transport	lectures	quiz
The ninth			Practical lectures	Practical quiz
			Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours	Fertilization and pregnancy	lectures	quiz
The tenth	(3) hours practical		Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical		lectures	quiz
The	(3) hours	Pregnancy and	Practical lectures	Practical quiz
eleventh	practical	childbirth	Laboratory	Scientific
	1		experiments	Reports
	(2) 1	Artificial insemination	Theoretical	Theoretical
	(2) hours	(introduction, semen	lectures	quiz
The twelfth	theoretical	collection and	Practical lectures	Practical quiz
	(3) hours	artificial insemination	Laboratory	Scientific
	practical	techniques)	experiments	Reports
The	(2) hours	Practical anatomy of	Theoretical	Theoretical
	× /	5	1	
	(3) hours	system + the process	Practical lectures	Practical quiz
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	practical	of spermatogenesis	Laboratory	Scientific
			experiments	Reports
	(2) hours	Practical anatomy of	Theoretical	Theoretical
The	(2) nours	the female	lectures	quiz
Fourtoonth	(3) hours practical	reproductive system +	Practical lectures	Practical quiz
Fourteentin		the process of	Laboratory	Scientific
		oogenesis	experiments	Reports
	(2) hours	Artificial incomination	Theoretical	Theoretical
The	(2) hours theoretical	in sheep and goats and the process of pregnancy screening	lectures	quiz
fifteenth			Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports

721- Educational institution:	Collage of Agriculture-Wasit University	
722- Scientific department /	Animal production	
Center:	Animal production	
723- Course name:	English language (3)	
724- Course code:	ENGL 301	
725-Number of academic	2	
units:		
726- Available forms of	Presence	
attendance:		
727- Semester / year:	The third year - the autumn semester	
728- Number of academic	(2) hours theoretical = (2) hours per week	
hours (total):		
729- Date of preparation of	12 / 2 / 2024	
this description:		
730- Name of the course	Wnnas shval vapper	
administrator:		
731- Course objectives	The ability to learn English at the second level is	
	characterized by its vocabulary, writing and reading style	
	The purpose of providing theoretical lectures to deliver	
732- Teaching and learning	information to students through the following means:	
methods:	(blackboard, data projector, interactive lecture, educational	
	video presentation).	
	Take quick daily exams.	
733- Evaluation methods:	The evaluation of students through the submission of	
	Scientific Reports and oral questions.	

		Take the monthly exams.Just take the final exam.			
		Required course books: English language textbook			
		Writing Academic English, Level 3 by Alice Oshima			
		Main references (sources	s): source books of	the language	
734- Infrast	ructure:	Books and references that	at are recommende	d (scientific	
		journals, reports).			
		Search for electronic refe	erences, Internet si	tes.	
735- Evalua	tion of the	Theoretical exam (50 por	ints) =(50 points)	+ (50 points )	
course:		final exam	, , ,		
736- Course	e structure:				
XX7 1		Name of the unit or	Method of	Evaluation	
Week	Hours	subject	Education	method	
The first	(2) hours	English preposition	Theoretical	Theoretical	
The first	theoretical		lectures	quiz	
The second	(2) hours	Passive voice	Theoretical	Theoretical	
The second	theoretical		lectures	quiz	
The third	(2) hours	Negative	Theoretical	Theoretical	
The unita	theoretical		lectures	quiz	
The fourth	(2) hours	If clause ( conditional)	Theoretical	Theoretical	
The Iourui	theoretical	sentences	lectures	quiz	
The fifth	(2) hours	Kinds of sentences	Theoretical	Theoretical	
The mu	theoretical		lectures	quiz	
The sixth	(2) hours	A- Simple tense	Theoretical	Theoretical	
The sixth	theoretical		lectures	quiz	
The	(2) hours	B-compound tense	Theoretical	Theoretical	
Seventh	theoretical		lectures	quiz	
The eighth	(2) hours	c- complex tense	Theoretical	Theoretical	
	theoretical		lectures	quiz	
The ninth	(2) hours	The use of so 'and	Theoretical	Theoretical	
	theoretical	neither'	lectures	quiz	
The tenth	(2) hours	Singular	Theoretical	Theoretical	
	theoretical		lectures	quiz	
The	(2) hours	plural	Theoretical	Theoretical	
eleventh	theoretical	lectures quiz		quiz	
The twelfth	(2) hours	How to answer	Theoretical	Theoretical	
	theoretical	causations	lectures	quiz	
The	(2) hours	Number + Roman	Theoretical	Theoretical	
thirteenth	theoretical	Numerals	lectures	quiz	

The	(2) hours	Every day sentences	Theoretical	Theoretical
Fourteenth	theoretical		lectures	quiz
The	(2) hours	The verb to be	Theoretical	Theoretical
fifteenth	theoretical		lectures	quiz

737- Educational	Collage of Agriculture-Wasit University	
institution:	Conage of Agriculture- wasit Oniversity	
738- Scientific department	Animal production	
/ Center:	Animal production	
739- Course name:	Poultry nutrition	
740- Course code:	PONU 411	
741-Number of academic	2.5	
units:	3.3	
742- Available forms of	Proconac	
attendance:	riesence	
743- Semester / year:	The fourth year - the autumn semester	
744- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
745- Date of preparation of	12/2/2024	
this description:	12/2/2024	
746- Name of the course	Dr. Mohammad Ali Makki Jaggim	
administrator:	DI. Monanimad Ali Marki Jassini	
	It is necessary for the student to learn about the importance	
747- Course objectives	of poultry nutrition, nutrition elements represented by	
	energy, proteins, minerals, digestion and metabolism	
	The purpose of providing theoretical lectures to deliver	
	information to students through the following means:	
748- Teaching and learning	(blackboard, data projector, interactive lecture, educational	
methods:	video presentation).	
	The application of practical lectures through observations	
	and interaction with field or laboratory aspects.	
	Take quick daily exams.	
	The evaluation of students through the submission of	
740 Evaluation matheday	Scientific Reports and oral questions.	
749- Evaluation methods.	Take the monthly exams.	
	Conducting practical examinations.	
	How to take the final exam.	
750- Infrastructure:	Required prescribed books $\Box$ poultry nutrition book by Dr.	

		Ali al-Yasin, Dr. Mohammed Hassan Abdul Abbas The main references (sources) are: books			
		Books and references that are recommended (scientific			
		journals, reports).	Ň		
		Find electronic references	, Internet sites.		
751- Evalu	ation of the	Theoretical exam (30 poin	ts) + practical exam	(20  points) =	
course:		(50  points) + (50  points)	) final exam		
752- Cours	e structure:		, 		
Wash	Hanna	Name of the unit or	Method of	Evaluation	
week	nours	subject	Education	method	
	(2) hours		Theoretical	Theoretical	
	(2) nours	Energy .Its sources its	lectures	quiz	
The first	(2) hours	division .Influencing	Practical lectures	Practical quiz	
	(3) nours	factors	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours	Proteins their types and	Theoretical	Theoretical	
The	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	classification, the effect of their increase and decrease	lectures	quiz	
second			Practical lectures	Practical quiz	
second			Laboratory	Scientific	
			experiments	Reports	
	(2) hours	Proteins and factors influencing their utilization	Theoretical	Theoretical	
	(2) hours theoretical (3) hours practical		lectures	quiz	
The third			Practical lectures	Practical quiz	
			Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	theoretical	Vitamins –their	lectures	quiz	
The fourth	(3) hours practical	classification and factors	Practical lectures	Practical quiz	
		influencing their needs	Laboratory	Scientific	
			experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	(2) nours	Minerals classified by	lectures	quiz	
The fifth	(3) hours	the effect of their	Practical lectures	Practical quiz	
	(3) nours	increase and decrease	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours	The importance of water	Theoretical	Theoretical	
The sivth	theoretical (3) hours practical	its functions, sources and	lectures	quiz	
			Practical lectures	Practical quiz	
			Laboratory	Scientific	

			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
1 IIC Correctle	(2) hours	First monthly exam	Practical lectures	Practical quiz
Sevenui	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Digestion and	lectures	quiz
The eighth	(3) hours	metabolism-digestive	Practical lectures	Practical quiz
	(5) nours	system-its functions	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Final products of	lectures	quiz
The ninth	(3) hours	digestion –factors	Practical lectures	Practical quiz
	practical	affecting digestion	Laboratory	Scientific
	practical		experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Primary feed materials, their sources and types	Theoretical	Theoretical
			lectures	quiz
The tenth			Practical lectures	Practical quiz
			Laboratory	Scientific
	pruetieur		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	vitamins, mineral	lectures	quiz
eleventh	(3) hours	elements and feed	Practical lectures	Practical quiz
	practical	additives	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	Feed concentrates,	lectures	quiz
twelfth	(3) hours	mixtures and feed	Practical lectures	Practical quiz
	practical	accessories	Laboratory	Scientific
	pruetieur		experiments	Reports
	(2) hours	Production and	Theoretical	Theoretical
The	theoretical	manufacturing of feed	lectures	quiz
thirteenth	(3) hours	feed laboratory its	Practical lectures	Practical quiz
	practical	importance and divisions	Laboratory	Scientific
	r		experiments	Reports
The	(2) hours	Laboratory maintenance	Theoretical	Theoretical
Fourteenth	theoretical	relational formation,	lectures	quiz
	(3) hours	synthesis and quality	Practical lectures	Practical quiz

	practical	control	Laboratory	Scientific
			experiments	Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Protein concentrates and their specifications	Theoretical	Theoretical
			lectures	quiz
			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports

Collage of Agriculture-Wasit University	
Animal production	
Poultry breeding	
POBR 412	
3.5	
5.5	
Brasanaa	
Fresence	
The fourth year - the autumn semester	
(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
week	
12 / 2 / 2024	
Dr. Chassen Mehemmed Hassen	
DI. Onassan Monammed Hassan	
The aim of the student is to get acquainted with the	
development of the general breeding and improvement of	
domestic birds, in-depth genetics of the frozen moon and the	
color of feathers, the inheritance of Clans and how to	
estimate the genetic features of the clan	
The purpose of providing theoretical lectures to deliver	
information to students through the following means:	
(blackboard, data projector, interactive lecture, educational	
video presentation).	
The application of practical lectures through observations	
and interaction with field or laboratory aspects.	
Take quick daily exams.	
The evaluation of students through the submission of	

Scientific Reports and oral quest Take the monthly exams. Conducting practical examinatio Just take the final exam.			questions. nations.	
766- Infrastructure:		Required textbooks: poultry breeding and improvement book by Dr. Nahel Muhammad Ali Main references (sources): genetics books Books and references that are recommended (scientific journals, reports). Find electronic references. Internet sites.		
767- Evalu course:	ation of the	Theoretical exam (30 points (50 points) + (50 points)	s) + practical exan final exam	n (20 points ) =
Week	Hours	Name of the unit or subject	Method of Education	Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The development of the science of breeding and improvement of poultry – the composition of breeds – the origin and classification of poultry	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Genus Gullus and wild species . Theories of the origins of domesticated chickens . The composition of breeds . Classification of chickens, their sections, features of each section and examples of it.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	General principles in heredity-the degree of dominance of the gene - gene interaction - modifications of the Mende lineage of one and two pairs of genes	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	(2) hours theoretical	Sex-related genetics : sex chromosomes and their	Theoretical lectures	Theoretical quiz

	(3) hours	systems-sex	Practical	Practical quiz
	practical	determination-sex-related	lectures	Scientific
		traits (striped feathers –	Laboratory	Reports
		slow feathering – silver	experiments	
		and gold feathers-dwarf		
		chickens-albinos) (singing		
		: sex chromosomes are		
		doubled(		
			Theoretical	Theoretical
	(2) hours		lectures	quiz
The fifth	theoretical	Deadly genes	Practical	Practical quiz
	(3) hours		lectures	Scientific
	practical		Laboratory	Reports
			experiments	1
	(2) hours	Its definition. Divide	Incoretical	Theoretical
	(2) nours	degree of their mether and	Proctical	quiz
The sixth	(2) hours	augree of their mother and	lastures	Practical quiz
	(3) nours	examples of each section	Laboratory	Scientific
	practical	and its neredity. How to	Laboratory	Reports
		Heredity: skin color	experiments	
		nlumage qualities		
		color. Inheritance of		
		plumage colors( white		
		red black) Color		
		determinations are the	Theoretical	Theoretical
	(2) hours	distribution of color on the	lectures	
The	theoretical	hird's hady and	Practical	quiz Practical quiz
Seventh	(3) hours	determinations of the	lectures	Flactical quiz
	practical	determinations of the	Laboratory	Ben anta
		fasther and its haradity	experiments	Reports
		Defermations and		
		deformations and		
		deformations of feathers.		
		growth		
	(2) hours	510 W 01	Theoretical	Theoretical
	theoretical	Heredity · custom shape	lectures	auiz
The eighth	(3) hours	deformed legs and snur	Practical	Practical ouiz
	practical		lectures	Scientific
	ruetteur		10010105	

			Laboratory experiments	Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Inheritance of Clans : gene duplication and factors affecting it— the rate and variation in the clan - the genetic value of the genotype – the genetic components of the variation	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Estimation of Hereditary features of the clan :	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	First: the genetic equivalent: its definition - its importance and uses - methods of estimation	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Second: genetic, environmental and phenotypic Association: definition - importance and uses - methods of estimation	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Election: its definition- election for one attribute – election for several attributes-factors affecting the efficiency of the election	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Mating systems :	Theoretical lectures Practical lectures Laboratory	Theoretical quiz Practical quiz Scientific Reports

		First: mating of relatives:	experiments	
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	estimating the kinship coefficient-estimating the coefficient of internal education-types of internal education-the harms of internal education-types of internal education	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

769- Educational	Collage of Agriculture-Wasit University	
institution:	Conage of Agriculture- wask Oniversity	
770- Scientific department	Animal production	
/ Center:	Animai production	
771- Course name:	Cattle production	
772- Course code:	DCPR 413	
773-Number of academic	3.5	
units:	5.5	
774- Available forms of	Presence	
attendance:	riesence	
775- Semester / year:	The fourth year - the autumn semester	
776- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
777- Date of preparation of	12/2/2024	
this description:	12/2/2024	
778- Name of the course	Dr. Ali Avad Hussein	
administrator:	DI. All Ayad Husselli	
	The student should learn about the importance of cattle, their	
779 Course objectives	breeds, types of Housing and all the necessary operations for	
779- Course objectives	them, as well as the operations of automated milk and the	
	anatomy of the mammary gland	
	The purpose of providing theoretical lectures to deliver	
	information to students through the following means:	
780- Teaching and learning	(blackboard, data projector, interactive lecture, educational	
methods:	video presentation).	
	The application of practical lectures through observations	
	and interaction with field or laboratory aspects.	
781- Evaluation methods:	Take quick daily exams.	

The evaluation of students through the submission of Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam.			ssion of	
782- Infras 783- Evalu	tructure: ation of the	The required prescribed books □The Book of milk cattleproduction by Dr. The spokesman of al-Qudsi, Jalal ElijahMain references (sources): dynastic booksBooks and references that are recommended (scientificjournals, reports).Find electronic references, Internet sites.Theoretical exam (30 points) + practical exam (20 points ) =		
course:		(50  points) + (50  points)	) final exam	
784- Cours	e structure:		M (1 1 C	
Week	Hours	Name of the unit or	Method of	Evaluation
		subject	Education	Theoretical
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The economic importance of animal products	lectures Practical lectures Laboratory experiments	quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The importance of cattle breeding	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The modern development of livestock in the world	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Factors that led to the decline in livestock production in Iraq	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	Evaluation of dairy cows	Theoretical lectures Practical lectures	Theoretical quiz Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
			Theoretical	Theoretical
	(2) hours		lectures	quiz
The sixth	theoretical	The spread of the milk	Practical lectures	Practical quiz
	(3) hours	production farm	Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours		lectures	quiz
The	theoretical	Reproduction in cattle	Practical lectures	Practical quiz
Seventh	(3) hours	1	Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours	Genetic factors	lectures	quiz
The eighth	theoretical	affecting milk	Practical lectures	Practical quiz
	(3) hours	production	Laboratory	Scientific
	practical	1	experiments	Reports
			Theoretical	Theoretical
	(2) hours	Environmental factors	lectures	quiz
The ninth	(3) hours	affecting milk	Practical lectures	Practical quiz
		production	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours	The development of the	lectures	quiz
The tenth	theoretical	mammary gland in	Practical lectures	Practical quiz
	(3) hours	cattle	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
T1	theoretical	Hormonal control of the	lectures	quiz
	(3) hours	development of the	Practical lectures	Practical quiz
eleventh	practical	mammary gland	Laboratory	Scientific
			experiments	Reports
	(2) have		Theoretical	Theoretical
The	(2) nours	The masses of wills	lectures	quiz
1 IIC	(2) hours	formation	Practical lectures	Practical quiz
twenth	(3) nours	formation	Laboratory	Scientific
	practical		experiments	Reports
The	(2) hours	Hormonal control of	Theoretical	Theoretical
thirteenth	theoretical	milk production	lectures	quiz

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Field operations	lectures	quiz
Fourtoonth	Fourteenth (3) hours	conducted in the fields	Practical lectures	Practical quiz
Fourteentii		of dairy cattle	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The fifteenth	(2) hours theoretical (3) hours practical		lectures	quiz
		Breeds of milk cattle	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports

institution:Conage of Agreentation Wash Oniversity786- Scientific department / Center:Animal production787- Course name:Meat production788- Course code:MEPR 414789-Number of academic units:3.5790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	785- Educational	Collage of Agriculture-Wasit University		
786- Scientific department / Center:Animal production787- Course name:Meat production788- Course code:MEPR 414789-Number of academic units:3.5790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	institution:			
/ Center:/ Hinna production787- Course name:Meat production788- Course code:MEPR 414789-Number of academic units:3.5790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	786- Scientific department	Animal production		
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788- Course code:MEPR 414789-Number of academic units:3.5790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad Hussein795- Course objectivesThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	787- Course name:	Meat production		
789-Number of academic units:3.5790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad Hussein795- Course objectivesThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	788- Course code:	MEPR 414		
units:5.5790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad Hussein795- Course objectivesThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	789-Number of academic	3.5		
790- Available forms of attendance:Presence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad Hussein795- Course objectivesThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	units:	3.5		
attendance:Tresence791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	790- Available forms of	Presence		
791- Semester / year:The fourth year - the autumn semester792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	attendance:	Fresence		
792- Number of academic hours (total):(2) hours theoretical + (3) hours practical = (5) hours per week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to795- Course objectivesidentify the problems and obstacles faced by the red meat	791- Semester / year:	The fourth year - the autumn semester		
hours (total):week793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to795- Course objectivesidentify the problems and obstacles faced by the red meat	792- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per		
793- Date of preparation of this description:12 / 2 / 2024794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to795- Course objectivesidentify the problems and obstacles faced by the red meat	hours (total):	week		
this description:127272024794- Name of the course administrator:Dr. Ali Ayad HusseinDr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	793- Date of preparation of	12/2/2024		
794- Name of the course administrator:Dr. Ali Ayad HusseinThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to795- Course objectivesidentify the problems and obstacles faced by the red meat	this description:	12/2/2024		
administrator:Di. All Ayad HussellThe aim is to familiarize the student with the concepts of red meat production and the differences between them and to identify the problems and obstacles faced by the red meat	794- Name of the course	Dr. Ali Avad Hussein		
795- Course objectives The aim is to familiarize the student with the concepts of red identify the problems and obstacles faced by the red meat	administrator:			
795- Course objectives identify the problems and obstacles faced by the red meat		The aim is to familiarize the student with the concepts of red		
795- Course objectives identify the problems and obstacles faced by the red meat		meat production and the differences between them and to		
internet and a second of the real months and a second of the real months	795- Course objectives	identify the problems and obstacles faced by the red meat		
production sector, the growth and development of meat		production sector, the growth and development of meat		
cattle breeds.		cattle breeds.		
706 Teaching and learning The purpose of providing theoretical lectures to deliver	706 Teaching and learning	The purpose of providing theoretical lectures to deliver		
methods: information to students through the following means:	methods:	information to students through the following means:		
(blackboard, data projector, interactive lecture, educational	memous.	(blackboard, data projector, interactive lecture, educational		

		video presentation). The application of practical lectures through observations and interaction with field or laboratory aspects.		
797- Evaluation methods:		Take quick daily exams.The evaluation of students through the submission of Scientific Reports and oral questions.Take the monthly exams.Conducting practical examinations.Just take the final exam		
798- Infrastructure:		The required prescribed books  The Book of meat production Dr. Majid Bashir al-Aswad The main references (sources): books of meat production Dr. Mohareb Tahir Abdul Hamid Books and references that are recommended (scientific journals, reports). Find electronic references. Internet sites		
799- Evaluation of the course:		Theoretical exam (30 points) + practical exam (20 points) = (50 points) + (50 points) final exam		
Week	Hours	Name of the unit orMethod ofEvaluationsubjectEducationmethod		Evaluation method
The first	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The concept of meat production (traditional and modern concept)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Biological axes of meat production and how it is expressed	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The third	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The reality of meat production and consumption in Iraq, the Arab world and the world	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	Challenges and constraints facing the red meat production	Theoretical lectures Practical lectures	Theoretical quiz Practical quiz

	practical	sector	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	Methods of animal	lectures	quiz
The fifth	theoretical	husbandry for the	Practical lectures	Practical quiz
	(3) hours	production of red meat	Laboratory	Scientific
	practical		experiments	Reports
		Growth and	-	-
		development of meat	Theoretical	Theoretical
	(2) hours	animals and changes in	lectures	quiz
The sixth	theoretical	the shape and structure	Practical lectures	Practical quiz
	(3) hours	of the body from the	Laboratory	Scientific
	practical	embryonic year to	experiments	Reports
		maturity		
		5	Theoretical	Theoretical
	(2) hours		lectures	quiz
The	theoretical	Types of meat cattle	Practical lectures	Practical quiz
Seventh	(3) hours	breeds	Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours		lectures	quiz
The eighth	theoretical	Factors affecting	Practical lectures	Practical guiz
8	(3) hours	growth	Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours	Optimal investment for	lectures	quiz
The ninth	theoretical	the efficiency of red	Practical lectures	Practical guiz
	(3) hours	meat production	Laboratory	Scientific
	practical		experiments	Reports
		The composition of	Theoretical	Theoretical
	(2) hours	carcasses, the	lectures	quiz
The tenth	theoretical	percentage of	Practical lectures	Practical duiz
	(3) hours	purification and factors	Laboratory	Scientific
	practical	affecting them	experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Factors affecting the	lectures	quiz
The	(3) hours	growth and	Practical lectures	Practical duiz
eleventh	(3) nours practical	development of a meat	Laboratory	Scientific
		animal	experiments	Reports
			experiments	Keports

The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Techniques used in the transportation and marketing of animals and carcasses	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Marketing category	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Genetic variation of traits needed in meat production improvement plans	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Meat industry	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

801- Educational	Collage of Agriculture Wasit University	
institution:	Conage of Agriculture- wash University	
802- Scientific department	Animal production	
/ Center:	Ammar production	
803- Course name:	Poultry management and production	
804- Course code:	MEPR 414	
805-Number of academic	3 5	
units:	5.5	
806- Available forms of	Presence	
attendance:	Tresence	
807- Semester / year:	The fourth year - the autumn semester	
808- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
809- Date of preparation of	12/2/2024	
this description:		
810- Name of the course	Dr. Mohammad Ali Makki Jassim	
administrator:		

		The student should learn how to manage poultry projects,			
811- Course objectives		identify the types of housing suitable for the atmosphere of			
		Iraq for the production of broiler meat and laying hens			
		The purpose of providi	ng theoretical lecture	es to deliver	
		information to students	through the following	ng means:	
812- Teachi	ng and learning	(blackboard, data proje	ctor, interactive lectu	re, educational	
methods:		video presentation).			
		The application of practical lectures through observations			
		and interaction with field or laboratory aspects.			
		Take quick daily exams.			
		The evaluation of stude	ents through the subm	nission of	
012 E 1		Scientific Reports and	oral questions.		
813- Evalua	ation methods:	Take the monthly exam	IS.		
		Conducting practical ex	caminations.		
		Just take the final exam	1.		
		Required required book	s: poultry manageme	ent book Dr.	
		Suhaib said Alwan			
011 Infra	transtance	Main references (sources): poultry production books			
814- miras	tructure:	Books and references that are recommended (scientific			
		journals, reports).			
		Find electronic references, Internet sites.			
815- Evalu	ation of the	Theoretical exam (30 p	oints) + practical exa	am(20  points) =	
course:		(50 points) + (50 points) final exam			
816- Cours	e structure:				
Week	Hours	Name of the unit or	Method of	Evaluation	
WCCK	110015	subject	Education	method	
	(2) hours	Poultry Science and	Theoretical	Theoretical	
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	the concept of poultry	lectures	quiz	
The first		noultry project	Practical lectures	Practical quiz	
		management	Laboratory	Scientific	
		management .	experiments	Reports	
	(2) hours	Importance of poultry	Theoretical	Theoretical	
The	(2) hours theoretical (3) hours practical	nrojects (egg and	lectures	quiz	
second		meat production	Practical lectures	Practical quiz	
		projects)	Laboratory	Scientific	
	raction	Projecto)	experiments	Reports	
	(2) hours	Internal organs of the	Theoretical	Theoretical	
The third	theoretical	chicken and their	lectures	quiz	
	(3) hours	functions, (male and	Practical lectures	Practical quiz	

	practical	female digestive and reproductive, egg components)	Laboratory experiments	Scientific Reports
The fourth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Types of poultry housing and breeding supplies	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Management and production of broilers (types of modern breeds and their specifications , incubation and care of chicks, breeding and care of broilers, breeding systems	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Feeding broilers and types of leeches, marketing broilers, meat preparation operations in slaughterhouses )	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	meat preparation operations in slaughterhouses (Management and production of laying hens) types of modern breeds and their specifications incubation and care of laying hens, breeding systems	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Feeding laying hens during the growth and production years, calculations of egg production ratios )	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Compulsory trimming ( its methods and benefits ).	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Management of mothers ' herds (broiler and egg mothers )	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Breeding turkeys, ducks and geese .	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Manage poultry fields in hot weather.	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Management of feed plants and feed preparation .	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Types of poultry houses	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Suitable environmental conditions for poultry farming ( ventilation, heat, humidity, lighting, bedding )	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

817- Educational	Collage of Agriculture-Wasit University
Institution: 818- Scientific department	
/ Center:	Animal production
819- Course name:	Pasture management
820- Course code:	PAMA 416
821-Number of academic units:	3.5
822- Available forms of attendance:	Presence
823- Semester / year:	The fourth year - the autumn semester
824- Number of academic hours (total):	(2) hours theoretical + (3) hours practical = (5) hours per week
825- Date of preparation of this description:	12 / 2 / 2024
826- Name of the course administrator:	Dr Hakim Sultan Abdul
827- Course objectives	The aim of the student is to get acquainted with the development of Natural Resources, pastures, identify the types of pastures and methods of grazing suitable for each type of animals according to grazing systems
828- Teaching and learning methods:	The purpose of providing theoretical lectures to deliver information to students through the following means: (blackboard, data projector, interactive lecture, educational video presentation). The application of practical lectures through observations and interaction with field or laboratory aspects.
829- Evaluation methods:	Take quick daily exams. The evaluation of students through the submission of Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam.
830- Infrastructure:	The required prescribed books  The Book of natural pasture management Dr. Ramadan Ahmed lutfif Al-Tikriti Main references (sources): animal herding books Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.

831- Evaluation of the		Theoretical exam (30 points) + practical exam (20 points) =			
course:		(50 points) + (50 points) final exam			
832- Course structure:					
Waalz	Uoura	Name of the unit or	Method of	Evaluation	
WCCK	Tiouis	subject	Education	method	
	(2) hours	The importance of	Theoretical	Theoretical	
	(2) nours	natural pastures, their	lectures	quiz	
The first	(2) hours	spread and their	Practical lectures	Practical quiz	
	(3) nours	relationship with other	Laboratory	Scientific	
	practical	sciences	experiments	Reports	
	(2) hours		Theoretical	Theoretical	
The	(2) nours	Types of Natural	lectures	quiz	
second	(3) hours	Pastures - the qualities of	Practical lectures	Practical quiz	
second	practical	a good pasture	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	theoretical	Natural, life,	lectures	quiz	
The third	(3) hours	environmental and soil	Practical lectures	Practical quiz	
		factors affecting pastures	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours	Pastoral plants and their	Theoretical	Theoretical	
	theoretical	relationship to soil and	lectures	quiz	
The fourth	(3) hours	water maintenance-the	Practical lectures	Practical quiz	
	practical	importance of water and	Laboratory	Scientific	
		soil-erosion processes	experiments	Reports	
	(2) hours	Effects of vegetation	Theoretical	Theoretical	
	theoretical	cover-desertification-	lectures	quiz	
The fifth	(3) hours	causes and remedies-	Practical lectures	Practical quiz	
	practical	stabilization of sand	Laboratory	Scientific	
	r	dunes	experiments	Reports	
		Organization of grazing-			
The sixth		components of plant	Theoretical	Theoretical	
	(2) hours	cover in pasture lands-	lectures	quiz	
	theoretical	after grazing on	Practical lectures	Practical quiz	
	(3) hours	Productivity of pastoral	Laboratory	Scientific	
	practical	plants-the effect of	experiments	Reports	
		grazing on the growth of	*	-	
	(2) 1	roots and soil	TT1 (* 1	TT1 (* 1	
Ine	(2) nours	I ne intensity of grazing-	Ineoretical	Ineoretical	

Seventh	theoretical (3) hours practical	the impact of grazing on the reproduction and survival of pastoral plants-the impact of grazing on the vegetation composition of clothing	lectures Practical lectures Laboratory experiments	quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Grazing systems - advantages and characteristics	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Exploitation of natural pastures-exploitation criterion-determination of feed exploitation- animal tonnage	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The state of natural pastures -judging the state of the pasture	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Classification of pasture conditions-the direction of the course of the case	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Grazing areas in Iraq – grazing in the plain of the Mesopotamian Valley	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The thirteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Grazing in the Iraqi valleys-grazing in the plains and mountains of Iraqi Kurdistan	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	Harmful and poisonous plants in pasture lands	Theoretical lectures Practical lectures	Theoretical quiz Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Nature reserves, interest	lectures	quiz
fifteenth	(2) hours	in them and the reasons	Practical lectures	Practical quiz
meenim	(3) Hours	for their creation	Laboratory	Scientific
	practical		experiments	Reports

833- Educational	Collage of Agriculture-Wasit University
834- Scientific department / Center:	Animal production
835- Course name:	Poultry diseases
836- Course code:	PODI 418
837-Number of academic units:	3.5
838- Available forms of attendance:	Presence
839- Semester / year:	The fourth year - the spring semester
840- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per
hours (total):	week
841- Date of preparation of	12/2/2024
this description:	12/2/2024
842- Name of the course	Ahmed Sadek Shael
administrator:	
	The aim is for the student to learn about the most important
843- Course objectives	diseases affecting poultry birds, what are the clinical signs of
	them, types of diseases, methods of treatment, and ways to
	prevent them
	The purpose of providing theoretical lectures to deliver
	information to students through the following means:
844- Teaching and learning	(blackboard, data projector, interactive lecture, educational
methods:	video presentation).
	The application of practical lectures through observations
	and interaction with field or laboratory aspects.
	Take quick daily exams.
845- Evaluation methods:	The evaluation of students through the submission of
	Scientific Reports and oral questions.
	Take the monthly exams.

		Conducting practical example	minations.		
		Just take the final exam.			
		Required prescribed books  poultry diseases book Dr.			
		Fouad al-sheikhli			
QAC Infra	<b>4</b>	Main references (sources)	): books on animal d	liseases	
846- Infras	tructure:	Books and references that	t are recommended	scientific	
		journals, reports).			
		Find electronic references	s, Internet sites.		
847- Evalu	ation of the	Theoretical exam (30 poi	nts) + practical exam	n(20  points) =	
course:		(50  points) + (50  points)	s) final exam		
848- Cours	e structure:				
<b>W</b> 7 1	TT	Name of the unit or	Method of	Evaluation	
week	Hours	subject	Education	method	
	(2) 1		Theoretical	Theoretical	
	(2) hours	Disease, etiological	lectures	quiz	
The first	theoretical	factors and clinical	Practical lectures	Practical quiz	
	(3) hours	signs	Laboratory	Scientific	
	practical		experiments	Reports	
			Theoretical	Theoretical	
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Infectious diseases in	lectures	quiz	
Ine			Practical lectures	Practical quiz	
second		cnickens	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	(2) nours	Valle and inflormation	lectures	quiz	
The third	(2) hours	York sac inflammation	Practical lectures	Practical quiz	
	(3) nours	/and blemish disease	Laboratory	Scientific	
	practical		experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	theoretical	Chickon tunhoid	lectures	quiz	
The fourth	(3) hours	Chicken typhold	Practical lectures	Practical quiz	
	practical	/cmcken paratyphold	Laboratory	Scientific	
			experiments	Reports	
	(2) hours		Theoretical	Theoretical	
	(2) nours	Infectious convice	lectures	quiz	
The fifth	(3) hours	noultry cholers	Practical lectures	Practical quiz	
	practical	poultry cholera	Laboratory	Scientific	
	practical		experiments	Reports	
The sixth	(2) hours	The following	Theoretical	Theoretical	

	theoretical	cases.different coli	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
T1	(2) nours		lectures	quiz
Ine	theoretical	Monthly exam	Practical lectures	Practical quiz
Seventh	(3) hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours		lectures	quiz
The eighth	theoretical	Conform granulomas	Practical lectures	Practical quiz
	(3) nours	in chickens	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours	Inflammation of the	lectures	quiz
The ninth	theoretical	oviduct /inflammation	Practical lectures	Practical quiz
	(3) nours	of the synovial	Laboratory	Scientific
	practical	membrane	experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours	$\Sigma_{1} = 11 + 12 + 12 + 12 = 12$	lectures	quiz
The tenth			Practical lectures	Practical quiz
	(3) nours	nepatitis	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
T1	theoretical		lectures	quiz
	(3) hours	Newcastle bird disease	Practical lectures	Practical quiz
eleventii	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) HOUIS	Inflormation of the	lectures	quiz
two16h	(2) hours	lowny and track as	Practical lectures	Practical quiz
iwentin	(3) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours		lectures	quiz
thirteenth	(3) hours	Kombu / bird pox	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
	practical		experiments	Reports

The Fourteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Mark / coccidia of birds	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Control of infectious diseases and entry points of the virus into the bird's body	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports

849- Educational	College of Agriculture Wegit University	
institution:	Conage of Agriculture- wash Oniversity	
850- Scientific department	Animal production	
/ Center:	Animal production	
851- Course name:	Molecular biology	
852- Course code:	MOMI 419	
853-Number of academic	3.5	
units:		
854- Available forms of	Presence	
attendance:	Tresence	
855- Semester / year:	The fourth year - the spring semester	
856- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
857- Date of preparation of	12/2/2024	
this description:		
858- Name of the course	Dr. Ghassan Mohammed Hassan	
administrator:	Di. Ghassan Wohanmed Hassan	
	It is necessary for the student to get acquainted with the	
859 Course objectives	genetic material, the concept of a gene, how to synthesize a	
859- Course objectives	protein, the genetic material of Eukaryotic and non-	
	eukaryotic organisms	
	The purpose of providing theoretical lectures to deliver	
860- Teaching and learning	information to students through the following means:	
methods:	(blackboard, data projector, interactive lecture, educational	
memous.	video presentation).	
	The application of practical lectures through observations	

861- Evaluation methods:       Take quick daily exams. The evaluation of students through the submission of Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam. Just take the final exam.         862- Infrastructure:       The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references. Herences, Internet sites.         863- Evaluation of the course:       Theoretical exam (30 points) + practical exam (20 points) = (50 points) + (50 points) final exam         864- Course structure:       Theoretical exam (30 points) + practical exam (20 points) = (50 points) + (50 points) final exam         864- Course structure:       Name of the unit or subject       Method of       Evaluation method         864- Course structure:       Name of the unit or subject       Method of       Evaluation method         864- Course structure:       Animal cell – functions of cell components       Theoretical experiments       Theoretical quiz         864- Gourse structure:       The concept of Molecular Biology – types of molecules in the practical       Theoretical eclures       Theoretical quiz         861       (2) hours theoretical practical       The concept of Molecular Biology – types of molecules in the cell       Theoretical lectures       Theoretical quiz         862       (2) hours theoretical practical       Molecular structure of DNA       Theoretical lectures       Theoretical practical lectures			and interaction with field	or laboratory aspect	S.	
861- Evaluation methods:       The evaluation of students through the submission of Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam. Just take the final exam.         862- Infrastructure:       The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.         863- Evaluation of the courses:       Theoretical exam (30 points) + practical exam (20 points) = (50 points) + (50 points) + practical exam (20 points) = (50 points) + (50 points) + final exam         864- Course structure:       Name of the unit or subject       Method of Evaluation method         864- Course structure:       Name of the unit or subject       Method of Evaluation method         864- Course structure:       Name of the unit or subject       Method of Evaluation method         864- Course structure:       Animal cell – functions of cell components of cell components       Theoretical quiz Practical lectures quiz Practical quiz Quiz Practical lectures quiz Practical quiz Practical lectures (2) hours theoretical cell ecluers of molecules in the cell and practical ecluers (2) hours theoretical Practical eclures (2) hours theoretical Quiz Practical lectures (2) hours theoretical Cell eclures (2) hours theoretical Practical eclures (2) hours theoretical Quiz Practical lectures (2) Practical quiz Practical quiz Practical quiz Practical lectures (2) Practical quiz Practical quiz Practical quiz Practical lectures (2) Practical quiz Practical quiz Practical quiz Practical quiz Practical quiz Practical quiz P			Take quick daily exams.			
861- Evaluation methods:       Scientific Reports and oral questions. Take the monthly exams. Conducting practical examinations. Just take the final exam.         862- Infrastructure:       The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references (sources): books of biotechologies			The evaluation of students through the submission of			
861-Evaluation methods:       Take the monthly exams. Conducting practical examinations. Just take the final exam.         862- Infrastructure:       The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.         863- Evaluation of the course:       Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam         864- Course structure:       Name of the unit or subject       Method of Education       Evaluation method         864- Course structure:       Name of the unit or subject       Method of Education       Evaluation method         7he first       (2) hours theoretical (3) hours practical       Animal cell – functions of cell components       Theoretical lectures Practical lectures       Practical quiz Practical quiz         The second       (2) hours theoretical (3) hours practical       The concept of Molecular Biology – types of molecules in the cell       Theoretical lectures       Theoretical quiz         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Theoretical quiz         (2) hours theoretical       Molecular structure of DNA       Theoretical lectures       Theoretical quiz         (2) hours theoretical       Molecular structure of DNA       Theoretical lectures       Theoretical quiz		· · · · · ·	Scientific Reports and oral questions.			
Conducting practical examinations. Just take the final exam.Just take the final exam.The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.862- Infrastructure:Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam864- Course structure:Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam864- Course structure:Name of the unit or subjectMethod of Education Practical864- Course structure:Name of the unit or subjectMethod of Education864- Course structure:Animal cell – functions of cell componentsTheoretical lectures Practical lectures7he first(2) hours theoretical (3) hours practicalAnimal cell – functions of cell componentsTheoretical lectures Practical lectures7he third(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lectures Practical lecturesPractical quiz Laboratory experiments7he third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lectures7he third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lectures7he third(2) hours theoretical (3) hours prac	861- Evalua	ition methods:	Take the monthly exams.	-		
Just take the final exam.The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.863- Evaluation of the course:Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam864- Course structure:Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam864- Course structure:Name of the unit or subjectMethod of Education methodWeekHoursName of the unit or subjectMethod of EducationThe first(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical ReportsThe third(2) hours theoretical (3) hours practicalThe concept of Molecular Siology – types of molecules in the cellTheoretical experimentsTheoretical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical experimentsTheoretical practical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical experimentsTheoretical quizThe third(2) hours theoretical (3) hours practicalThe double helix structure of DNATheoretical theoretical lecturesTheoretical quizThe third(2) hours theoretical (3) hours practical <td></td> <td></td> <td>Conducting practical exan</td> <td>ninations.</td> <td></td>			Conducting practical exan	ninations.		
862- Infrastructure:       The required course books are: the book of Molecular Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.         863- Evaluation of the course:       Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam         864- Course structure:       Maime of the unit or subject       Method of Education       Evaluation method         Week       Hours       Name of the unit or subject       Method of Education       Evaluation method         The first       (2) hours theoretical (3) hours practical       Animal cell – functions of cell components       Theoretical lectures       Theoretical quiz         The second       (2) hours theoretical (3) hours practical       The concept of Molecular Biology – types of molecules in the cell       Theoretical lectures       Theoretical quiz         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Theoretical quiz       Theoretical quiz         The third       (2) hours theoretical       Molecular structure of DNA       Theoretical lectures       Theoretical quiz         (2) hours theoretical       The double helix theoretical       Theoretical lectures       Theoretical quiz         (2) hours theoretical       The double helix theoretical       Theoretical lect			Just take the final exam.			
862- Infrastructure:       Biology Dr. Ayesha Devan Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.         863- Evaluation of the course:       Theoretical exam (30 points) + practical exam (20 points) = (50 points) + (50 points) final exam         864- Course structure:       Theoretical exam (30 points) + practical exam (20 points) = (50 points) + (50 points) final exam         864- Course structure:       Name of the unit or subject       Method of Education       Evaluation method         864- Course structure:       Name of the unit or subject       Method of Education       Evaluation method         7he first       (2) hours theoretical (3) hours practical       Animal cell – functions of cell components       Theoretical lectures       Practical quiz Laboratory       Scientific experiments         7he       (2) hours theoretical       The concept of Molecular Biology – types of molecules in the practical       Theoretical lectures       Theoretical quiz         7he theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Theoretical quiz         804       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Practical quiz         804       (2) hours theoretical       Theoretical fucoretical       Theoretical lectures       Practical quiz         80			The required course books	are: the book of M	olecular	
862- Infrastructure:     Main references (sources): books of biotechnologies Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.       863- Evaluation of the course:     Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam       864- Course structure:     Interret exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Name of the unit or subject     Method of       864- Course structure:     Animal cell – functions of cell components     Theoretical       864- fination     Nolecular Biology – theoretical     Theoretical     Practical quiz       860- (2) hours     The concept of Molecular Biology – types of molecules in the cell     Theoretical     Practical quiz       860- (2) hours     Molecular structure of DNA     Theoretical     Inte			Biology Dr. Ayesha Devar	1		
862- Infrastructure:       Books and references that are recommended (scientific journals, reports). Find electronic references, Internet sites.         863- Evaluation of the course:       Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam         864- Course structure:       Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam         864- Course structure:       Name of the unit or subject       Method of       Evaluation method         7       Hours       Name of the unit or subject       Method of cell curves       Practical practical quiz         7       (2) hours theoretical (3) hours practical       Animal cell – functions of cell components       Theoretical lectures practical quiz         7       (2) hours theoretical (3) hours practical       The concept of Molecular Biology – types of molecules in the cell       Theoretical lectures practical quiz         7       (2) hours theoretical (3) hours practical practical practical practical practical curves practical practic			Main references (sources)	: books of biotechno	ologies	
	862- Infras	tructure:	Books and references that	are recommended (	scientific	
Find electronic references, Internet sites.863- Evaluation of the course:Theoretical exam (30 points) + practical exam (20 points ) = (50 points ) + (50 points ) final exam864- Course structure:Name of the unit or subjectMethod of EducationEvaluation methodWeekHoursName of the unit or subjectMethod of EducationEvaluation methodThe first(2) hours theoretical (3) hours practicalAnimal cell – functions of cell componentsTheoretical ecuresTheoretical quizThe second(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesTheoretical quiz(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesTheoretical quiz(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesTheoretical quiz(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesTheoretical quiz(2) hours theoretical (3) hours practicalThe double helix structure of DNATheoretical theoretical lecturesTheoretical quiz			journals, reports).	Ň	``````````````````````````````````````	
863- Evaluation of the course:       Theoretical exam (30 points) + practical exam (20 points) = (50 points) final exam         864- Course structure:       (50 points) + (50 points) final exam         864- Course structure:       Name of the unit or subject       Method of Education method         Week       Hours       Name of the unit or subject       Method of Education method         The first       (2) hours theoretical (3) hours practical       Animal cell – functions of cell components       Theoretical lectures Practical quiz Laboratory Scientific         The first       (2) hours theoretical (3) hours practical       The concept of Molecular Biology – types of molecules in the cell       Theoretical lectures Practical quiz Laboratory Scientific         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures Practical quiz Laboratory Scientific         The third       (2) hours theoretical (2) hours theoretical quiz theoretical cell       Molecular structure of DNA       Theoretical lectures Practical quiz Laboratory Scientific         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures Practical quiz Practical lectures Reports         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures Practical quiz Laboratory Scientific experiments         Reports       Theoretical lectures quiz Practical lectu			Find electronic references.	, Internet sites.		
course:(50 points) + (50 points) final exam864- Course structure:Name of the unit or subjectMethod of EducationEvaluation methodWeekHoursName of the unit or subjectMethod of EducationEvaluation methodThe first(2) hours theoretical (3) hours practicalAnimal cell – functions of cell componentsTheoretical LaboratoryTheoretical experimentsPractical quiz Practical lecturesThe second(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesTheoretical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical practical lecturesPractical quiz practical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical practical lecturesTheoretical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical practical lecturesPractical quiz practical quiz practical quizThe third(2) hours theoretical (3) hours practicalThe double helix structure of DNATheoretical practical practicalTheoretical quiz	863- Evalu	ation of the	Theoretical exam (30 poin	ts) + practical exan	n(20  points) =	
864- Course structure:       Name of the unit or subject       Method of Education       Evaluation method         Week       Hours       Name of the unit or subject       Method of Education       Education       method         The first       (2) hours theoretical (3) hours practical       Animal cell – functions of cell components       Theoretical lectures       Practical lectures       Practical quiz         The first       (2) hours theoretical (3) hours practical       The concept of Molecular Biology – types of molecules in the cell       Theoretical lectures       Reports         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Practical lectures       Practical quiz         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Practical quiz         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Quiz         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Practical quiz         The third       (2) hours theoretical (3) hours practical       Molecular structure of DNA       Theoretical lectures       Practical quiz         The third       (2) hours theoretical (3) hours practical       Molecular s	course:		(50  points) + (50  points)	) final exam		
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The first(2) hours theoretical (3) hours practicalAnimal cell – functions of cell componentslectures Practical lecturesquiz Practical quiz LaboratoryThe first(2) hours theoreticalThe concept of Molecular Biology – types of molecules in the cellTheoretical theoretical (3) hoursThe concept of Molecular Biology – types of molecules in the cellTheoretical theoretical (3) hoursThe concept of Molecular Biology – types of molecules in the cellTheoretical theoretical (3) hoursThe concept of Molecular Biology – types of molecules in the cellTheoretical theoretical (3) hoursScientific experimentsThe third(2) hours theoretical (3) hoursMolecular structure of DNATheoretical theoretical DNATheoretical theoretical cexperimentsTheoretical quiz(2) hours theoretical (3) hoursMolecular structure of DNATheoretical theoretical cexperimentsPractical quiz Reports(2) hours theoretical (3) hoursThe double helix structure of DNATheoretical theoretical tecturesTheoretical quiz			5	Theoretical	Theoretical	
The firsttheoretical (3) hours practicalAnimal cell – functions of cell componentsPractical lectures Laboratory experimentsPractical quiz Scientific ReportsThe second(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesTheoretical quizTheoretical quizThe third(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesPractical lectures Practical lecturesThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lecturesTheoretical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lecturesPractical quiz quizThe third(2) hours theoretical (3) hours practicalThe double helix structure of DNATheoretical lecturesTheoretical quiz		(2) hours	Animal cell – functions of cell components	lectures	quiz	
(3) hours practicalof cell components of cell componentsLaboratory experimentsScientific ReportsThe second(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesTheoretical quiz(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesPractical lectures Reports(2) hours theoretical (3) hours practical(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesTheoretical quiz(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesTheoretical quiz(2) hours theoretical (2) hours theoreticalThe double helix structure of DNATheoretical lecturesTheoretical quiz	The first	theoretical		Practical lectures	Practical quiz	
practicalexperimentsReportsThe second(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesTheoretical quiz(3) hours practicalThe concept of Molecular Biology – types of molecules in the cellTheoretical lecturesPractical lectures Practical lecturesPractical quiz Scientific experimentsThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lecturesTheoretical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lecturesPractical quiz practical lectures(2) hours theoreticalThe double helix structure of DNATheoretical lecturesTheoretical quiz		(3) hours practical		Laboratory	Scientific	
The second(2) hours theoretical (3) hours 				experiments	Reports	
The second(2) hours theoretical (3) hours practicalThe concept of Molecular Biology – types of molecules in the celllectures Practical lecturesquiz Practical lecturesThe third(2) hours theoretical (3) hours practical(2) hours theoretical (3) hours theoretical (3) hours practicalMolecular Biology – types of molecules in the celllectures Practical lecturesPractical quiz Laboratory PracticalThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical Practical lecturesTheoretical quiz(2) hours practicalMolecular structure of DNATheoretical Practical lecturesPractical quiz practical lectures(2) hours practicalThe double helix structure of DNATheoretical lecturesTheoretical quiz				Theoretical	Theoretical	
The secondtheoretical (3) hours practicalMolecular Biology - types of molecules in the cellPractical lectures Laboratory experimentsPractical quiz Scientific ReportsThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesTheoretical quizThe third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesPractical quiz quiz(2) hours theoretical practicalMolecular structure of DNATheoretical lecturesPractical quiz quiz(2) hours theoretical theoreticalThe double helix structure of DNATheoretical lecturesTheoretical quiz	<b>T</b> 1	(2) hours	The concept of	lectures	quiz	
second(3) hourstypes of molecules in the cellLaboratoryScientificpracticalcellLaboratoryReports(2) hourstheoreticalMolecular structure of DNATheoreticalInterestical(3) hoursMolecular structure of DNAPractical lecturesPractical quiz(3) hoursDNADNAScientific(2) hoursThe double helix theoreticalTheoreticalReports(2) hoursThe double helix structure of DNATheoreticalInterestical(2) hoursThe double helix structure of DNATheoreticalInterestical	The	theoretical	Molecular Biology –	Practical lectures	Practical quiz	
practicalcellexperimentsReportsexperimentsReportsReportsReports(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lecturesquizPractical lectures practicalPractical lectures Scientific experimentsPractical quiz(2) hours practicalThe double helix structure of DNATheoretical lecturesTheoretical	second	(3) hours	types of molecules in the	Laboratory	Scientific	
The third(2) hours theoretical (3) hours practicalMolecular structure of DNATheoretical lectures Laboratory experimentsTheoretical quiz Practical lectures Scientific Reports(2) hours practicalMolecular structure of DNATheoretical lecturesTheoretical quiz(2) hours theoreticalThe double helix structure of DNATheoretical lecturesTheoretical quiz		practical	cell	experiments	Reports	
The third(2) hours theoretical (3) hours practicalMolecular structure of DNAlectures Practical lecturesquiz(3) hours practicalDNALaboratory experimentsScientific Reports(2) hours theoreticalThe double helix structure of DNATheoretical lecturesTheoretical		(2) 1		Theoretical	Theoretical	
The thirdtheoretical (3) hours practicalMolecular structure of DNAPractical lecturesPractical quiz Scientific experiments(2) hours theoretical(2) hours theoreticalThe double helix structure of DNATheoretical lecturesTheoretical		(2) hours		lectures	quiz	
(3) hours practicalDNALaboratory experimentsScientific Reports(2) hours theoreticalThe double helix structure of DNATheoreticalTheoretical	The third	theoretical	Molecular structure of	Practical lectures	Practical quiz	
practicalexperimentsReports(2) hours theoreticalThe double helix structure of DNATheoretical lecturesTheoretical quiz		(3) hours	DNA	Laboratory	Scientific	
(2) hours theoreticalThe double helix theoreticalTheoreticalTheoretical(2) hours theoreticalThe double helix lecturesTheoretical quiz		practical		experiments	Reports	
theoretical I he double helix structure of DNA lectures quiz		(2) hours	TT1 1 1 1 1 1	Theoretical	Theoretical	
		theoretical	I ne double helix	lectures	quiz	
The fourth (3) hours   Practical lectures   Practical quiz	The fourth	(3) hours	structure of DNA	Practical lectures	Practical quiz	
practical according to watson and Laboratory Scientific		practical	according to Watson and	Laboratory	Scientific	
Crick experiments Reports		1	Crick	experiments	Reports	
The fifth(2) hoursThe approved methodTheoreticalTheoretical	The fifth	(2) hours	The approved method	Theoretical	Theoretical	

	theoretical (3) hours practical	for studying cells and tissues	lectures Practical lectures Laboratory experiments	quiz Practical quiz Scientific Reports
The sixth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Methods of observing the behavior of cells and tissues - how the light interference microscope is used to obtain information regarding the concentration of substances in the cell	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The Seventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	How genetic information stored in DNA can travel between cell parts and determine function	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	The process of protein formation in the cell	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The ninth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Regulation of genetic events within the cell	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Gene expression (Gene expression)	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The eleventh	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Genetics-reproduction and translation	Theoretical lectures Practical lectures Laboratory experiments	Theoretical quiz Practical quiz Scientific Reports
The twelfth	(2) hours theoretical	Separation of DNA from the rest of the cell	Theoretical lectures	Theoretical quiz

	(3) hours	components	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) Hours	DNA posturos (DNA	lectures	quiz
thirtaanth	(2) hours	DNA postures (DNA-	Practical lectures Laboratory	Practical quiz
unnteentin	(5) Hours	Comormation)		Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) Hours	Estimating the purity of nucleic acids spectroscopically	lectures	quiz
Fourteenth	(3) hours		Practical lectures	Practical quiz
	(5) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The fifteenth	(2) Hours	DNA symthesis (DNA	lectures	quiz
	(3) hours	DINA Symmesis (DINA-	Practical lectures	Practical quiz
	(3) nours practical	Synulesis)	Laboratory	Scientific
			experiments	Reports

865- Educational	Collage of Agriculture Wasit University	
institution:	Conage of Agriculture- wasit Oniversity	
866- Scientific department	Animal production	
/ Center:		
867- Course name:	Sheep and goat production	
868- Course code:	MOMI 419	
869-Number of academic	3.5	
units:	5.5	
870- Available forms of	Presence	
attendance:	Presence	
871- Semester / year:	The fourth year - the spring semester	
872- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
873- Date of preparation of	12 / 2 / 2024	
this description:		
874- Name of the course	Dr. Mohammed Abdallah Khamees	
administrator:	DI. Mohammed Abdanan Khamees	
875 - Course objectives	The aim is for the student to learn about the economic	
675- Course objectives	importance of sheep and goat breeding, breeding in sheep	

and goats, wool and hair production and the establishmer lamb fattening projects			establishment of	
		The purpose of providing theoretical lectures to deliver		
		information to students through the following means:		
876- Teachi	ng and learning	(blackboard, data projecto	or, interactive lectur	e, educational
methods:		video presentation).		
		The application of practic	al lectures through	observations
		and interaction with field or laboratory aspects.		
		Take quick daily exams.		
		The evaluation of student	s through the submi	ission of
977 Evelue		Scientific Reports and ora	al questions.	
0//- Evalua	ation methods:	Take the monthly exams.		
		Conducting practical example	ninations.	
		Just take the final exam.		
		The required prescribed b	ooks are available:	sheep and goat
		production book by Dr. Z	uhair Fakhri Al-Jali	li
		Main references (sources)	): sheep and goat br	eeding books
878- Infras	tructure:	Basra University		
		Books and references that are recommended (scientific		
		journals, reports).		
		Find electronic references, Internet sites.		
879- Evalu	ation of the	Theoretical exam (30 point	nts) + practical example	m(20  points) =
course:		(50 points) + (50 points) final exam		
880- Cours	e structure:			
Waak	Hours	Name of the unit or	Method of	Evaluation
WEEK	TIOUIS	subject	Education	method
	(2) hours		Theoretical	Theoretical
	(2) nours	The economic	lectures	quiz
The first	(3) hours	importance of sheep and	Practical lectures	Practical quiz
	(3) nours	goat breeding	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Classification of shoon	lectures	quiz
second	(3) hours	and goats	Practical lectures	Practical quiz
second	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The third	theoretical	Feeding sheep and goats	lectures	quiz
	(3) hours		Practical lectures	Practical quiz

	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The fourth	theoretical	Reproduction in sheep	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical	and goats (part one)	Laboratory	Scientific
	-		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The fifth	theoretical	Providing nutritional	Practical lectures	Practical quiz
	(3) hours	needs	Laboratory	Scientific
	practical		experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours	C	lectures	quiz
The sixth	theoretical	Growth and production	Practical lectures	Practical quiz
	(3) nours	of red meat	Laboratory	Scientific
	practical		experiments	Reports
	(2) have		Theoretical	Theoretical
The	(2) nours	Ded meet and duction	lectures	quiz
The Seventh	(3) hours	patterns	Practical lectures	Practical quiz
Seventn			Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours	W 1 1 h	lectures	quiz
The eighth	(2) hours	wool and hair	Practical lectures	Practical quiz
	(3) nours	production	Laboratory	Scientific
	practical		experiments	Reports
	(2) have		Theoretical	Theoretical
	(2) nours		lectures	quiz
The ninth	(3) hours	Milk production	Practical lectures	Practical quiz
	(5) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) nours		lectures	quiz
The tenth	(3) hours	Intensive production	Practical lectures	Practical quiz
	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
The	(2) hours	Feeding and weaning	Theoretical	Theoretical
eleventh	theoretical	lambs	lectures	quiz

	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	The use of milk	lectures	quiz
twolfth	(2) hours	substitutes in feeding	Practical lectures	Practical quiz
twenth	(3) Hours	lambs	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Establishment of lamb fattening projects	lectures	quiz
thirtaanth	(3) hours practical		Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Fattening lambs	lectures	quiz
Fourtoonth	(2) hours		Practical lectures	Practical quiz
Fourteentin	(3) nours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Introduction to shoon	lectures	quiz
	(3) hours practical	and goat production	Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports

881- Educational institution:	Collage of Agriculture-Wasit University	
882- Scientific department	Animal production	
/ Center:		
883- Course name:	Meat science	
884- Course code:	MESC 421	
885-Number of academic	3.5	
units:	5.5	
886- Available forms of	Presence	
attendance:	Tresence	
887- Semester / year:	The fourth year - the spring semester	
888- Number of academic	(2) hours theoretical $+$ (3) hours practical $=$ (5) hours per	
hours (total):	week	
889- Date of preparation of	12 / 2 / 2024	

this descripti	on:			
890- Name of the course		Dr. Ali Avad Hussein		
administrator:				
		The aim is to familiarize the student with the components		
		and general composition o	f meat, the physica	and chemical
891- Course	objectives	properties of meat, identify	y the phenomena th	at accompany
		the slaughter process, facto	ors affecting the rat	e of meat
		consumption	.1 .* 11 .	. 1.1.
		The purpose of providing f	theoretical lectures	to deliver
802 Terestin	11	information to students the	ough the following	means:
892- Teachin	ig and learning	(blackboard, data projecto)	r, interactive fecture	e, educational
memous.		The application of practice	1 lectures through a	heervations
		and interaction with field	or laboratory aspect	S
		Take quick daily exams.	in about of y aspect	
		The evaluation of students	through the submis	ssion of
		Scientific Reports and oral	l questions.	
893- Evaluat	ion methods:	Take the monthly exams.		
		Conducting practical examinations.		
		Just take the final exam.		
		The following books are required: the book of meat science		
		by Dr. Mohareb Tahir Abdul Hamid		
		Main references (sources): meat science books by Dr. Majid		
894- Infrasti	ructure:	Bashir al-Aswad		
		Books and references that are recommended (scientific		
		journals, reports).		
		Find electronic references, Internet sites.		
885- Evalua	tion of the	Theoretical exam (30 points) + practical exam (20 points) =		
course:		(50  points) + (50  points)	) final exam	
896- Course	structure:			<b>F</b> 1 (*
Week	Hours	Name of the unit or	Method of	Evaluation
			Theoretical	Theoretical
	(2) hours	terms: meat meat	lectures	Theoretical
The first	theoretical (3) hours practical	science meat industry	Practical lectures	Practical quiz
		meat processing meat	Laboratory	Scientific
		auality	experiments	Reports
	(2) hours	Types of meat and	Theoretical	Theoretical
The second	theoretical	nutritional value of	lectures	quiz
				1

	(3) hours	meat	Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) nours	C1 $1$ $1$	lectures	quiz
The third	theoretical	Chemical composition	Practical lectures	Practical quiz
	(3) nours	or meat	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	The general and exact	lectures	quiz
The fourth	(3) hours	composition of meat,	Practical lectures	Practical quiz
	practical	muscles and their types	Laboratory	Scientific
			experiments	Reports
	(2) 1		Theoretical	Theoretical
	(2) hours		lectures	quiz
The fifth	theoretical	Muscle cell proteins .	Practical lectures	Practical quiz
	(3) hours	Types of muscle fibers	Laboratory	Scientific
	practical		experiments	Reports
			Theoretical	Theoretical
	(2) hours	muscle contraction the	lectures	quiz
The sixth	theoretical	muscle contraction, the	Practical lectures	Practical quiz
	(3) hours	processes of contraction	Laboratory	Scientific
	practical	and diastole	experiments	Reports
	(2) 1	C1 1 1	Theoretical	Theoretical
701	(2) hours	Chemical and	lectures	quiz
The	theoretical	biochemical changes in	Practical lectures	Practical quiz
Seventh	(3) hours	the muscle after death	Laboratory	Scientific
	practical	and factors affecting it	experiments	Reports
	(2) have		Theoretical	Theoretical
	(2) nours	The measure of turning	lectures	quiz
The eighth	(2) h source	The process of turning	Practical lectures	Practical quiz
	(3) hours	muscle into meat	Laboratory	Scientific
	practical		experiments	Reports
	(2) have		Theoretical	Theoretical
	(2) nours	Types of throwing	lectures	quiz
The ninth	(2) hours	stiffness and factors	Practical lectures	Practical quiz
	(3) mours	affecting it	Laboratory	Scientific
	practical		experiments	Reports
The tenth	(2) hours	Characteristics of fresh	Theoretical	Theoretical

	theoretical	meat: water retention,	lectures	quiz
	(3) hours	softness, color, texture .	Practical lectures	Practical quiz
	practical	Nutritional value	Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical	Meat storage methods:	lectures	quiz
	(3) hours	cryopreservation and	Practical lectures	Practical quiz
eleventh	practical	freeze storage	Laboratory	Scientific
(3) hours practicalsoftness, color, texture . Nutritional valuePr La exThe eleventh(2) hours theoretical (3) hours practicalMeat storage methods: cryopreservation and freeze storageIce exThe eleventh(2) hours theoretical (3) hours practicalMeat storage methods: cryopreservation and freeze storageIce exThe twelfth(2) hours theoretical (3) hours practicalThermal manufacturing : drying, irradiationThe lee Pr La exThe thirteenth(2) hours theoretical (3) hours practicalPackaging and types of used packaging materialsThe lee Pr La exThe theoretical thirteenth(2) hours theoretical (3) hours practicalContamination of meat and its sourcesThe lee Pr La exThe fourteenth(2) hours theoretical (3) hours practicalContamination of meat and its sourcesThe lee Pr La exThe fourteenth(2) hours theoretical (3) hours practicalSources of meat types and nutritional value ofThe Pr	experiments	Reports		
	(2) hours		Theoretical	Theoretical
	(2) nours	Thormal manufacturing	lectures	quiz
The twelfth	(2) hours	during imadiation	Practical lectures	Practical quiz
	(5) Hours		Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Packaging and types of	lectures	quiz
thirteenth	(2) hours	used packaging	Practical lectures	Practical quiz
timteentii	(3) nours	materials	Laboratory	Scientific
The twelfth The thirteenth The Fourteenth	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Contamination of meat	lectures	quiz
Fourtoonth	(2) hours	and its sources	Practical lectures	Practical quiz
Fourteentii	(3) nours	and its sources	Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) nours	Sources of meat types	lectures	quiz
fifteenth	(3) hours	and nutritional value of	Practical lectures	Practical quiz
	practical	meat	Laboratory	Scientific
	practical		experiments	Reports

897- Educational	Callege of Agriculture West University	
institution:	Collage of Agriculture- wasit University	
898- Scientific department	Animal production	
/ Center:	Animal production	
899- Course name:	Buffalo production	
900- Course code:	BUPR 422	
901-Number of academic	2	
units:	2	

902- Availa attendance:	ble forms of	Presence		
903- Semes	ter / year:	The fourth year - the spring semester		
904- Number of academic hours (total):		(2) hours theoretical = (2) hours per week		
905- Date of preparation of this description:		12 / 2 / 2024		
906- Name administrate	of the course or:	Dr. Ali Ayad Hussein		
907- Course objectives		The main task is for the student to get acquainted with the Buffalo, its breeds, its phenotypic qualities, what are the features of its upbringing, the obstacles it faces, the economic importance of its products, and its housing.		
908- Teachi methods:	ng and learning	The purpose of providing theoretical lectures to deliver information to students through the following means: (blackboard, data projector, interactive lecture, educational video presentation). The application of practical lectures through observations and interaction with field or laboratory aspects		
909- Evaluation methods:		<ul> <li>Take quick daily exams.</li> <li>The evaluation of students through the submission of</li> <li>Scientific Reports and oral questions.</li> <li>Take the monthly exams.</li> <li>Conducting practical examinations.</li> <li>Just take the final exam.</li> </ul>		
910- Infrastructure:		The required books: the Buffalo production book by Dr. Hassan Abdallah Main references (sources): milk cattle production books by Dr. Al-Qudsi's spokesman Books and references that are recommended (scientific journals, reports.( Find electronic references. Internet sites		
911- Evaluation of the		Theoretical exam (50 points) = $(50 \text{ points}) + (50 \text{ points})$		
course:		final exam		
912- Course structure:				
Week	Hours	Name of the unit or subject	Method of Education	Evaluation method
The first	(2) hours	Origin and history of	Theoretical	Theoretical
1110 11100	theoretical	Buffalo	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
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	practical		Laboratory	Scientific
	-		experiments	Reports
	(2) 1		Theoretical	Theoretical
The second	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li></ul>	Buffalo numbers in Iraq and the world	lectures	quiz
			Practical lectures	Practical quiz
			Laboratory	Scientific
	(2) hours theoretical (3) hours	Classification of buffaloes in the animal kingdom	experiments	Reports
			Theoretical	Theoretical
			lectures	quiz
The third			Practical lectures	Practical quiz
			Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
	theoretical	Genetic differences	lectures	quiz
The fourth	(3) hours	between Asian and	Practical lectures	Practical quiz
	practical	African buffaloes	Laboratory	Scientific
	-		experiments	Reports
	(2) hours		Theoretical	Theoretical
	(2) hours theoretical (3) hours	Breeds of wild buffalo	lectures	quiz
The fifth			Practical lectures	Practical quiz
			Laboratory	Scientific
	(2) hours theoretical (3) hours	Breeds of domesticated Buffaloes in the world	experiments	Reports
			Theoretical	Theoretical
			lectures	quiz
The sixth			Practical lectures	Practical quiz
			Laboratory	Scientific
	practical		experiments	Reports
	(2) hours		Theoretical	Theoretical
The	(2) hours theoretical (3) hours	Reproduction in Buffalo females	lectures	quiz
Seventh			Practical lectures	Practical quiz
Seventin			Laboratory	Scientific
	practical		experiments	Reports
The eighth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Causes of low reproductive efficiency in Buffaloes	Theoretical	Theoretical
			lectures	quiz
			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
The ninth	(2) hours	Nutrition and diet of	Theoretical	Theoretical

	theoretical	Buffalo	lectures	quiz
	(3) hours		Practical lectures	Practical quiz
	practical		Laboratory	Scientific
			experiments	Reports
The tenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Causes of low reproductive efficiency in Buffaloes	Theoretical	Theoretical
			lectures	quiz
			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	(2) hours		Theoretical	Theoretical
The	theoretical (3) hours practical	Methods of checking pregnancy in Buffalo	lectures	quiz
alouanth			Practical lectures	Practical quiz
eleventii			Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Characteristics of the digestive system of Buffalo	Theoretical	Theoretical
The			lectures	quiz
twelfth			Practical lectures	Practical quiz
twentin			Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Milk production in Buffalo	Theoretical	Theoretical
The			lectures	quiz
thirteenth			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports
	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Differences in milk	Theoretical	Theoretical
The			lectures	quiz
Fourteenth		components in different	Practical lectures	Practical quiz
routeentii		breeds	Laboratory	Scientific
			experiments	Reports
The fifteenth	<ul><li>(2) hours</li><li>theoretical</li><li>(3) hours</li><li>practical</li></ul>	Meat production in Buffalo	Theoretical	Theoretical
			lectures	quiz
			Practical lectures	Practical quiz
			Laboratory	Scientific
			experiments	Reports

913- Educational institution:	Collage of Agriculture-Wasit University
914- Scientific department / Center:	Animal production

915- Course name:		English language (4)		
916- Course code:		ENGL 401		
917-Number of academic		<b>.</b>		
units:				
918- Available forms of		2		
attendance:		2		
919- Semes	ter / year:	Presence		
920- Number of academic		The fourth year - the spring semester		
hours (total)	):	The fourth year - the spring semester		
921- Date of	f preparation of	(2) hours theoretical $=$ (2) hours per weak		
this description:		(2) nours meorencal – (2) nours per week		
922- Name	of the course	Wanag shavel yenner		
administrato	or:	winnas snayar yapper		
923- Course	objectives	The ability to learn English at the second level is		
<i>525</i> Course	, objectives	characterized by its vocabulary, writing and reading style		
		The purpose of providing theoretical lectures to deliver		
924- Teachi	ng and learning	information to students through the following means:		
methods:		(blackboard, data projector, interactive lecture, educational		
		video presentation).		
		Take quick daily exams.		
		The evaluation of students through the submission of		
925- Evalua	tion methods:	Scientific Reports and oral questions.		
		Take the monthly exams.		
		Just take the final exam.		
		Required course books: English language textbook		
		□ Writing Academic English, Level 4 by Alice Oshima		
926- Infrast	tructure:	Main references (sources): source books of the language		
		Books and references that are recommended (scientific		
		journals, reports).		
		Find electronic references, Internet sites.		
927- Evaluation of the		Theoretical exam (50 points) = $(50 \text{ points}) + (50 \text{ points})$		
course:		final exam		
928- Course structure:				
Week	Hours	Name of the unit or	Method of	Evaluation
		subject	Education	method
The first	(2) hours	Getting to know you	Theoretical	Theoretical
	theoretical		lectures	quiz
The	(2) hours	The way we live	Theoretical	Theoretical
second	theoretical		lectures	quiz

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The third	(2) hours	It All Went Wrong	Theoretical	Theoretical
	theoretical		lectures	quiz
The fourth	(2) hours	If clause ( conditional)	Theoretical	Theoretical
	theoretical	sentences	lectures	quiz
The fifth	(2) hours	Tell me! What's it like?	Theoretical	Theoretical
	theoretical		lectures	quiz
The sixth	(2) hours	A- Simple tense	Theoretical	Theoretical
	theoretical		lectures	quiz
The	(2) hours	B-compound tense	Theoretical	Theoretical
Seventh	theoretical		lectures	quiz
The eighth	(2) hours	c- complex tense	Theoretical	Theoretical
The eighth	theoretical		lectures	quiz
The ninth	(2) hours	The use of so 'and	Theoretical	Theoretical
	theoretical	neither'	lectures	quiz
The tenth	(2) hours	Famous couples	Theoretical	Theoretical
	theoretical		lectures	quiz
The	(2) hours	Do's and don'ts	Theoretical	Theoretical
eleventh	theoretical		lectures	quiz
The	(2) hours	How to answer	Theoretical	Theoretical
twelfth	theoretical	causations	lectures	quiz
The	(2) hours	Going places	Theoretical	Theoretical
thirteenth	theoretical		lectures	quiz
The	(2) hours	Every day sentences	Theoretical	Theoretical
Fourteenth	theoretical		lectures	quiz
The	(2) hours	Scared to death	Theoretical	Theoretical
fifteenth	theoretical		lectures	quiz