

Academic program description form for colleges
For the academic year 2021-2022

University name : Southern Technical University
College name: Technical Institute / Shatra
Scientific Department: Department of Animal Production Techniques
File filling date: 3/8/2022

Department Head Name: asst.Prof.Dr. Khairi Gargan Awaid
Name of the Associate Dean for Scientific Affairs: Lect. Turki Diwan

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The file has already been checkedDepartment of Quality Assurance and University Performance
Name of the Director of the Department of Quality Assurance and University Performance: Mortada Abdel Karim
Date
Signature
Dean's endorsement

Academic Program Description

This academic program description provides a brief summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, proving whether he has made the most of the available opportunities . It is accompanied by a description of each course within the program

Ministry of Higher Education and Scientific Research	Educational .1 institution
Technical Institute / Shatra	Scientific Department .2 / Center
Animal Production Techniques Department	Academic or .3 professional program name
Technical Diploma	Final certificate name .4
semester system	school system .5
Theoretical and practical study	Accredited .6 Accreditation Program
Laboratories, field field, library, internet, agricultural and industrial institutions and agricultural projects	Other external .7 influences
2022	Description creation .8 date
The objectives of the academic program: Granting the student a diploma in the .9 theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena	
Practicing activities related to the qualitative and quantitative -1 examination of feed materials and their conformity with the required specifications	
The link between animal production and food security for the country -2	

Practicing activities related to the management of animal fields,-3 slaughterhouses and veterinary clinics
Storing fodder materials using different storage techniques and-4 providing appropriate conditions for them

Required program outcomes and methods of teaching, learning and assessment .10
A- Cognitive goals A1- The scientific method for raising and improving animals (cows - sheep - poultry - fish .A 2 - Study of artificial insemination and management of veterinary clinics .A3 - Operation and management of feed mills , slaughterhouses and hatcheries . A4 - The scientific method in the field of fodder alternatives
B - Skills objectives of the program .B1 - The technical method in the fields of animal breeding and improvement .B 2 - how to artificial insemination .B 3- How to operate and manage feed mills, slaughterhouses and hatcheries B-4 How to operate and maintain the machinery and equipment of the animal production fields
Teaching and learning methods
Providing students with the basics and additional topics related to previous - . learning outcomes of skills , to solve practical problems . Applying the topics studied in theory on a practical level - Asking students, during practical lessons, to conduct some applied research - . and under the supervision of their professors . Visiting practical laboratories by the academic staff -
Evaluation methods
Daily and monthly exams - Semester and final exams - Participation scores for competition questions for academic subjects - Scores for homework and report writing -
C- Emotional and value goals C1- Applying knowledge in animal production sciences in order to address problems related to it C2 - Design and implementation of scientific experiments , as well as analysis and interpretation of data C3 - Determine vocabulary available to the student to help him acquire the skill and ability to choose what achieves his purpose C4 - - The student expresses his desire to learn about the relationship of zoology with other sciences C5 - Use of modern techniques, skills and tools necessary for agricultural technical practices
Teaching and learning methods
.Data Show A1- The lecture is accompanied by the presentation using .C 2- Discussion .C3 - Brainstorming .C 4 - Take the student to the fields
Evaluation methods
the exams -1 Note -2 questionnaire -3 Report writing -4
d- Transferred general and rehabilitative skills (other skills related to employability (and personal development .D1- Work in the field of cows and calves fattening .D2 - Work in the field of raising sheep and goats .D3 - Work in the field of poultry farming .D4 - Work in the field of fish farming

D5 - Working in the operation and management of feed mills, slaughterhouses and .hatcheries				
.D6 - Work in the artificial insemination center and veterinary clinics				
Teaching and learning methods				
.Practical lectures attended by the student to laboratories and fields - .summer training - .Writing a research project				
Evaluation methods				
.Direct supervision in the field by the practical professor and field workers - .Direct supervision during training by a scientific supervisor from the department - .Discuss research and give a score on it -				
Certifications .12 and Credit Hours	Program Structure .11			
	Credit hours	Course or course name	Course or course code	level/year
Technical Diploma Require (x) credit hours	4	dairy cattle production	1	The first stage fall semester
	5	basics of veterinary medicine	2	
110	4	Sheep and goat production	3	
	4	food and nutrition	4	
	4	poultry production	5	
	3	Pullers and agricultural machines	6	
	3	(Computers 1	7	
	2	Human rights and democracy	8	
	29		Total	
	4	beef cattle production	1	First stage/spring semester
	5	animal health	2	
	4	fish production	3	
	4	poultry feed	4	
	4	general chemistry	5	
	3	animal production mechanization	6	
	2	English language	7	
	26		Total	
	5	animal physiology	1	The second phase fall semester
	4	animal diseases	2	
	4	Animal breeding and improvement	3	
	3	Forage and pasture crops	4	
	4	animal feed	5	
	4	Meat preservation and processing	6	
	3	Calculator Basics (2	7	
	2	English language	8	
	29		Total	
	5	Reproduction and fertilization physiology	1	The second phase spring semester
	5	poultry diseases	2	
	4	fish farming	3	
	4	Banana manufacturing	4	
	4	hatchery techniques	5	
	2	The economics of animal production	5	
	2	The project	7	
	26		Total	

Planning for personal development .13
. D 1. Improving their debating skills D 2. Raising their research perceptions and transferring students from the . education stage to the learning stage . D 3. The student's use of modern and contemporary sources D 4. Make use of the internet sites that contain up-to-date information . related to animal production
Admission criterion (setting regulations related to admission to a college or .14 (institute)
. Adoption of the central admission requirements .1 . The acceptance rate for the sixth scientific, vocational / agricultural .2 . To be medically fit for the specialty .3 . The absorptive capacity of the department .4
The most important sources of information about the program .15
The Central Library in the Covenant .1 Internet information network .2 The experiences of Arab and international universities .3 Current Curriculum .4 . Market needs .4 . Local directives .6 . Studies and questionnaires .7 . Specialized seminars and workshops with the beneficiaries .8

Curriculum Skills Outline																			
Please check the boxes corresponding to the individual learning outcomes from the program being evaluated																			
Learning outcomes required from the program																			
General and Transferable Skills or) Other skills) related to employability and personal development				thinking skills				Subject-specific skills				knowledge and understanding				Basic mother optional	Course Name	Course Code	year / level
D 4	d 3	D 2	d 1	c 4	c 3	c 2	c 1	b 4	b 3	b 2	b 1	A 4	A 3	A 2	A 1				
		√				√			√				√			Specialty	dairy cattle production	1	The first stage of the fall semester
		√				√			√			√				Specialty	basics of veterinary medicine	2	
		√				√			√				√			Specialty	Sheep and goat production	3	
	√					√			√				√			Specialty	food and nutrition	4	
	√				√					√			√			Specialty	poultry production	5	
	√				√					√		√				help	Pullers and agricultural machines	6	
		√				√						√		√		help	(Computers 1	7	
		√				√						√			√	General	Human rights and democracy	8	
Curriculum Skills Outline																			
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D 4	d 3	D 2	d 1	c 4	c 3	c 2	c 1	b 4	b 3	b 2	b 1	A 4	A 3	A 2	A 1				
		√				√			√				√			Specialty	beef cattle production	1	The first stage of the spring semester
		√				√			√			√				Specialty	animal health	2	
		√				√			√				√			Specialty	fish production	3	
	√					√			√				√			Specialty	poultry feed	4	
	√				√					√			√			Specialty	general chemistry	5	
	√				√					√		√				help	animal production mechanization	6	

Curriculum Skills Outline																				
Please check the boxes corresponding to the individual learning outcomes from the program being evaluated																				
Learning outcomes required from the program																				
General and Transferable Skills or) Other skills) related to employability and personal development				thinking skills				Subject-specific skills				knowledge and understanding				Basic mother optional	Course Name	Course Code	year / level	
D 4	d 3	D 2	d 1	c 4	c 3	c 2	c 1	b 4	b 3	b 2	b 1	A 4	A 3	A 2	A 1					
		√				√			√				√				Specialty	animal physiology	1	The second stage of the vocational semester
		√				√			√				√				Specialty	animal diseases	2	
		√				√			√				√				Specialty	Animal breeding and improvement	3	
	√					√			√				√				Specialty	Forage and pasture crops	4	
	√					√				√			√				Specialty	animal feed	5	
	√					√				√			√				help	Meat preservation and processing	6	
		√				√						√		√			help	Calculator Basics ((2	7	
		√				√						√		√			General	English language	8	

Curriculum Skills Outline																				
Please check the boxes corresponding to the individual learning outcomes from the program being evaluated																				
Learning outcomes required from the program																				
General and Transferable Skills or) Other skills) related to employability and personal development				thinking skills				Subject-specific skills				knowledge and understanding				Basic mother optional	Course Name	Course Code	year / level	
D 4	d 3	D 2	d 1	c 4	c 3	c 2	c 1	b 4	b 3	b 2	b 1	A 4	A 3	A 2	A 1					
		√				√			√				√				Specialty	Reproductive physiology and vaccination	1	The second stage of the spring semester
		√				√			√				√				Specialty	poultry diseases	2	
		√				√			√				√				Specialty	fish farming	3	
	√					√			√				√				Specialty	Banana manufacturing	4	
	√					√				√			√				Specialty	hatchery techniques	5	
	√					√				√			√				help	The economics of animal production	5	
		√				√						√		√			Specialty	The project	7	

course description form

Course description

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational institution .1
Animal Production Techniques Department	Scientific Department / Center .2
sheep and goat/ Production of sheep and goats production	Course name / code .3
Blended /present and e- learning	Available forms of attendance .4
Autumn semester / first stage	season / year .5
An hour in the classroom, theoretical and practical 60	Number of hours of study (.6 (total
	The date this description was .7 prepared
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course outcomes and methods of teaching, learning and assessment .9	
A - cognitive goals	
- A - The student recognizes the importance of the production of sheep and goats 1	
- A - The scoop student classification of sheep and goats Arab and international 2	
A - The student recognizes the types of sheep and goats , locally, regionally and globally 3	
A - The student recognizes the basic products of sheep and goats 4	
B - Skills objectives of the program	
- b - Definition of students of the importance of sheep and goats for human beings 1	
- b - the student 's ability to learn good species with desirable traits and varieties 2	
b - enable students to identify the modern techniques used for the production of sheep 3 and goats	
Teaching and learning methods	

Explanation and clarification Lecture method student groups Practical lessons in animal fields Scientific trips to animal fields in Iraq					
Evaluation methods					
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams					
. C - emotional and value goalsC 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand when, what and how he . should think and work to improve the ability to think reasonably - C2 - Observation and Perception - C3 - Analysis and Interpretation - C 4. Preparation and CalendarC5 - Critical thinking strategy in learning					
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2					
Course structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	foundations Scientific to classify Sheep strains Sheep existing in a field , strains Sheep Iraqi	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	strains sheep the meat , the milk and wool Processes field for sheep / punctuation , eunuch , to cut that follows , Removal the horns	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	reproduction and fertilization in a Sheep , Hardware Genital Processes field seasonal / immersion , shear wool	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	puberty sexual, season reproduction , Methods the control On timing estrangement Processes field Of the daily / Submit fodder and water , cleaning , catch and trading the animals	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	interval pregnancy and birth , Care ewes before and at Birth Establishing the herd , Test dynasty , size the herd , an appointment Purchase Sheep	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	growth and development in a Sheep sheds Sheep and accessories , Species barns	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Produce the milk in a Sheep and factors influential On Produce the milk Breast feeding and care Newborns , Weight Newborns , t body handler and stripes	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	properties and features wool , anatomy morphological destruction lambs , reasons the doom	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	deported growth fiber wool , gradient wool Appreciation Age in a Sheep , Species the teeth	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	origin goats and rating , the site in a The kingdom animal records field , Species records	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	strains goats in a the scientist proces sweet heart , Species milking , manual , mechanic	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	reproduction goats , puberty sexual , maturity sexual adjectives phenotypic for strains goats	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Produce the milk and hair leather in a goats Identify On Species Poetry in a goats	My knowledge and skills	1 theoretical 3 practical	Thirteenth

Asking practice questions	Lecture and practical lesson	optimization genetic in a Sheep and goats future industry Sheep and production capacitor	My knowledge and skills	1 theoretical 3 practical	Fourteen and fifteen
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course development plan .11

. Providing the possibility of academic support in organizing field visits -

Providing the appropriate classroom environment that enables the teacher to diversify teaching -

. strategies

. Providing information technology in the campus library -

Hosting experts from outside the institute , or from the work environment for which they are -

preparing to benefit from their expertise in developing the course according to the actual

. needs of the labor market

Infrastructure .12	
Basics of sheep and goat production and rearing Dr.. Jalal Elia Reverend d. Zuhair Fakhri Jalili Dr.. Daeb Isaac Aziz	Required course books .1
Sheep and goat production -1 Dr.. Zuhair Fakhri Jalili. Dr.. Jalal Elia the priest Production of sheep and wool 2 Dr.. Naguib Tawfiq Ghazal d. Muzaffar Nafeh Al-Sayegh	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty www.google.com Location Animal Science Journal	a . Recommended books and references (scientific journals , reports , 0000 b . Electronic references , websites

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the .program

Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
poultry production/ Produce poultry	Course name / code .3
Blended /present and e- learning	Forms of attendance available .4
Autumn semester / first stage	Semester / year .5
hours of theoretical and practical class 60	Number of hours of study (.6 (total
	Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	

Course outcomes and methods of teaching, learning and assessment -9	
A - cognitive goals . A 1 rating most important strains poultry Globalism and local A 2- Introducing students to how to manage poultry fields	
B - Skills objectives of the program B 1 - To provide the student with the skills of applying scientific methods with regard to . managing poultry fields B 2 - Training the student on how to increase production and improve the quality of local . poultry B 3 - To provide the student with the necessary skills to conduct laboratory tests related to . poultry and their breeding	
Teaching and learning methods Giving scientific and theoretical lectures through displays and powerpoints, and visiting . poultry breeding fields	
Evaluation methods Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals . C 1- Enable the student to apply theoretical information in a practical way C 2- To develop the patriotic spirit of the student to increase production in quantity and . quality C 3 - Instilling the concept of community service and the best way to deal with the simple . segments of the society, educators and farmers C 4 - Develop professional ethics . Agricultural engineer among students by following the . correct professional behavior	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The importance of the poultry industry in Iraq, the international companies producing broiler and egg .chicken breeds Origin of chickens, classification of chickens (biological, economic, geographical classification	My knowledge and skills	1 theoretical 3 practical	the first

ask questions	Lecture and practical lesson	Reproduction functions in poultry and egg formation Iraqi local chicken, the most important hybrid breeds used at the present time	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Male and female reproductive systems and hormones and their control over the .formation of the egg Poultry Physiology/ Poultry Anatomy to view the various .internal organs	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Physiological work of the .gastrointestinal tract Maintenance of poultry fields, supplies and equipment used ,in them	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Natural and artificial hatching in chickens are the basic .ingredients of hatching Types of manholes and manholes, their installation, operation and maintenance, ventilation and cooling devices, heating devices	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Poultry housing, items to be provided in field site testing and design, ventilation, cooling and lighting needs .calculations Nursery methods, the most important daily operations, requirements and problems of nursery	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Various poultry equipment .used in poultry houses Hatchery types, hatcher numbers, operation, and typical hatcher specifications	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Egg production, laying hens rearing systems, factors affecting egg production, methods for calculating egg .production Maintenance of poultry fields and their supplies and the devices used in them, cooling, heating devices with production .Eggs, daily field operations	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Production of biological eggs or programmed eggs produced from laying hens and turkeys, its health and .economic importance Breeding turkeys, ducks and geese, types, methods of raising them, eggs examination, external appearance examination Internal contents, scan, egg staging	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Production of quail eggs, economic importance, general rules for egg .production Meat production and the difficulties that prevent the development of this industry, sorting chicken meat production	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Meat production, broiler rearing systems, factors .affecting meat production Operation and maintenance of poultry slaughterhouses, preparation of broilers before and after slaughter	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Poultry slaughterhouse management and methods of processing and marketing broilers Breeding turkeys, ducks and geese, their types, methods of raising them	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Genetic improvement of poultry, general principles of genetics, quantitative and qualitative traits, methods of .selection Disposal and utilization of poultry waste	My knowledge and skills	1 theoretical 3 practical	Thirteenth

Asking practice questions	Lecture and practical lesson	Turkey types and methods of breeding Economic accounts for poultry projects, cost and profit accounts for broiler meal	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Breeding ducks, geese types and methods of breeding them A visit to one of the typical poultry fields	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Infrastructure -1 1	
	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
Course Development Plan .12	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which they are - preparing to benefit from their expertise in developing the course according to the actual . needs of the labor market	

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
food and nutrition	Course name / code .3
present learning	Forms of attendance available .4
Autumn semester / first stage	Semester / year .5
hours of theoretical and practical class 60	Number of hours of study (.6 (total
2022	Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	
Course outcomes and methods of teaching, learning and assessment .9	
A - cognitive goals A 1- Defining food and nutrition and giving the student an idea about the composition of the feed materials A 2 to introduce the importance of nutrition for the animal and the statement of the . installation of feed materials and liabilities specified for each animal . A 3- Explain the types of digestion and the structure of the digestive system A 4- Identify the nutrients included in food, their importance, the function of each element, and the symptoms of its deficiency A 5 - Teaching the student how to calculate the nutritional needs of an animal, how to . manufacture feed, and the formation of balanced and economical diets	
B - Skills objectives of the program B 1 - To provide the student with the skills of applying scientific methods with regard to food and animal nutrition so that he is able to reduce the cost of feeding each animal . by choosing the appropriate diets B 2 - Training the student on how to improve the quality of poor feed and make it . useful and good for the animal through various additions and treatments to it B 3 - To provide the student with the necessary skills to conduct laboratory tests . related to animal nutrition	
Teaching and learning methods	
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining food samples, and using various laboratory . equipment and devices	
Evaluation methods	
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals . C 1- Enable the student to apply theoretical information in a practical way C 2- To develop the patriotic spirit of the student to increase production in quantity . and quality C 3 - Instilling the concept of community service and the best way to deal with the . simple strata of society, the peasants and farmers C 4 - Develop professional ethics . Agricultural engineer among students by following . the correct professional behavior	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1	

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Definition of nutrition, the importance of nutrition for animals Familiarize yourself with the tested devices, methods of sampling the different feed materials	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Composition of feed materials (water, carbohydrates + fats + proteins + vitamins + salts .(mineral Anatomy of the digestive system of ruminants	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Digestion and absorption of food compounds in ruminant and monogastric animals Anatomy of the digestive system of monogastric animals ((poultry and rabbits	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Classification and feed materials Performing solutions dilution operations (mular and molar (concentration	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Different feed specifications Determination of moisture in concentrated and rough (green) feed	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Dietary and non-food .supplements added to diets Protein Estimation	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	The use of agricultural (plant and animal) and industrial wastes in animal nutrition Protein Estimation	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The use of hay and silage in .feeding animals fat estimation	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Basic rules for creating relationships Energy rating	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Balancing relationships and building relationships estimation of fiber	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	.food poisoning estimation of fiber	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Study the animal's energy needs and its fate in the .animal's body Determination of silica in feed materials, and methods of adulteration of feed	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Nutritional measurements and methods for measuring the nutritional value of feed materials Mathematical applications on food scales	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	food scales Mathematical applications on nutritional scales	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Some important nutritional terms (increasing the weight of the digestion coefficient, the , efficiency of food conversion A visit to one of the feed factories	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Course Development Plan .12

. Providing the possibility of academic support in organizing field visits -
Providing the appropriate classroom environment that enables the teacher to diversify -
teaching strategies
. Providing information technology in the campus library -
Hosting experts from outside the institute , or from the work environment for which -
they are preparing to benefit from their expertise in developing the course according

. to the actual needs of the labor market	
Infrastructure .11	
method book	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites
Infrastructure .11	
method book	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
Veterinary Principle/ basics medicine veterinary	Course name / code .3
present learning	Forms of attendance available .4
Autumn semester / first stage	Semester / year .5
hours of theoretical and practical class 75	Number of hours of study (.6 (total
2022	Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	

Course outcomes and methods of teaching, learning and assessment .9	
A - cognitive goals . A 1- Providing students with the basics of veterinary public health A 2- Knowing the nature and pathological condition of animals A 3- student learning the basics of diseases and knowledge of the condition and how to treat them A 4- Introducing the student to the reality of the livestock sector and familiarizing him with endemic and imported animal diseases	
B - Skills objectives of the program B1 - Contribute to community service through consultations in all aspects of animal production and slaughter of large animals and poultry B 2 - Training the student to conduct applied research and solve problems that arise in the . field B 3 - To provide the student with the necessary skills to conduct laboratory tests related to . animal nutrition	
Teaching and learning methods	
Explanation and clarification Lecture method student groups Practical lessons in the field Scientific trips to follow up on dairy cattle production projects self-learning method	
Evaluation methods	
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand when, what and how he . should think and work to improve the ability to think and solve problems - C2 - Observation and Perception - C3 - Analysis, interpretation and persuasion - C4 - Preparation and calendar C 5- Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development D - verbal communication (the ability to express ideas clearly and confidence in the 1 (speech (Team work- D - Teamwork (work with confidence within the group 2 d - analysis of the investigation (collection of information systematically to establish 3 (scientific facts and principles of a solution to a particular problem (d - Contact the written (the ability to express yourself clearly in writing 4	

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	.internal body organs Identify the external parts of the animal's body and the importance of some areas	My knowledge and skills	2 theoretical 3 practical	the first
ask questions	Lecture and	.internal body organs	My knowledge	2 theoretical	The second

	practical lesson	Signs of health and disease, condition of skin and hair	and skills	3 practical	
Listen and ask questions	Lecture and practical lesson	.The internal organs of the body Veterinary medicines in the pharmacy	My knowledge and skills	2 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Bacteria, their types and characteristics Methods of administering veterinary medicines and vaccines	My knowledge and skills	2 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Blood, its components and functions , types and causes of anemia Sample collection Methods for collecting blood, stool and urine samples	My knowledge and skills	2 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	.Immunity and resistance Sterilization and disinfection: natural sterilization methods	My knowledge and skills	2 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Diseases classified by their modes of transmission Methods for diagnosing internal and external parasites - field + laboratory	My knowledge and skills	2 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	.diagnoses of illnesses Methods of collecting samples for the purpose of bacterial examination	My knowledge and skills	2 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Medicine and types of veterinary drugs ,important field operations	My knowledge and skills	2 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Prevention and control of infectious diseases Cut the horns by anaesthesia of the corneal nerve	My knowledge and skills	2 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	.Mastitis Types of mastitis Birth Instruments used in childbirth	My knowledge and skills	2 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	.animal parasites Birth Instruments used in childbirth	My knowledge and skills	2 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	.Surgery, types of wounds Modern methods of maternal and newborn care	My knowledge and skills	2 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	.Hormones, types of sex hormones Modern methods of maternal and newborn care	My knowledge and skills	2 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Childbirth, dystocia Serological tests	My knowledge and skills	2 theoretical 3 practical	Fifteenth

Course Development Plan .11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	

Infrastructure .12	
method book	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
Dairy cattle Production dairy cattle production	Course name / code .3
present learning	Forms of attendance available .4
Autumn semester / first stage	Semester / year .5
hours of theoretical and practical class 60	Number of hours of study (.6

2022	(total Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	

Course outcomes and methods of teaching, learning and assessment .9	
A - cognitive goals - A - The student recognizes the concept of the production of cattle milk 1 A - learn cows are classified on the basis of the strain and the purpose of production 2 A - to keep pace with student management of milk cows in the modern era and the difference 3 in management programs between the past and present - A - The student recognizes the production of cattle milk supplies 4 A - The student learns how to set up pens for cows by region appropriate geographical 5 breeding of heat Humidity, lighting and ventilation	
B - Skills objectives of the program - b - student production of the definition of the concept of cattle milk 1 b - teaching students and training on the scientific method for the management of milk 2 cows	
Teaching and learning methods Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, . and a wooden canopy	
Evaluation methods Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals . C 1- Enable the student to apply theoretical information in a practical way C 2- To develop the patriotic spirit of the student to increase production in quantity and . quality C 3 - Instilling the concept of community service and the best way to deal with the simple . strata of society, the peasants and farmers C 4 - Develop professional ethics . Agricultural engineer among students by following the . correct professional behavior	

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Factors affecting the increase and decrease in the level of milk Identify the components of the cow field	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Milk cattle breeds Cow body parts / identification of milk-producing breeds	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Iraqi cattle and their milk production (Animal arbitration (tables	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Care and feeding of dairy cattle Cattle dwellings, isolation rooms, childbirth, feed stores	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Types of global and Iraqi buffalo Production field records	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	.Milk production in buffaloes Daily field operations / cleaning, feeding, production	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	.Camels and milk production Seasonal operations / numbering, drying of milk animals	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The installation and physiology of the udder Types of milking / Bedouin milking	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Hormones and their effect on .milk secretion Types of milking / mechanical milking	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Factors affecting milk production in terms of .chemical composition Breastfeeding and its types	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and	Genetic improvement of dairy .cattle herds	My knowledge and skills	1 theoretical	eleventh

	practical lesson	Milk substitutes and the importance of colostrum		3 practical	
Practical exercise and workgroups	Lecture and practical lesson	Selection methods for dairy cattle Evolution of Breeds and Milking Processes (Information Network)	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Establishment of dairy cattle farms See a milk production plant	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Store and produce healthy .milk A scientific visit to one of the milk collection stations	My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Protect milk from .contamination Discussion about the practical lesson	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Course Development Plan .11

- . Providing the possibility of academic support in organizing field visits -
- Providing the appropriate classroom environment that enables the teacher to diversify -
- teaching strategies
- . Providing information technology in the campus library -
- Hosting experts from outside the institute , or from the work environment for which -
- they are preparing to benefit from their expertise in developing the course according
- . to the actual needs of the labor market

Infrastructure .12

Dairy cattle production. Department of .Livestock, College of Agriculture Baghdad University . 340 shakes Written by Professor Dr Natiq Hamid Al-Qudsi and Jial Victor Elijah	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
.Dairy Sci. J www.google.com Location	b . Electronic references , websites

Course description

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
Agriculture / Pullers and Agricultural Machines Machines & Equipments	Name/Code of the course .3
present learning	Forms of attendance available .4
Autumn semester / first stage	Semester/year .5
hours of theoretical and practical class 45	Number of hours of study .6 ((total
2022	Date of preparation of this .7 description

Course objectives: Granting the student a diploma in the theoretical and practical .8
aspects to serve the preparation of a graduate of a distinguished level and his commitment
.to the practical arena

Course outcomes and methods of teaching, learning and assessment .9

- A - cognitive goals
- A1 - Teaching students to understand the agricultural tug and training to use it in the . field
- A 2- Introduce students to the main parts of the tug, their importance, and how each . part works
- . A 3- Enable the student to know how to deal with materials and devices in the tug
- B - Skills objectives of the program
- . B1 - To provide the student with the skills of tug maintenance
- B 2 - Training the student to understand the work of tug systems and identify faults to . reach high productivity
- B 3 - To provide the student with the necessary skills to conduct general examinations . related to the tug and the soil and how to give the appropriate scientific judgments

Teaching and learning methods

Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy

Evaluation methods

- Quizzes Take daily quick exams
- Conducting monthly exams
- Conducting semester and final exams

course description form

Course description

course description form

Course description

. C - emotional and value goals . C 1- Enable the student to apply theoretical information in a practical way C 2- To develop the patriotic spirit of the student to increase production in quantity . and quality C 3 - Instilling the concept of community service and the best way to deal with the . simple strata of society, the peasants and farmers C 4 - Develop professional ethics . Agricultural engineer among students by following . the correct professional behavior
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2 -D 3

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Knowing the importance of agricultural mechanization - types of pullers - public safety Watching the types of pullers and getting to know their parts	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Study of the main parts of the puller and the function of each part - transmission devices, their parts and function The main engine parts and types of systems	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Study of intake systems (fuel system - cooling system) - types - important parts and benefits - faults and .maintenance Parts of the cooling system and air system	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Study of the lubrication system - the air purification system - the exhaust system and the silencer - its parts and function .its malfunctions lubrication system parts	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Study of the electrical system - the parts - the utility, function .and maintenance of each part tug movement device and tug drive	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Knowledge of the devices and means of exploiting the power in the tug, the hydraulic device - the traction shaft - the rear drive shaft PTO management reel Electrical system for tug parts	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Study of the structure of the tug - parts and benefits - guidance system - stops - the trajectory device in the tug Separator, its parts and gearshift device	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Knowing the types of plows - the importance of the plowing process - the characteristics of .good plowing Practical tug driving exercises	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Study of tilting plows - tipping disc plows - their use - their parts - maintenance and .plowing methods Connect the tools on the tug	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Study of excavator plows - rotary plows - underground .plow - their use - their parts Identify the parts of permanence	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Knowledge of soil softening equipment - its use - its parts - machines for leveling, planning and channeling - its .importance - its use Types of plows and familiarization with the equipment used	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Study of mechanized agriculture - fertilizer and seed spreader - its parts - types - .calibration Types of protective equipment	My knowledge and skills	1 theoretical 3 practical	twelveth

ask questions	Lecture and practical lesson	A study of the fertilized seed in lines - its parts - its field .titration - laboratory titration Types of cleaning equipment in the fields	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Study of planting machines in lines - potato cultivation - types .- calibration Watching the use of drawers in the fields (Information Network)	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Fodder cutting machines - types - parts of the compound combine harvester - work - the main aggregates of the .combine harvester Discuss the practical lesson and benefit in the field of specialization	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Course Development Plan .11

. Providing the possibility of academic support in organizing field visits -
Providing the appropriate classroom environment that enables the teacher to diversify -
. teaching strategies
. Providing information technology in the campus library -
Hosting experts from outside the institute, or from the work environment for which -
they are preparing to benefit from their expertise in developing the course according
. to the actual needs of the labor market

Infrastructure .12

Systematic book for pullers and agricultural machines	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational Institution .1
Department of Plant Production Techniques	Scientific Department / Center .2
Computer Application / calculator	Course name / code .3
present learning	Forms of attendance available .4
Autumn semester / first stage	Semester / year .5
hours of theoretical and practical class 45	Number of hours of study (.6 (total
2022	Date of preparation of this .7 description

Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena

Course outcomes and methods of teaching, learning and assessment .9

A - cognitive goals
A 1- teach students to understand the calculator parts and operating systems (WINDWS7) and its commands for managing the various files and applications . available
A 2- Introducing students to important computer programs that help in raising the . level of production
A 3- Enable the student to know how to deal with devices in the computer lab, . printers, monitors, and others
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams
Conducting monthly exams
Conducting semester and final exams
. C - emotional and value goals
. C 1- Enable the student to apply theoretical information in a practical way
C 2- To develop the patriotic spirit of the student to increase production in quantity . and quality
C 3 - Instilling the concept of community service and the best way to deal with the . simple strata of society, the peasants and farmers
C 4 - Develop professional ethics . Agricultural engineer among students by following . the correct professional behavior
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development
-D 1
-D 2
-D 3
-D 4

Course Structure .10

Evaluation method	education method	Unit name / course or topic	Required learning	hours	the week
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			outcomes		
Questions and answers mini practical lesson	Lecture and practical lesson	Definition of the calculator and its benefits, its generations, linking the parts of the calculator, the physical components of the calculator and the means of input and output in it, software, the unit of memory measurement, the definition of files and folders	My knowledge and skills	1 theoretical 2 practical	first - sixth
ask questions	Lecture and practical lesson	System advantages, basic requirements for operation, components WINDOWS7The operating system, the concept of the icon, the style of dealing withDESKTOP Desktop home screen, buttonSTART , to benefit from TASKBARMouse activities, the importance and components of the taskbar to enter programs and exit the system and turn off the calculator	My knowledge and skills	1 theoretical 2 practical	Seventh - tenth
Listen and ask questions	Lecture and practical lesson	icon MY COMPUTER The concept of the window and identifying its main components, dealing with icons, copying files and folders, cutting and pasting, MY , RECYCLE BIN identifying DOCUMENTS	My knowledge and skills	1 theoretical 2 practical	eleventh - fourteenth
Practical exercise, meeting and work groups	Lecture and practical lesson	Properties of files, folders and disks, change the desktop background DESKTOP BACKGROUNDChange window colors COLOR , screen saver SCREEN SAVER	My knowledge and skills	1 theoretical 2 practical	fifteenth - eighteenth
Practical exercise, meeting and work groups	Lecture and practical lesson	Mouse properties, get to know the control panel CONTROL PANAL How to delete programs that were installed through PROGRAM AND FEATURES , Get to know some of the accessories ACCESSORIES , Such asCALCULATOR , wordpad ,Play video WINDOSWS PLAYERfiles MEDIA	My knowledge and skills	1 theoretical 2 practical	Nineteen - twenty-two
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	The concept of the calculator virus, the motives for the spread of viruses, how to get infected with the virus, types of viruses according to the nature of the infection and damage, signs of infection of the virus to the calculator, precautions to be taken to avoid viruses entering the computer, dealing with one of the anti-virus programs	My knowledge and skills	1 theoretical 2 practical	Twenty-third - twenty-fourth
Case study Practical exercise and work groups	Lecture and practical lesson	Networks and their types, network forms, network protocols	My knowledge and skills	1 theoretical 2 practical	twenty-fifth
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The Internet and its development, the Internet and the Internet, firewalls, some basic Internet concepts	My knowledge and skills	1 theoretical 2 practical	twenty-sixth
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Connect to the Internet, open the Internet browser, components of the Internet browser window, toolbars, browser icons	My knowledge and skills	1 theoretical 2 practical	Twenty-seven
Ask group work questions	Lecture and practical lesson	Web addresses, change the start page HOME PAGE Closing the browser and disconnecting the Internet, storing favorite pages	My knowledge and skills	1 theoretical 2 practical	twenty-eighth
Mini-lesson work groups	Lecture and practical lesson	Search engines, how to search for information on the network, copy text and images from websites for any application, download files from the Internet, prepare for printing, print	My knowledge and skills	1 theoretical 2 practical	twenty-nine
Practical exercise and workgroups	Lecture and practical lesson	Definition of email E-MAIL And its advantages, create an email GMAIL From the Google search engine Google Write a new message, attach files with	My knowledge and skills	1 theoretical 2 practical	thirty

		messages ATTACHMENT , read the message box INBOX Reply to messages REPLAYPassing incoming messages to othersFORWARD, delete messages , exit e - mail			
Course Development Plan .11					
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market					
Infrastructure .12					
Computer Fundamentals Book, Part One and Two			Required course books .1		
Supporting resources for each course			(Main references (sources .2		
Scientific journals, as well as research, letters and theses of professors in the same specialty			a. Recommended books and references (scientific journals , (reports , 0000		
www.google.com Location			b. Electronic references , websites		
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program					
Technical Institute / Shatra			Educational Institution .1		
Animal Production Techniques Department			Scientific Department / Center .2		
Human rights and democracy			Course name / code .3		
present learning			Forms of attendance available .4		
Autumn semester / first stage			Semester / year .5		
hours in theoretical class 30			Number of hours of study (.6 (total		
2022			Date of preparation of this .7 description		
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena					

Course outcomes and methods of teaching, learning and assessment .9	
A - cognitive goals A 1- Educating students on the most important rights of the citizen in the past, present . and future, and the most important laws that govern this A 2- Introducing students to the most important regional charters, constitutions and . guarantees of respect and protection of human rights and the legal rules of law	
B - Skills objectives of the program . B 1 - To provide the student with human rights skills and how to conduct them B 2 - Training the student on the skills of dealing with a democratic principle, guarantee . and human rights B 3 - To provide the student with the necessary skills for human rights and how to give . appropriate scientific judgments between the disputants	
Teaching and learning methods . Giving scientific and theoretical lectures through display screens, PowerPoint and slides	
Evaluation methods Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals . C 1- Enable the student to apply theoretical information in a practical way C 2- To develop the patriotic spirit of the student to increase production in quantity and . quality C 3 - Instilling the concept of community service and the best way to deal with the simple . strata of society, the peasants and farmers C 4 - Develop the ethics of the human rights profession among students by following the . correct professional behavior	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers lesson	Lecture and practical lesson	Human rights - their definition - their goals - the roots and development of human rights in human history - human rights in ancient and middle ages	My knowledge and skills	2 theoretical	the first
ask questions	Lecture and practical lesson	Human rights in the civilization of Mesopotamia - human rights in the divine laws - a special study of human rights in Islam	My knowledge and skills	2 theoretical	The second
Listen and ask questions	Lecture and	Human rights in the Middle Ages - Rights in sects, schools, theories,	My knowledge and skills	2 theoretical	the third

	practical lesson	corporations, their declarations and constitutions - Human rights in contemporary and modern history - International recognition of human rights in the League of Nations			
And meet and work groups	Lecture and practical lesson	Regional recognition of human rights - the European Convention on Human Rights in 1950 - the American agreement 1969 - non-governmental organizations and human rights	My knowledge and skills	2 theoretical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	National Human Rights Organizations - Human rights in the Iraqi constitutions between theory and reality	My knowledge and skills	2 theoretical	Fifth
Mini-lesson discussion and workgroups	Lecture and practical lesson	The relationship between human rights and public freedoms in the Universal Declaration of Human Rights, regional charters and national constitutions	My knowledge and skills	2 theoretical	VI
Case study and work groups	Lecture and practical lesson	Necessary human rights and collective human rights - economic, social and cultural human rights and civil and political human rights	My knowledge and skills	2 theoretical	seventh
Listen and ask questions and work groups	Lecture and practical lesson	Modern human rights - realities in development - the right to a clean environment - the right to solidarity - the right to religion - guarantees of respect and protection of human rights at the national level - guarantees in the constitution and laws - guarantees in the principle of the rule of law	My knowledge and skills	2 theoretical	VIII
Ask questions, listen and work groups	Lecture and practical lesson	Guarantees in constitutional oversight - in freedom of the press and public opinion - guarantees of respect for human rights at the international level - the role of the United Nations in providing guarantees	My knowledge and skills	2 theoretical	ninth
Ask group work questions	Lecture and practical lesson	The role of the Arab League, the European Union, the African Union and ASEAN in respecting and protecting human rights - the general theory of freedoms - the origin of rights and freedoms	My knowledge and skills	2 theoretical	The tenth
Mini-lesson work groups	Lecture and practical lesson	The functional nature of the concept of public freedoms - philosophical considerations of the right to work - structural and economic considerations	My knowledge and skills	2 theoretical	eleventh
Listen to a mini lesson	Lecture and practical lesson	The legal basis for the rule of law - regulation of public liberties by public authorities	My knowledge and skills	2 theoretical	twelveth
ask questions	Lecture and practical lesson	Non-judicial litigation or grievance - Judicial appeal - Determining the state's responsibility for its legitimate actions	My knowledge and skills	2 theoretical	Thirteenth
ask questions	Lecture and practical lesson	The effect of the duality of eliminating public liberties - public freedoms in administrative jurisprudence - equality - its historical development	My knowledge and skills	2 theoretical	fourteenth
ask questions	Lecture and practical lesson	The recent development of the idea of equality - gender equality - equality between individuals according to their beliefs and their race	My knowledge and skills	2 theoretical	Fifteenth

Course Development Plan .11

- . Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to - . diversify teaching strategies
- . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .12

method book	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000

Course description

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
Meat Cattle Production beef cattle production	Course name / code -3
present learning	Available forms of attendance -4
Spring semester / first stage	season / year -5
hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9	
A - cognitive goals A - to identify the most important strains producing meat and morphological 1 characteristics and productivity - . A - The student recognizes the production of red meat sources 2 a - to be able to understand the economic and nutritional importance to the 3 - . production of red meat - . A - to be able to know how to invest the productive efficiency of animal meat 3 . a - that recognizes the dressing percentage and recognize the factors affecting them 4 - A - to be familiar with the ways used to transport and marketing of animals and 5 . sacrifices	
B - Skills objectives of the program - . B 1 definition of the student production of red meat sources B 2 student 's ability to understand how to get to the best investment for the efficiency - . of the production of animal meat B 3 the students to recognize the best way to transfer and marketing of animals and . carcasses in different circumstances	
Teaching and learning methods	
Explanation and clarification Lecture method student groups Practical lessons in animal fields Scientific trips to animal fields in Iraq	
Evaluation methods	
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals	
C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand when, what and . how he should think and work to improve the ability to think reasonably - C2 - Observation and Perception - C3 - Analysis and Interpretation - C 4. Preparation and Calendar C5 - Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of . (employment and personal development -D 1 -D 2 -D 3 -D 4	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The reality of meat production in the Arab world and the world Field identification of the meat-producing parts of the animal's body	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Meat production in Iraq, means of increasing production, problems of meat production Field supplies in the fields of meat animals and housing, tools, scales	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and	Classification of farm animals producing beef - buffalo - camels	My knowledge and skills	1 theoretical	the third

	practical lesson	Field operations in the fields of meat animals : animal numbering, removal of horns, male fertilization process, nail clipping, spraying process, disinfection process, weighing animals, holding and placing animals		3 practical	
Practical exercise, meeting and work groups	Lecture and practical lesson	Breeds of beef cattle, phenotypic traits, productive traits Choosing and buying meat animals	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Production of meat from buffalo, buffalo in Iraq The most important methods of fattening	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Production of meat from camels ((camels The stages of establishing the herd	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Growth and development in meat animals - growth theory - growth curve Economic traits of meat animals	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Reproduction and fertility in meat animals Slaughter of animals / methods of animal slaughter	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Feeding meat animals, nutritional needs of meat animals, concentrated green fodder, production needs, types of diets and methods of fattening Calculations of carcasses / adhesion ratios, recovery ratios	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Study of the economic and productive characteristics of meat animals Field records of meat animals/kinds	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	The nutritional value of red meat and its comparison with some other human foods Scientific bases in the process of cutting carcasses	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	animal body composition Economic Calculations for Field Meat Production	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Doing a scientific trip The process of inspecting the carcasses	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	The practical foundations of the meat inspection process in the slaughterhouse, laboratory and at the consumer Laboratory tests conducted on meat	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	The future of meat production in Iraq scientific visit	My knowledge and skills	1 theoretical 3 practical	Fifteenth

course development plan -11

. Providing the possibility of academic support in organizing field visits -
Providing the appropriate classroom environment that enables the teacher to -
. diversify teaching strategies
. Providing information technology in the campus library -
Hosting experts from outside the institute , or from the work environment for -
which they are preparing to benefit from their expertise in developing the
. course according to the actual needs of the labor market

Infrastructure -12

Required course books .1

Supporting resources for each course 1 (Main references (sources .2

Scientific journals, as well as research, letters and professors' theses in the same specialty
a . Recommended books and references (scientific journals , (reports , 0000

www.google.com Location
Animal Science Journal b . Electronic references , websites

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the .program

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
Animal Health/ animal health	Course name / code -3
present learning	Available forms of attendance -4
Spring semester / first stage	season / year -5
hours of theoretical and practical class 75	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course outcomes and methods of teaching, learning and assessment -9	
A - cognitive goals a - that recognizes the environmental conditions in animal shelters 1 A - The scoop student pollutants to air or water 2 A - The student recognizes how the transmission of diseases and their causes through 3 affordable water	
B - Skills objectives of the program b - - improve the student 's ability to learn observation and experimentation and the 1 desire to perform experiments b - Learn how to set up a health system coherent and avoid the spread of diseases to 2 increase the numbers of animals b - enable students to identify the modern techniques used to improve the health of the 3 environment and animal	
Teaching and learning methods	
Explanation and clarification Lecture method student groups Practical lessons in animal fields Scientific trips to animal fields in Iraq	
Evaluation methods	
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. C - emotional and value goals	
C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand when, what and how he . should think and work to improve the ability to think reasonably - C2 - Observation and Perception - C3 - Analysis and Interpretation - C 4. Preparation and Calendar C5 - Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2 -D 3 -D 4	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Air, the health importance of air components, air pollutants inside animal housing and their health . importance gas ratingco In barns, . 2 methods for measuring microbial contamination in the air: Open occlusal method effervescent pellet method	My knowledge and skills	2 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	The role of air in the transmission of pathogens, droplet infection, dust infection and the health importance of rapid . Air, sun and light Methods for estimating humidity: a- absolute humidity b- relative humidity	My knowledge and skills	2 theoretical 3 practical	The second

		Wet and dry warehouse -1 hygrometermason Circular Hygrometer 3- -2 Humidity Diagram 4- Displacement Index			
Listen and ask questions	Lecture and practical lesson	Ventilation, air exchange and air volume, ventilation methods in . animal housing Methods for measuring air velocity a- engines b- indirect methods by CO2In the air of the building	My knowledge and skills	2 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Water, water sources: rain water, surface water, seas and . groundwater Industrial ventilation methods	My knowledge and skills	2 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Sanitary conditions to be met in . drinking water, watering animals Water test to judge its purity: local examination of the water source, how to take samples from the tap, wells, and surface water	My knowledge and skills	2 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	The role of water in the transmission of pathogens, pathogenic microbes, animal parasites, toxins . The chemical Chemical examination: pH, organic matter, ammonia, nitrates, chlorides	My knowledge and skills	2 theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Purification of drinking water, the purpose of which is the natural and artificial purification of water, the addition of chlorine, bleaching powder and potassium . permanganate Microscopic and bacteriological examination of drinking water	My knowledge and skills	2 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Animal pens, building site, construction, roof, thermal . insulation Animal building constructions, the main materials in the walls, floor and ceiling, thermal insulation	My knowledge and skills	2 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Discharge of waste and liquids from barns, liquid manure deposits, drainage pipes and traps . Veterinary conditions for imported animals and birds and their products	My knowledge and skills	2 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Healthy ways to get rid of waste in . barns Chemical disinfectants used in the field	My knowledge and skills	2 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Barn systems for dairy cattle, general specifications, ceiling and walls, troughs and manholes, lighting And ventilation, the stores of the . loins Animal barn disinfection method	My knowledge and skills	2 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Milking machines, their types: mobile milking machine, . stationary milking machine Insecticides and their uses in animal health, general specifications to be taken into account when choosing an insecticide	My knowledge and skills	2 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	General specifications of the pits: light, ventilation, ceiling, entrance, . door openings Methods of using insecticides, immersion and immersion, the dangers of immersion	My knowledge and skills	2 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Theatres, animal health in . theatres, slatted floors Tick resistance, methods of tick resistance in pastures, on animals and in animal habitats	My knowledge and skills	2 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Calf barns, environment, calf barn systems, shedding barns, fattening .cattle barns and sheep barns Resistance to scabies on animals and in barns, poisoning with insecticides, petroleum oils, ,solvents Sulfur and lime sulfur, arsenic compounds	My knowledge and skills	2 theoretical 3 practical	Fifteenth

course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute, or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports, 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites

Course description

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the .program

Course description	Technical Institute / Shatra	Educational institution -1
	Animal Production Techniques Department	Scientific Department / -2 Center
	fish production	Course name / code -3
	present learning	Available forms of attendance -4
	Spring semester / first stage	season / year -5
	An hour in the classroom, theoretical and practical 60	Number of hours of study (-6 (total
	2022	The date this description -7 was prepared
	Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	
	Course outcomes and methods of teaching, learning and assessment -9	
	- A. Cognitive Objectives - A 1 student recognizes the principles of the concept of fish - A 2 learn classification of fish - A 3 recognizes the internal and external parts of the fish A 4 to identify the specialized study of fish science - . b Skills objectives of the course - B 1. Know the concept of the student Mpadi fish B 2 - The student's ability to distinguish fish and their locations in aquatic environments - B3 - Learn how to study the food of fish, estimate their age, and determine their . reproductive period B 4- The student's ability to distinguish some Iraqi fish Teaching and learning methods Explanation and clarification Lecture method student groups Practical lessons in animal fields Scientific trips to animal fields in Iraq Evaluation methods theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams - C - Emotional and value goals C 1- The skill of thinking according to the student's ability and that the goal of this skill - is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably - C 2. observation and cognition - C3 - Analysis and Interpretation - C 4. Preparation and Calendar C -5 Critical thinking strategy in learning D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini	Lecture and practical lesson	Introduction to fish production - ichthyology - importance of fish - . characteristics of fish	My knowledge and skills	1 theoretical	the first

practical lesson		Study of the external appearance of the fish - parts of the body		3 practical	
ask questions	Lecture and practical lesson	The appearance outer for fish appearance the body openings . somatic , scales fins Study of fins - scales - lateral line - longitudinal line - standard length Types of fins	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Internal structures of fish, respiratory, digestive, reproductive, circulatory, sense organs and . urinary system Anatomy of fish, identification of the digestive system, respiratory system, reproductive system	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	secretion and organization osmosis . for fish , the device nervous Familiarize yourself with the laboratory equipment and how it works (measuring device). pH , Measuring device CO2) and others	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Classification of fish (length measurements, weight measurements, methods used in . classifying fish Collect samples of water from rivers and streams and measure (dissolved oxygen and pH salinity , transparency, (degree of salinity	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Taxonomic traits of some . important and common Iraqi fish	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Methods for estimating age in fish, relationship between height and . weight in fish Collection and examination of phytoplankton and zooplankton Examination of samples of plankton from different aquatic environments	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Reproduction – Reproduction strategies – Factors affecting reproduction (internal and external) Reproductive systems Sexual differentiation and .sexual differences Multiplication nests, types and use	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The aquatic environment, the physicochemical factors that affect . the growth and life of fish Fertility test and measurement (absolute, relative) reproductive function	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Migration of fish (reproduction migration, feeding migration, . (winter migration Scientific films about the aquatic environment	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Plant and animal plankton, food pyramid (production stage, consumption stage, death stage, . (recovery stage Identifying Iraqi fish and applying some of the methods used in classifying fish	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Fertility (absolute, relative) . reproductive function Making maps of water bodies in Iraq	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Pollution types and sources and its .impact on aquatic organisms Identifying the types of fishing (means (nets, traps, snarls 0000	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Water resources in Iraq, rivers, . lakes, marshes, seas A visit to one of the fish farms and see its components	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Methods of improving inland water .productivity A visit to a water body and a study of ways to improve it	My knowledge and skills	1 theoretical 3 practical	Fifteenth

course development plan -11

. Providing the possibility of academic support in organizing field visits -
Providing the appropriate classroom environment that enables the teacher to diversify -
. teaching strategies
. Providing information technology in the campus library -

Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports, 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the .program	

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
poultry feed	Course name / code -3
present learning	Available forms of attendance -4
Spring semester / first stage	season / year -5
An hour in the classroom, theoretical and practical 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9	
- A. Cognitive Objectives . A1 - The student will be familiar with the concept of feeding poultry - . A 2 - The student learns the components of poultry diets - . A 3 - Using modern software to build relationships A 4 - that students learn how to manage feeding hens and broiler chickens and the . difference in the nutrition requirements between Monday . A 5 - The student learns how to set up fodder plants	
. B - the skill objectives of the course B1 - Introducing the student to the concept of poultry nutrition . B 2 - the student's ability to evaluate nutrition programs . B 3 - Introducing students to the work of feed mills	
Teaching and learning methods	
Explanation and clarification Lecture method student groups Practical lessons in poultry fields Scientific trips to poultry fields in Iraq	
Evaluation methods	
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
- C - Emotional and value goals C 1- The skill of thinking according to the student's ability and that the goal of this skill - is for the student to believe in what is tangible and understandable . When, what and how he should think and improve the ability to think reasonably - C 2. observation and cognition - C3 - Analysis and Interpretation - C 4. Preparation and Calendar C -5 Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The concept of nutrition, the basic nutrients that birds need and their .functions The nature of the feed materials used in poultry feeding, their specifications, and the determinants of their use	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and	The concept of energy, the main sources of energy, digestion and	My knowledge and skills	1 theoretical	The second

	practical lesson	absorption of fats and .. carbohydrates Classification of feed materials		3 practical	
Listen and ask questions	Lecture and practical lesson	The relationship between energy and feed density, factors affecting energy needs, symptoms of deficiency and increase in energy in poultry diets Calculation of nutritional energy requirements (broilers and laying hens)	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	The energy needs of broilers and broilers during the ..different life stages Calculation of nutritional energy requirements (broilers and laying hens)	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Poultry needs of protein and essential amino acids Symptoms of deficiency and excess of protein in poultry ..diets Practical examples of poultry energy needs and net base energy calculation	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Factors affecting the protein ..needs of poultry Calculating the nutritional needs of protein for broilers and laying hens, practical examples of calculating daily protein needs of chicken	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	.The ratio of energy to protein Calculations of the digestive ratio of protein, and the relationship between them and the digestive ratio of protein, the remaining protein in the body, the biological value of protein, the net value of protein and the relationship between them and the digestive ratio	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Nutritional needs of vitamins and inorganic elements and the ..factors affecting them Calculation of feed conversion efficiency of birds and dressing ratio	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Food and non-food additives in ..poultry rations Calculation of energy and protein needs for broiler chickens - practical examples	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	The relationship of nutrition to the quality of the egg, the quality of the shell, the quality of the egg white, the nutritional value of the eggs, the quality and color of the yolk, nutrition, the size and .. production of eggs Composition and mixing of poultry feeds - selection of primary feed materials, determination of the level of nutrients in the diet	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Food rationing for poultry, methods used in rationing ..feed. Feed forms for poultry Applied calculations to measure growth velocity, methods used to measure growth velocity of chickens	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Feeding turkeys and diets - nutritional needs during the ..breeding period Calculation of poultry feed needs	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Traditional feed, used in poultry diets (feed ..(alternatives Recognizing the symptoms of nutritional deficiency in birds and how to treat them, evaluating the quality of the feed and its freeness Poisons, fungi and means of storage	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking	Lecture	Traditional feed, used in poultry	My	1	fourteenth

practice questions	and practical lesson	. (diets (feed alternatives Practical examples of calculating feed costs for birds	knowledge and skills	theoretical 3 practical	
Asking practice questions	Lecture and practical lesson	Diseases and bad habits caused by .nutritional deficiencies Some materials from feed alternatives and how to treat them when introduced into rations	My knowledge and skills	1 theoretical 3 practical	Fifteenth

course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports, 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the .program	

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
Chemistry general chemistry	Course name / code -3
present learning	Available forms of attendance -4
Spring semester / first stage	season / year -5
An hour in the classroom, theoretical and practical 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9
- A. Cognitive Objectives A 1 - That the student familiarize himself with the general concepts and principles of . chemistry A 2 - The student should acquire intellectual skills related to modern methods and . trends A 3- The student should acquire manual skills that qualify as the outcome of laboratory . work . A 4- Spreading the spirit of cooperation among students through laboratory work A 5- That the student recognize the characteristics of experimental science, which is the science on which the science of chemistry is based
. B - the skill objectives of the course B1 . To enable students to acquire knowledge and understanding of chemical standards B 2- Enable students to obtain knowledge and understanding of laws related to scientific research B3 - Enable students to obtain knowledge and understanding of international auditing standards B 4. enable students to obtain knowledge and understanding of the chemical law B 5. Students enable access to knowledge and understanding of the science of chemistry systems
Teaching and learning methods
Explanation and clarification Lecture method student groups Practical lessons in the chemistry lab
Evaluation methods
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
- C - Emotional and value goals C 1- The skill of thinking according to the student's ability and that the goal of this skill - is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably - C 2. observation and cognition - C3 - Analysis and Interpretation - C 4. Preparation and Calendar C -5 Critical thinking strategy in learning

D - skills of public and rehabilitation transferred (other skills related to the viability of
.(employment and personal development
-D 1
-D 2

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The history of chemistry and its importance in nature and its types	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Types of solutions and how to prepare them	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Chemical structure of inorganic compounds	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Chemical composition of organic compounds	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Saturated and unsaturated hydrocarbons	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	hydrocarbons saturated and change saturated	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Amines and alcohol	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Amines and alcohol	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	citrus carboxylate	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	citrus carboxylate	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	salts mineral/ detection About most important metal in a nature	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	salts mineral/ detection About most important metal in a nature	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	salts mineral/ detection About most important metal in a nature	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Detergents and sterilizers used in animal production fields	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	detergent and sterilizers used in a fields production animal	My knowledge and skills	1 theoretical 3 practical	Fifteenth
course development plan -11					
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market					
Infrastructure -12					
method book			Required course books .1		
			(Main references (sources .2		
Scientific journals, as well as research, letters and professors' theses in the same specialty			a . Recommended books and references (scientific journals , (reports , 0000		

www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the .program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
animal production mechanization	Course name / code -3
present learning	Available forms of attendance -4
Spring semester / first stage	season / year -5
hours of theoretical and practical class 45	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description	Course outcomes and methods of teaching, learning and assessment -9	
	- A cognitive goals	
	A 1- The student will be familiar with the concept of mechanization of animal production	
	A 2- The student should classify the sources of water needed for the field	
	A 3- The student should separate between manual and mechanical work	
	A 4- To perform a number of theoretical calculations for the use of machines	
	A 5 - The student evaluates the benefits of using machines	
	- B Marathi objectives for the program	
	- B 1 introduce students to the concept of mechanization of production Alhawwana	
	- B 2 the student 's ability to use agricultural machinery skillfully	
	B 3 enable students to choose the appropriate machine in the appropriate field	
	Teaching and learning methods	
	Explanation and clarification	
	Lecture method	
	student groups	
	Practical lessons in agricultural fields	
	Evaluation methods	
	theory tests	
	Practical tests	
	Reports and Studies	
	Quizzes Take daily quick exams	
	Conducting monthly exams	
	Conducting semester and final exams	
	- . C - emotional and value goals	
	C 1- The skill of thinking according to the student's ability, and that the goal of this skill	
	. is for the student to believe in what is tangible	
	Understand when, what and how to think and improve the ability to think	
	. reasonably	
	C2 - Observation and Perception	
	- C3 - Analysis and Interpretation	
	- C4 - Preparation and calendar	
	C 5- Critical thinking strategy in learning	
	D - skills of public and rehabilitation transferred (other skills related to the viability of	
	.(employment and personal development	
	-D 1	
	-D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	An overview of the mechanization of livestock and poultry fields and .their equipment A visit to the poultry fields, livestock fields and their accessories at the institute	My knowledge and skills	1 theoretical 2 practical	the first
ask questions	Lecture and practical lesson	The use of blacksmithing ..workshops and gas welding Training in blacksmithing workshops and gas welding	My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	.The use of electric arc welding Electric welding training	My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Electricity in animal production fields Single-phase and three-phase electricity Electric cycle .Electrical terms and symbols	My knowledge and skills	1 theoretical 3 practical	the fourth

		Training and familiarization with electrical installations Doing an electrical course			
Practical exercise, meeting and work groups	Lecture and practical lesson	Motors . Installation of the electric motor, means of straightening the motor, .maintenance and repair Starting electric motors Disassembling and installing the electric motor Identifying the parts	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Automatic milking machine Types of milking devices Milk preservation and cooling ..devices Operation and maintenance of automatic milking machine	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Green Forage Processing Equipment Forage Headers Dry Forage Equipment Hay Baler Parts ..maintenance work Operation and maintenance of green forage harvesters, operation and maintenance of balers	My knowledge and skills	1 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Mechanization of concentrated feed processing Types of feed mills Feed plant parts Grinders ..mixers Operation and maintenance of the feed mill and mixers	My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Mechanization of sheep fields Tools Spraying and dipping devices Wool shearing .. machines Training on shearing operation Maintenance of wool shearing machines and sheep spraying and dipping machines	My knowledge and skills	1 theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Mechanization of poultry hatcheries types of hatcheries. egg grading equipment egg grading equipment Operation and maintenance of incubators Training on egg collection and grading devices	My knowledge and skills	1 theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Poultry slaughterhouses Livestock slaughterhouses Slaughter methods Manufacturing protein from ..slaughterhouse waste A scientific trip to one of the poultry slaughterhouses and livestock massacres	My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Ventilation and cooling systems, lighting systems in ..chicken fields Operation and maintenance of ventilation, cooling and lighting equipment	My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Automatic manifolds and manholes, parts, maintenance .and repair Operation and maintenance of automatic feeders and manholes	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Water pumps of all kinds, operation, maintenance and .repair Operation and maintenance of pumps and repairs for holidays	My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Generators are the basis of the generator's work, the parts, the maintenance instructions, the calculation of the project's need ..for generators Operation of generators and maintenance of generators	My knowledge and skills	1 theoretical 2 practical	Fifteenth

course development plan -11

. Providing the possibility of academic support in organizing field visits -
Providing the appropriate classroom environment that enables the teacher to diversify -
. teaching strategies
. Providing information technology in the campus library -
Hosting experts from outside the institute , or from the work environment for which -
they are preparing to benefit from their expertise in developing the course according
. to the actual needs of the labor market

Infrastructure -12

method book Required course books .1

(Main references (sources .2	
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
English language	Course name / code -3
present learning	Available forms of attendance -4
Spring semester / first stage	season / year -5
An hour in the classroom, theoretical and practical 30	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9	
- A cognitive goals A1 - To familiarize the student with the concept of the English language A2 - The student will describe the types of English language A 3- That the student knows the ways of expressing the English language That the student knows the rules of the English language -4 A 5- To know how to classify English grammar A 6 - to know how to use the English language	
b Programmatic skills objectives B1 - That the student can distinguish between English grammar and general language B2 - To know the basics of the English language B 3- To know the importance of the English language	
Teaching and learning methods	
Explanation and clarification -1 Lecture method -2 Laboratory practical lessons -3 Lessons and field visits -4	
Evaluation methods	
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
. c Emotional and value goals C 1- Thinking skill according to the student's ability C2 - Observation and Perception C3 - Analysis and interpretation C 4- Preparation and calendar	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	the first
ask questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 3 practical	the fourth

Practical exercise, meeting and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson		My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	Fifteenth

Infrastructure -11	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
course development plan -12	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2

	Center
animal physiology	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second	season / year -5
An hour in the classroom, theoretical and practical 75	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description	Course outcomes and methods of teaching, learning and assessment -9				
	- A. Cognitive Objectives				
	A1 - The student will be familiar with the concept of animal physiology				
	A 2. The student classifies knowledge of physiology on the basis of old and compared to the scientific development theory information quotient has				
	A 3 - That the student separate between physiological concepts in the modern era and between concepts in the past and the difference in modernity				
	Information between the past and the present				
	A 4- The student learns how the body's organs work physiologically and what are the factors affecting them				
	A 5 - The student learns how to conduct physiological examinations about the organs of the body and what are the requirements necessary for that				
	. b Skills objectives of the course				
	B 1- Introduce the student to the concept of animal physiology				
	B 2 - The student's ability to study the various organs of the body in a scientific way				
	B 3- Introducing students to how to use laboratory equipment to perform blood tests				
	Teaching and learning methods				
	Explanation and clarification -5				
	Lecture method -6				
	Laboratory practical lessons -7				
	Lessons and field visits -8				
	Evaluation methods				
	theory tests				
	Practical tests				
	Reports and Studies				
	Quizzes Take daily quick exams				
	Conducting monthly exams				
	Conducting semester and final exams				
	- C Emotional and value objectives				
	C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand				
	. When, what and how he should think and improve the ability to think reasonably				
	C2 - Observation and Perception				
	C 3- Analysis and interpretation				
	C 4- Preparation and calendar				
	C 5- Critical thinking strategy in learning				
	D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development				
	-D 1				
	-D 2				

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Introduction to physiology, definition of animal physiology Learn about the body parts of cows, sheep and goats and the function of each part	My knowledge and skills	3 theoretical 2 practical	the first
ask questions	Lecture and practical lesson	The external parts of the animal and poultry body and the importance of some parts Identify the parts of the bird's body and the function of each part of the body	My knowledge and skills	3 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Digestive and circulatory anatomy of ruminants Digestive and circulatory anatomy of ruminants	My knowledge and skills	3 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Anatomy of the respiratory and urinary systems in ruminants Anatomy of the respiratory and urinary systems in ruminants	My knowledge and skills	3 theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Anatomy of the bones, muscles and nervous system of ruminants Anatomy of the bones, muscles and nervous system of ruminants	My knowledge and skills	3 theoretical 2 practical	Fifth

Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Digestive and circulatory anatomy of poultry Digestive and circulatory anatomy of poultry	My knowledge and skills	3 theoretical 2 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Anatomy of the respiratory and urinary system in poultry Anatomy of the respiratory and urinary system in poultry	My knowledge and skills	3 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Anatomy of bones, muscles and nervous system of poultry Anatomy of bones, muscles and nervous system of poultry	My knowledge and skills	2 theoretical 3 my work	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Animal body composition: muscle tissue, connective tissue, adipose tissue, bones Identify the muscle, ligament, fatty and bone tissues in the animal's body	My knowledge and skills	2 theoretical 3 my work	ninth
Ask group work questions	Lecture and practical lesson	Endocrine glands and their types in ruminants Identify the types and locations of endocrine glands in ruminants	My knowledge and skills	2 theoretical 3 my work	The tenth
Mini-lesson work groups	Lecture and practical lesson	Endocrine secretions and endocrine functions Methods of taking blood samples from the body of animals and birds	My knowledge and skills	2 theoretical 3 my work	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Neurological and hormonal control over various animal body activities Preserving the blood samples drawn from the animal, performing the plasma separation process	My knowledge and skills	2 theoretical 3 my work	twelveth
ask questions	Lecture and practical lesson	How to take samples of blood, ways to store them, and the procedures that take place on them before conducting laboratory tests, types of blood cells and the function of each .type Conducting laboratory tests on blood samples and watching red and white blood cells	My knowledge and skills	2 theoretical 3 my work	Thirteenth
Asking practice questions	Lecture and practical lesson	Determining the blood type of the animal, counting the number of blood cells (red and white) Performing the process of determining the blood type, counting the number of different blood cells	My knowledge and skills	2 theoretical 3 my work	fourteenth
Asking practice questions	Lecture and practical lesson	Diagnosis of diseases through blood tests and knowledge of blood contamination A visit to one of the nearby veterinary medicine colleges to see the components of the animal's body and various blood tests	My knowledge and skills	2 theoretical 3 my work	Fifteenth

Infrastructure -11	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
course development plan -12	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library -	

Hosting experts from outside the institute , or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
animal diseases	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second	season / year -5
hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena	

Course outcomes and methods of teaching, learning and assessment -9

- A. Cognitive Objectives
A 1- The student will be familiar with the concept of animal diseases
A 2- The student should classify diseases on the basis of the type of causative agent and the type of animal affected
A 3- That the student separate between epidemic and non-epidemic diseases and the difference in management programs dealing with them
A 4- The student learns how to treat common diseases and the difference in treatment requirements between them
A 5 - That the student learn how to establish integrated health programs in animal fields to prevent the occurrence of diseases

. b Skills objectives of the course
B1 - Introducing the student to the concept of animal diseases
B2 - The student's ability to evaluate health programs and compare them with old programs in terms of therapeutic efficiency and necessary supplies
B 3- Introducing students to how to treat various diseases and the effect of real conditions on them from lighting and ventilation

Teaching and learning methods

Explanation and clarification -9
Lecture method -10
Laboratory practical lessons -11
Lessons and field visits -12

Evaluation methods

theory tests
Practical tests
Reports and Studies
Quizzes Take daily quick exams
Conducting monthly exams
Conducting semester and final exams

- C Emotional and value objectives
C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably

C2 - Observation and Perception
C 3- Analysis and interpretation
C 4- Preparation and calendar
C 5- Critical thinking strategy in learning

D - skills of public and rehabilitation transferred (other skills related to the viability of employment and personal development
-D 1

Course description

Course structure -10

Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Introduction to physiology, definition of animal physiology Learn about the body parts of cows, sheep and goats and the function of each part	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	The external parts of the animal and poultry body and the importance of some parts Identify the parts of the bird's body and the function of each part of the body	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Digestive and circulatory anatomy of ruminants Digestive and circulatory anatomy of ruminants	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise,	Lecture and	Anatomy of the respiratory and urinary systems in ruminants	My knowledge and skills	1 theoretical	the fourth

meeting and work groups	practical lesson	Anatomy of the respiratory and urinary systems in ruminants		3 practical	
Practical exercise, meeting and work groups	Lecture and practical lesson	Anatomy of the bones, muscles and nervous system of ruminants Anatomy of the bones, muscles and nervous system of ruminants	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Digestive and circulatory anatomy of poultry Digestive and circulatory anatomy of poultry	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Anatomy of the respiratory and urinary system in poultry Anatomy of the respiratory and urinary system in poultry	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Anatomy of bones, muscles and nervous system of poultry Anatomy of bones, muscles and nervous system of poultry	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Animal body composition: muscle tissue, connective tissue, adipose tissue, bones Identify the muscle, ligament, fatty and bone tissues in the animal's body	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Endocrine glands and their types in ruminants Identify the types and locations of endocrine glands in ruminants	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Endocrine secretions and endocrine functions Methods of taking blood samples from the body of animals and birds	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Neurological and hormonal control over various animal body activities Preserving the blood samples drawn from the animal, performing the plasma separation process	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	How to take samples of blood, ways to store them, and the procedures that take place on them before conducting laboratory tests, types of blood cells and the function of each type Conducting laboratory tests on blood samples and watching red and white blood cells	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Determining the blood type of the animal, counting the number of blood cells (red and white) Performing the process of determining the blood type, counting the number of different blood cells	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Diagnosis of diseases through blood tests and knowledge of blood contamination A visit to one of the nearby veterinary medicine colleges to see the components of the animal's body and various blood tests	My knowledge and skills	1 theoretical 3 my work	Fifteenth

course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to	

achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
Animal breeding and improvement	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second	season / year -5
hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9
- A. Cognitive Objectives A 1- The student will be familiar with the concept of raising and improving an animal A 2- Teaching the student to use and apply the scientific methods of genetics, statistics, and education On animals in order to benefit from them and produce successive generations, each generation differs from the other in its productivity and economy -A 3 A 4
. b Skills objectives of the course B1 - Introducing the student to the concept of animal breeding and improvement B2 - The student's ability to know animals with good genetic traits B 3- Introducing students to how to choose a good quality breeding herd
Teaching and learning methods
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits
Evaluation methods
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
- C Emotional and value objectives C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably C2 - Observation and Perception C 3- Analysis and interpretation C 4- Preparation and calendar C 5- Critical thinking strategy in learning
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	General foundation in the study of agricultural animals Examples and applications in genetics	My knowledge and skills	1 theoretical 3 my work	the first
ask questions	Lecture and practical lesson	General basics about statistics (measures of dispersion and concentration Practical applications in concentration, scattering, and contrast	My knowledge and skills	1 theoretical 3 my work	The second
Listen and ask questions	Lecture and practical lesson	Lethal and semi-lethal genes To identify the most important essential and semi-eutrophic traits in agricultural animals	My knowledge and skills	1 theoretical 3 my work	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Farm animal husbandry and methods Applications of gene duplication factors	My knowledge and skills	1 theoretical 3 my work	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Internal education (relative education) Applications in finding the degree of kinship of agricultural animals	My knowledge and skills	1 theoretical 3 my work	Fifth
Mini Lesson Discussion Practical	Lecture and practical lesson	External Education (External Education) Finding the genetic equivalent of different traits	My knowledge and skills	1 theoretical 3 my work	VI

Exercise and Workgroups					
case study Practical exercise and workgroups	Lecture and practical lesson	Selection of animals and quantitative and qualitative traits Finding the genetic equivalent of different traits	My knowledge and skills	1 theoretical 3 my work	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Types of selection in animals Practical applications in finding hybrid power	My knowledge and skills	1 theoretical 3 my work	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Objectives of improving animals for the purpose of milk production, disease resistance Fetal recurrence calculator	My knowledge and skills	1 theoretical 3 my work	ninth
Ask group work questions	Lecture and practical lesson	Reproductive efficiency, components of milk, body size in the animal Calculation of the coefficient of kinship	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Improving animals for meat production, the relationship of the environment with belonging, improving the breeding herds Practical applications in clan inheritance and applications on Hardy and Weinberg Law	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Develop new breeds of meat animals, dual-purpose cattle Practical applications in clan inheritance and applications on Hardy and Weinberg Law	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Sheep improvement, types and shapes of sheep, commercial herds, different breeds of sheep Identify the phenotypic characteristics of different sheep breeds	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Inheritance of clans, including changes in gene duplication, genetic variance Identify the phenotypic traits of different breeds of milk, meat and cattle	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	education and improve poultry to produce the meat, feel yen poultry to produce eggs Identify the phenotypic characteristics of different breeds of poultry, eggs, and meat	My knowledge and skills	1 theoretical 3 practical	Fifteenth

course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
fodder crops	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second	season / year -5
hours of theoretical and practical class 45	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8	

Course description

Course outcomes and methods of teaching, learning and assessment -9					
- A. Cognitive Objectives . A 1 - Distinguish between different fodder crops and pastures A 2- Knowing the appropriate climatic conditions for the production of any of the different fodder crops and pastures A 3- Knowing the appropriate soil conditions (soil type, soil acidity, soil salinity) and their impact on the production of any of the various fodder crops and pastures A 4- Knowing the most appropriate operations needed to prepare the land for cultivation, and how and when to perform them . A 5- Knowing the most important modern high- yielding varieties of each crop					
. b Skills objectives of the course A 1- Determining the different fodder crops and pastures that can be grown under different environmental conditions A 2- Implementing all agricultural transactions in the optimal way and at the appropriate dates (preparing the land for cultivation, planting operations , operations of serving and caring for the crop after planting, harvesting and preparing (the crop after harvest A 3- Interpretation of the results obtained from the application of all agricultural treatments for each crop A 4- Giving technical recommendations for appropriate agricultural treatments for each crop and which maximize productivity . Keeping pace with modern technological development in the production of these crops, such as the ability to use modern machines in all agricultural transactions from cultivation to harvesting . A 5- Keeping pace with the evolving needs of the external market through field visits A 6- Develop his skill in the implementation of some projects in the field of fodder and pasture crops production, such as : The work of a consulting office to follow up the production process from preparing the land for planting to harvesting, marketing and solving all problems facing the product					
Teaching and learning methods					
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits					
Evaluation methods					
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams					
- C Emotional and value objectives C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably C2 - Observation and Perception C 3- Analysis and interpretation C 4- Preparation and calendar C 5- Critical thinking strategy in learning					
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2					

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The importance of developing livestock and its relationship to feed production Nutrients in plant feed materials	My knowledge and skills	1 theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Classification of field crops according to economic importance Properties of forage crops	My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Fodder cultivation methods Botanical Description of Jet and Alfalfa	My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Maize production and use as a fodder crop Cultivation of fodder crops (jet, barley, alfalfa, soybeans)	My knowledge and skills	1 theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Cultivation and production of the soybean crop Silage and its manufacturing stages	My knowledge and skills	1 theoretical 2 practical	Fifth
Mini	Lecture	Drees production	My	1	VI

Lesson Discussion Practical Exercise and Workgroups	and practical lesson	The most important differences between the cereal and legume family	knowledge and skills	theoretical 2 practical	
case study Practical exercise and workgroups	Lecture and practical lesson	Concentrated feed materials, grains and influencing factors on it Botanical description of yellow corn and field follow-up	My knowledge and skills	1 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Cultivation of the citrus crop Botanical description of soybeans	My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Cultivation of alfalfa crop and its use as green fodder Collection and drying of feed forms	My knowledge and skills	1 theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Cultivation of barley crop and its use as green fodder and concentrated fodder Manufacture of Drees, Conditions and Methods of Manufacture	My knowledge and skills	1 theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	silage production Crop service operations	My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Almarai in Iraq Diagnose seeds and study the importance of phenotype	My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Natural plant, nutritional value Discussing seminars for students	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Observations about the natural pastures (Information Network) Watching recent scientific films about crop farms	My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Water resources, pasture animal care Watching scientific films about feed manufacturing (Information Network)	My knowledge and skills	1 theoretical 2 practical	Fifteenth

course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
animal feed	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second	season / year -5

hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description	Course outcomes and methods of teaching, learning and assessment -9
	- A. Cognitive Objectives . A 1- The student will be familiar with the concept of ruminant feeding A 2 - The student should classify ruminants on the basis of production, age, and . conditions suitable for breeding A 3 - That the student separate between feeding ruminants in the modern era and - managing it in the past, and the difference in programs Nutrition past and present A 4 - The student learns how to feed cows and sheep milk animals or Oslo is the meat - and the difference in the requirements Education between the two A 5- That the student learn how to establish poultry breeding halls and the appropriate . equipment for breeding from heat Humidity, lighting and ventilation
	- b Skills objectives of the course - B 1. Definition of the concept of the student feeding of ruminants B 2 - The student's ability to evaluate the projects of modern ruminants and compare - them with the old projects in terms of production and supplies B 3- Introducing students to how to set up lighting and ventilation systems and how to . calculate the area allocated for education For both milk cows, meat and sheep
	Teaching and learning methods
	Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits
	Evaluation methods
	theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
	- C Emotional and value objectives C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably C2 - Observation and Perception C 3- Analysis and interpretation C 4- Preparation and calendar C 5- Critical thinking strategy in learning D - skills of public and rehabilitation transferred (other skills related to the viability of (employment and personal development -D 1 -D 2

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Digestive system of ruminants (parts, functions, evolution of the system Anatomy of the digestive systems of agricultural animals) cows, sheep, poultry, rabbits and fish	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	glands attached to the system and their functions Anatomy of the digestive systems of agricultural animals) cows, sheep, poultry, rabbits and fish	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Digestion and absorption of the food components of the feed, simple and complex carbohydrates Conducting a digestion experiment, rumen and duodenal orifice	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Proteins, lipids and materials resulting from various metabolic processes Conducting a digestion experiment, rumen and duodenal orifice	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Microbiology of the digestive system of ruminants, its types and functions Examination of substances inside the digestive system, rumen and duodenum	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion	Lecture and	The use of aprotic nitrogen substances in feeding ruminants	My knowledge	1 theoretical	VI

Practical Exercise and Workgroups	practical lesson	(types, feeding methods, poisoning The use of nitrogenous and non-protein materials in feeding ruminants	and skills	3 practical	
case study Practical exercise and workgroups	Lecture and practical lesson	Mineral salts and their importance in feeding ruminants, their types, functions and sources Determination of mineral salts, their types and their importance to animals	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Feeding milk cows (nutritional needs of milk cows for different purposes, feeding systems, stages of female feeding, stages of newborn feeding, calculating the nutritional needs of milk cows and newborns, forming diets and calculating their components)	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercises and groups	Lecture and practical lesson	Feed materials used to feed dairy cows (types, benefits, problems)(Calculating the nutritional needs of milk cows and newborns, forming rations, and calculating their components	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Feeding beef and buffalo cows (nutritional needs for different purposes, feeding systems, feeding stages Feeding beef cows and buffaloes and creating rations for them	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Sheep and goats nutrition (food needs for different purposes, stages of female nutrition, stages of newborn nutrition, male nutrition) Calculation of the nutritional needs of sheep for the various stages and the formation of diets	My knowledge and skills	1 theoretical 3 practical	atheistic ten
Practical exercise and workgroups	Lecture and practical lesson	Nutritional needs of animals for growth purposes (growth, development) Factors affecting growth nutritionally Calculation of the nutritional needs of sheep for the various stages and the formation of diets	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Nutritional needs of breeding animals, the effect of nutritional needs on reproduction and fertilization in animals (energy, protein, fats, minerals and vitamins) Creating and calculating the nutritional needs of the diets of breeding animals	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Nutritional needs of fattening animals (types of fattening, methods, feeding stages, feeding methods) Formation of diets for fattening animals and methods of providing feed	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Some metabolic and nutritional diseases affecting ruminant animals (bloat, gluttony, milk fever, preeclampsia, mineral deficiency, vitamin deficiency Diagnosis of metabolic and nutritional diseases of ruminants (gluttony , milk fever, food poisoning, deficiency of salts and vitamins	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Curriculum development plan -11

- . Providing the possibility of academic support in organizing field visits -
- Providing the appropriate classroom environment that enables the teacher to diversify -
- teaching strategies
- . Providing information technology in the campus library -
- Hosting experts from outside the institute , or from the work environment for which -
- they are preparing to benefit from their expertise in developing the course according
- . to the actual needs of the labor market

Infrastructure -12

method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites

This course description provides a brief summary of the most important

Course description

Course description

characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
Meat preservation and processing	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second	season / year -5
hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena	

Course outcomes and methods of teaching, learning and assessment -9	
-- A Cognitive objectives A 1 - The student will identify the sources of meat production and methods of preserving it A 2- Be able to understand the economic and nutritional importance of meat production A3 - Be able to know how meat products are manufactured A 4 - to recognize modern methods of preservation and canning of meat A 5- He should be familiar with the methods used to detect corruption and contamination of meat and meat products	
B - Skills objectives of the course B 1- Introduce the student to the sources of meat production B 2. The student 's ability to understand how to get to the best investment for the efficiency of the production of animal meat B3 - Students should know the best way to manufacture and preserve meat products	
Teaching and learning methods	
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits	
Evaluation methods	
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
- C Emotional and value objectives C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably C2 - Observation and Perception C 3- Analysis and interpretation C 4- Preparation and calendar C 5- Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Meat and its economic importance Solutions and Concentration Measurement	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Animal body parts and chemical compositions of meat Analysis of the main components of meat	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Preparation before slaughter and its importance, the different methods of slaughter The effect of different chemicals on the color of meat	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Meat palatability factors. The percentage of dressing in meat Preserving meat by salting, preparing solutions and tools, and performing the meat preservation process	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Meat preservation methods Preservation by smoking: a smoke-up procedure for a meat model	My knowledge and skills	1 theoretical 3 practical	Fifth

Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Meat cutting. Minced meat (Alsoj industry and Alambrker) Preserving meat by canning. Forms of meat suitable for canning	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Meat cooking methods (dry, wet) The importance of the meat cooking process Preserving meat by drying	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Meat spoilage and spoilage Meat preservation by refrigeration and freezing	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical and group exercises	Lecture and practical lesson	The massacres: their importance: their design Microbial examination of halloumi	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Manufacture of meat by- products and methods of benefiting from them The effect of pH on the actual water carrying capacity of meat	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Fish evaluation, nutritional value of fish, methods of preserving fish The sausage and hamburger industry	My knowledge and skills	1 theoretical 3 practical	atheistic ten
Practical exercise and workgroups	Lecture and practical lesson	Chemical composition of fish, examination of freshness, decomposition and rancidity, percentages of what fish contain according to their types of protein, fat, water Meat cooking methods	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Study of the chemical composition of broiler chickens, turkeys, quails, hens, (eggs fish meal industry	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Modern and new technology for poultry slaughterhouses, preparing turkeys, quails, and broilers, and how to market them Sensory and chemical tests to enhance meat quality	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Damage and spoilage of meat and fish and how to control it A scientific visit to the meat slaughterhouse	My knowledge and skills	1 theoretical 3 practical	Fifteenth

course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports, 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational Institution .1
Department of Plant Production Techniques	Scientific Department / Center .2

Computer Application / calculator	Course name / code .3
Blended /present and e- learning	Forms of attendance available .4
Autumn semester / first stage	Semester / year .5
hours of theoretical and practical class 45	Number of hours of study (.6 (total
	Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	
Course outcomes and methods of teaching, learning and assessment .9	
- A. Cognitive Objectives A1 - To familiarize the student with the concept of computer applications A2 - The student categorizes the types of programs A3 - The student should separate the types of programs A 4 - The student analyzes the data a statistical study of research programs A 5 - The student assesses his knowledge of the applications through practical tests	
Teaching and learning methods	
Explanation and clarification method of lecture - Student totals - practical lessons in the laboratory - learning how self -	
Evaluation methods	
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
- C Emotional and value objectives C 1- The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible Understand when, what and how to think and improve the ability to think reasonably . C 2- Observation and Perception C3 - Analysis and interpretation C4 - Preparation and calendar C5 - Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2 -D 3 -D 4	

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Networking concept Networks And its types, the concept of the Internet Internet , and run it	My knowledge and skills	1 theoretical 2 practical	- first
ask questions	Lecture and practical lesson	Description of the main screen, its components and how to connect with the World Wide (Web) Web	My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Take advantage of popular search engines like ,Google , Yahoo Learn how to search for and access information	My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	a program ExcelFamiliarize yourself with the concept of the program with its benefits, specifications, features and .methods of operation	My knowledge and skills	1 theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Familiarize yourself with the main screen and its components and contain various effective menus and tools	My knowledge and skills	1 theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	The concept of the cell, the basic types of bits and how to enter them	My knowledge and skills	1 theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	How to save a page Works license And Work book Close the program, close the file, open the saved file, enter data, and perform simple mathematical operations	My knowledge and skills	1 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Learn how to adjust or format data and structure it within a single cell or group of cells	My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions	Lecture and	Learn different ways of collecting data or a group of	My knowledge	1 theoretical	ninth

and listening practical exercise and work groups	practical lesson	cells	and skills	2 practical	
Ask group work questions	Lecture and practical lesson	How to sort the data and use some of the functions provided by the program such as Count SQRT , Ave , Sumi , Min, Max And other related useful statistical functions	My knowledge and skills	1 theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	To learn about the vaccination process Edit Provided by the software, how to copy data or transfer data	My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	And learn about the concept of copying arithmetic operations, as well as the concept of relative cells (Relative) and absolute cells (Absolute) Control the cell process by changing its style and layout through the use of formatting tools	My knowledge and skills	1 theoretical 2 practical	twelveth
Practical exercise and workgroups	Lecture and practical lesson	Dealing with schemas Chart And how to convert digital and text bytes to charts of various kinds through Charts Saher (Chart Wizard) and learn how to make adjustments and revisions provided by the program	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Practical exercise and workgroups	Lecture and practical lesson	Learn how to add or delete rows or columns on the work page	My knowledge and skills	1 theoretical 2 practical	fourteenth
Practical exercise and workgroups	Lecture and practical lesson	print data digital or diagrams	My knowledge and skills	1 theoretical 2 practical	Fifteenth

Course Development Plan .11

- . Providing the possibility of academic support in organizing field visits -
- Providing the appropriate classroom environment that enables the teacher to diversify -
- . teaching strategies
- . Providing information technology in the campus library -
- Hosting experts from outside the institute, or from the work environment for which -
- they are preparing to benefit from their expertise in developing the course according
- . to the actual needs of the labor market

Infrastructure .12

Computer Fundamentals Book, Part One and Two	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
English language	Course name / code -3
present learning	Available forms of attendance -4
Autumn semester / second stage	season / year -5
An hour in the classroom, theoretical and practical 30	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9
- A cognitive goals A1 - To familiarize the student with the concept of the English language A2 - The student will describe the types of English language A 3- That the student knows the ways of expressing the English language That the student knows the rules of the English language -4 A 5- To know how to classify English grammar A 6 - to know how to use the English language b Programmatic skills objectives B1 - That the student can distinguish between English grammar and general language

B2 - To know the basics of the English language
B 3- To know the importance of the English language
Teaching and learning methods
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits
Evaluation methods
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. c Emotional and value goals C 1- Thinking skill according to the student's ability C2 - Observation and Perception C3 - Analysis and interpretation C 4- Preparation and calendar
D - skills of public and rehabilitation transferred (other skills related to the viability of (employment and personal development -D 1 -D 2

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	the first
ask questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson		My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	ninth
Ask group work questions	Lecture and		My knowledge and skills	1 theoretical	The tenth

	practical lesson			2 practical	
Mini-lesson work groups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson		My knowledge and skills	1 theoretical 2 practical	Fifteenth

Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
course development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
Reproductive physiology and artificial insemination	Course name / code .3
present learning	Forms of attendance available .4
Spring Semester / Second Stage	Semester / year .5
hours of theoretical and practical class 75	Number of hours of study (.6 (total
2022	Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	

Course outcomes and methods of teaching, learning and assessment .9
A - cognitive goals A 1- Knowledge of male and female reproductive organs and functions A 2 - education students to artificial insemination and the extent of its spread widely To improve genetics A 3- learn ways to save semen and laboratory tests of the effectiveness of the male sperm and female eggs
B - Skills objectives of the program B1 - Contributing to community service through consultations in all aspects of animal production . Training the student to carry out the process of artificial insemination in the field -2 B 3 - provide students with the skills necessary to conduct laboratory tests of semen . B 4. training students to conduct detection of pregnancy different deviation
Teaching and learning methods
Explanation and clarification Lecture method student groups Practical lessons in the field Scientific trips to follow up on dairy cattle production projects self-learning method
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. C - emotional and value goals

Course description

- C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand when, what and how he should think and work to improve the ability to think and solve problems**
- C2 - Observation and Perception
 - C3 - Analysis, interpretation and persuasion
 - C4 - Preparation and calendar
 - C 5- Critical thinking strategy in learning
- D - skills of public and rehabilitation transferred (other skills related to the viability of employment and personal development**
- D - verbal communication (the ability to express ideas clearly and confidence in the 1 (speech**
- (Team work- D - Teamwork (work with confidence within the group 2**
- d - analysis of the investigation (collection of information systematically to establish 3**
- (scientific facts and principles of a solution to a particular problem**
- (d - Contact the written (the ability to express yourself clearly in writing 4**

Course Structure .10

Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The importance of artificial insemination and its relationship to genetic improvement, anatomy and physiology of the male reproductive system, testis cross section. The importance of artificial insemination	My knowledge and skills	1 theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Identify the endocrine glands of the reproductive process and the hormones they secrete and define the reproductive process hormone, endocrine Physiology of the male reproductive system, the work of the testicles, the stages of sperm formation, the work of the ,epididymis, the penis scrotum	My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Puberty and sexual maturity and the factors affecting it (hereditary, (environmental	My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Physiology of the female reproductive system, its anatomy, the work of each of its organs Anatomy of the female reproductive system, ovary, uterus, vagina, external genital opening, cross section for the ovary	My knowledge and skills	1 theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	The estrus cycle and its stages, the estrus period, the stages of the estrus cycle and the factors affecting it Physiology of the female reproductive system, the work of the ovary, the formation of eggs, the work of the female reproductive system	My knowledge and skills	1 theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Ovarian work, oocyte formation, oocyte transfer, factors affecting it Method of semen collection: the objective of semen collection, treatment of the bull during the collection process, methods Various combination, artificial vagina, electrical stimulation	My knowledge and skills	1 theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Ovarian hormonal action, ovarian hormones related to reproduction, chemical composition Semen examinations, primary examinations, secondary examinations	My knowledge and skills	1 theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Physiology of the male reproductive system, parts of the male reproductive system, the testes Dilution and preservation of semen, the most important diluents, methods of preparation	My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Male reproductive cell (sperm), male quantity, its external form, physiological characteristics, and its function Freezing and thawing of semen, methods of freezing, freezing temperature, goals of freezing, thawing	My knowledge and skills	1 theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Reproductive efficiency of males and females, reproductive efficiency of cows, reproductive efficiency of bulls, methods of examining organs, fertility, sterility, venereal diseases	My knowledge and skills	1 theoretical 2 practical	The tenth

		Female fertilization methods, fertilization process, tools used in (vaccination, caveats (deficiencies and the advantages			
Mini-lesson work groups	Lecture and practical lesson	Fertility and pregnancy, the journey of the sperm inside the female reproductive system, implantation, pregnancy Changes in the female reproductive system during pregnancy Reproductive efficiency in bulls and cows	My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Pregnancy hormones (mother and fetus), pregnancy diagnosis (idea (and benefits Pregnancy diagnosis and definition, precautions, supplies, scientific idea	My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Births and their stages, childbirth, stages of childbirth, natural childbirth, dystocia, placenta retention, reversal the womb Modern tactics in reproductive physiology, modern ideas in the field of increasing the number of births and checking pregnancy, timing Ovulation, double ovulation, methods of increasing the number of eggs, hormones used, embryo implantation tactics, external fertilization, twin production	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Anatomy and physiology of the reproductive system of hens and roosters Learn about the reproductive organs of hens and roosters	My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	The use of artificial insemination in poultry Semen collection from roosters and identification of semen characteristics of birds	My knowledge and skills	1 theoretical 2 practical	Fifteenth

Course Development Plan .11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure .12	
method book	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	

Technical Institute / Shatra	Educational Institution .1
Animal Production Techniques Department	Scientific Department / Center .2
poultry diseases	Course name / code .3
present learning	Forms of attendance available .4
Spring Semester / Second Stage	Semester / year .5
hours of theoretical and practical class 75	Number of hours of study (.6 (total
2022	Date of preparation of this .7 description
Course Objectives : Granting the student a diploma in the theoretical and practical .8 aspects to serve the preparation of a graduate of a distinguished level and his commitment to .the practical arena	

Course outcomes and methods of teaching, learning and assessment .9	
A - cognitive goals	
A 1- Gain the capabilities in diagnosing, treating and controlling poultry diseases A 2- Providing students with cognitive abilities in knowing the importance of various common parasitic, viral, bacterial and fungal diseases A 3- Learn the methods of diagnosing different diseases that affect poultry through clinical signs and anatomy	
B - Skills objectives of the program	
B1 - An overview of all diseases affecting poultry in Iraq Identify viral and fungal diseases, bacterial diseases, nutritional deficiency diseases -2 B 3 - Providing the student with the ability to control and control poultry diseases and methods of treatment	

Course description

	Teaching and learning methods
	Explanation and clarification Lecture method student groups Practical lessons in the field Scientific trips to follow up on poultry field projects self-learning method
	Evaluation methods
	Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
	. C - emotional and value goals C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand when, what and how he should think and work to improve the ability to think and solve problems - C2 - Observation and Perception - C3 - Analysis, interpretation and persuasion - C4 - Preparation and calendar C 5- Critical thinking strategy in learning
	D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development D - verbal communication (the ability to express ideas clearly and confidence in the 1 (speech (Team work- D - Teamwork (work with confidence within the group 2 d - analysis of the investigation (collection of information systematically to establish 3 (scientific facts and principles of a solution to a particular problem (d - Contact the written (the ability to express yourself clearly in writing 4

Course Structure .10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Classification of poultry diseases according to the pathogen and addressing the most important nutritional deficiency diseases and ways to prevent them, especially diseases caused by a lack of vitamins and minerals Anatomy of poultry and identification of the various parts of the bird's body and examination of the various organs (digestive, respiratory, urinary, reproductive	My knowledge and skills	1 theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Bacterial diseases such as diarrhea, paratyphoid, bird cholera Identifying the pathological changes and pests caused by different diseases and how to diagnose disease states According to the anatomical character (Salmonella and cholera	My knowledge and skills	1 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Diagnosis and treatment of the following diseases: contagious flu, mycoplasma, stinging colon, how to reduce it The most important symptoms that occur in the following diseases (mycoplasma, infectious cold)	My knowledge and skills	1 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Viral diseases, modes of transmission, symptoms, diagnosis, limiting their spread (such as Newcastle, bronchitis How does Newcastle disease appear, methods of transmission of the pathogen, the most important symptoms, and how to diagnose cases The disease, limiting its spread, and emphasizing the vaccine used	My knowledge and skills	1 theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Diagnosis and treatment of the following diseases: komboro, merck, laryngitis and bronchitis The most important methods used in the diagnosis and treatment of the following diseases: laryngitis, smallpox, merck, komboro and ways to control them	My knowledge and skills	1 theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Identifying fungal diseases, how to diagnose, treat and control them, (such as Albergellus, Monilia The most important fungal diseases and how they are transmitted, diagnosed and treated	My knowledge and skills	1 theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	To identify the most important diseases caused by internal parasites, ways of their spread and how to reduce them (such as coccidiosis, tapeworms Parasitic diseases, how to diagnose and treat them, limit their spread,	My knowledge and skills	1 theoretical 2 practical	seventh

		focus on coccidiosis and its economic importance			
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Identify the most important diseases caused by external parasites and how to diagnose them, such as lice and lice External parasitic diseases, their diagnosis, treatment and limiting their spread	My knowledge and skills	1 theoretical 2 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The most important metabolic diseases and how to diagnose, treat and limit their spread (gout, tendon slippage, fatty liver, cage (paralysis) Nutritional deficiency diseases, their importance, diagnosis and treatment	My knowledge and skills	1 theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Diseases resulting from breeding errors, their causes and limiting their spread (predation, tendency (to sleep) The preventive program and how to implement it and the schedule for giving medicines and vaccines to prevent disease	My knowledge and skills	1 theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Disinfection and disinfectants used in poultry fields and how to choose the appropriate disinfectant and use methods Disinfection (formalin and (permanganate) Disinfection and disinfectants used in poultry, and how to choose the appropriate disinfectant and prepare poultry fields before Receive new meals	My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Preventive programs used in poultry to limit the spread of diseases, how to conduct the used vaccines, and the dates for giving medicines The most common diseases as a result of breeding errors and how to diagnose them	My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	The most important medicines used in poultry, methods of giving them to reduce the spread of diseases, and how to add them The reasons for the death of poultry and how to conduct an autopsy of the cases and to know the reasons that led to the owners and whether they are satisfactory or unsatisfactory	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Diagnosis, treatment and prevention methods of the following diseases: viral arthritis, encephalitis, hemorrhagic enteritis The most important vaccines used in poultry in Iraq and how to give them, such as Newcastle and chicken pox vaccine The Merck and the Campuro Vaccine	My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	A scientific visit to one of the poultry fields in the region A scientific visit to one of the poultry fields in the region to learn about the most important diseases in it	My knowledge and skills	1 theoretical 2 practical	Fifteenth

Course Development Plan .11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
Infrastructure .12	
method book	Required course books .1
Supporting resources for each course	(Main references (sources .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location	b . Electronic references , websites
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center

fish farming	Course name / code -3
present learning	Available forms of attendance -4
spring semester / second	season / year -5
hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9	
- A. Cognitive Objectives . A1 - The student will be familiar with the concept of fish farming . A 2- That the student be exposed to water sources suitable for fish farming . A 3- Introduce the student to ways to develop fish nutrition - A 4 - Definition of the student to fish disease and treatment A 5 - The student should assess the cost of maintaining fish breeding and production projects	
- . b Skills objectives of the course - B 1 introduce students to the concept of breeding and production of fish B 2 student 's ability to evaluate modern education systems and comparing of traditional - systems B 3 enable students to analyze the cost set up Mishari production of fish	
Teaching and learning methods	
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits	
Evaluation methods	
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams	
- C Emotional and value objectives C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably C2 - Observation and Perception C 3- Analysis and interpretation C 4- Preparation and calendar C 5- Critical thinking strategy in learning	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Introduction to fish farming, its economic importance and the reasons for its rapid development Fish farms and their various parts	My knowledge and skills	1 theoretical 3 my work	the first
ask questions	Lecture and practical lesson	Types of fish farms, types of breeding, types of ponds How to create an aquarium and its different parts	My knowledge and skills	1 theoretical 3 my work	The second
Listen and ask questions	Lecture and practical lesson	Types and specifications of reared fish (carp and its types, tilapia) Breeding fish in the world, in the Arab world, and in Iraq	My knowledge and skills	1 theoretical 3 my work	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Fish farming water (physicochemical characteristics, quantity) The equipment used in the laboratory is a measuring device , transparency microscope dissolved and method O2 , pH	My knowledge and skills	1 theoretical 3 my work	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Preparation for introducing a new meal of fish for breeding (preparing ponds, sources of fingerlings, adding water) Preparing the basins to receive a new meal Maintenance of the basin parts, cleaning, maintenance, sterilization, ,fertilization add the water	My knowledge and skills	1 theoretical 3 my work	Fifth
Mini	Lecture	Basin management and follow-	My	1	VI

Lesson Discussion Practical Exercise and Workgroups	and practical lesson	up of water properties and ways to improve them Methods of improving culture water and treating specifications that are not suitable for breeding	knowledge and skills	theoretical 3 my work	
case study Practical exercise and workgroups	Lecture and practical lesson	Fish farming closed systems and cages (its advantages and objectives) Breeding cages Types of cages, parts, manufacture of cages, materials used in the industry, places to put cages	My knowledge and skills	1 theoretical 3 my work	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Reproduction in ponds, natural reproduction, artificial propagation, planning for fingerling production Reproduction in ponds, natural reproduction Maternal specifications, hormones used, pituitary gland extract hormone injection	My knowledge and skills	1 theoretical 3 my work	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Artificial reproduction Planning for fingerling production Fish hatcheries, hatchery construction, main parts, complementary parts	My knowledge and skills	1 theoretical 3 my work	ninth
Ask group work questions	Lecture and practical lesson	Fish nutrition (needs for protein, carbohydrates - fats - salts, minerals and vitamins) Food and nutrition of fish, storage of feed, place and time of feeding, quantity of food, number of feeding times, factors Affecting the amount of food	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Follow up fish growth and feeding efficiency Preparation of diets, the method of calculating the components of complementary food	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	The reality of fish farming in Iraq and ways to develop it Means used in fishing	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Fish diseases (definition of disease and factors of its occurrence - sign of disease in ponds - types of diseases Examination of fish to identify internal and external parasitic infections using a microscope	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Parasitic bacteria species viral species - country diseases - diseases arising from infection in the parasites Diagnosing Qatari bacterial and viral diseases and how to treat and prevent them	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Methods of fishing and preserving its flavour . Conservation and marketing of live fish A visit to one of the fish farms and to see the administrative and preventive works	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
Curriculum development plan -11	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to	

achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
Banana manufacturing	Course name / code -3
present learning	Available forms of attendance -4
spring semester / second	season / year -5
hours of theoretical and practical class 60	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course outcomes and methods of teaching, learning and assessment -9
- A. Cognitive Objectives A 1- To provide the student with the ability to plan for the management of dairy factories Increasing the student's awareness of the types of technology used in manufacturing -2 A 3- to expand the student 's understanding of the manufacturing methods used in the industry A 4 that the students are familiar with the scientific foundations for the manufacture of
. B - the skill objectives of the course . B1 - That the student learn the skill of manufacturing all dairy products in general B 2 - That the student learn how to operate and manage the work of industrial . equipment . B 3 - How to deal with equipment used in manufacturing and sterilization
Teaching and learning methods
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits
Evaluation methods
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
- C Emotional and value objectives C 1 - The skill of thinking according to the student's ability, and that the goal of this skill is for the student to believe in what is tangible and understand . When, what and how he should think and improve the ability to think reasonably C2 - Observation and Perception C 3- Analysis and interpretation C 4- Preparation and calendar C 5- Critical thinking strategy in learning
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Definition of milk and the importance of its production, including: the importance of milk as food for humans, the nutritional value of milk and its products. Milk production in Iraq and the problems it faces A visit to a field of milk cows and carrying out the process of milking to produce full-featured milk, and introducing the student to the dairy factory and the steps of dairy manufacturing	My knowledge and skills	1 theoretical 3 my work	the first
ask questions	Lecture and practical lesson	Milk components include: water, fats in milk, nutritional value of milk fat Sample definition n How to take a milk sample, types of samples. Sensory examinations: their definition Its characteristics and areas of use	My knowledge and skills	1 theoretical 3 my work	The second
Listen and ask questions	Lecture and practical lesson	Milk components include: milk proteins, milk enzymes Examination of milk sediments and various examination methods, the mixed model method, the method of taking the model from the bottom of the milk basin	My knowledge and skills	1 theoretical 3 my work	the third
Practical exercise,	Lecture and	Milk sugar (lactose), salts and minerals in milk, vitamins of milk	My knowledge	1 theoretical	the fourth

Course description

meeting and work groups	practical lesson	Estimation of milk fat percentage by different methods, including: Kerber and Babcock method, weighing methods (Majunier and .Roskotlib), indirect method	and skills	3 my work	
Practical exercise, meeting and work groups	Lecture and practical lesson	Milk contamination and diseases that can be transmitted through milk, sources of contamination to milk, types of diseases transmitted through milk Measurement of milk density, methods of adulteration of milk and how to detect it	My knowledge and skills	1 theoretical 3 my work	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Milk spoilage, including: poisoning of milk and its products, change in flavor, change in color Determination of acidity in milk titration methods. Milk percentage estimation, including: Formol method, tincture method, acidity determination method	My knowledge and skills	1 theoretical 3 my work	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Transactions that take place on milk in milk collection centers, including: How to produce clean milk, functions Assembly centers, their location Carrying out reduction tests on milk (rhizosphere, methylene blue), estimation of biting solids .and moisture in milk	My knowledge and skills	1 theoretical 3 my work	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The transactions that take place on the milk in the factory, including: receiving the milk, filtering it, filtering it, adjusting the proportion of the milk .components Testing for brows: boiling, alcohol	My knowledge and skills	1 theoretical 3 my work	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Cheese industry, including: the economic importance of cheese, the nutritional value of cheese soft cheese manufacturing,	My knowledge and skills	1 theoretical 3 my work	ninth
Ask group work questions	Lecture and practical lesson	Cheese classification, soft cheese manufacturing steps Halloumi cheese manufacturing	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Fermented dairy industry : definition of pounds, types of fermentation, defects of milk, milk industry Yogurt manufacture (fermented milk) , starter preparation	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Cream industry (precious): define the value of food cream, ways to get the cream, secretions, types of cream, cream accounts Sort, cream industry (decantation (and cyclones	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Butter industry: definition, importance of butter, method of making butter, making ghee (free (fat (Butter industry (local, churning	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Ice cream industry Deciduous : definition, ice cream industry, a, ice cream components ^{١٤} ١٥ Manufacture of milk ice cream and ice cream . Mixture Components Calculations	My knowledge and skills	1 theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Washing and cleaning materials (types and uses) Ice cream making steps, milky ice cream defects	My knowledge and skills	1 theoretical 3 practical	Fifteenth

Curriculum development plan -11

- . Providing the possibility of academic support in organizing field visits -
- Providing the appropriate classroom environment that enables the teacher to diversify -
- . teaching strategies
- . Providing information technology in the campus library -
- Hosting experts from outside the institute , or from the work environment for which -
- they are preparing to benefit from their expertise in developing the course according
- . to the actual needs of the labor market

Infrastructure -12

method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic referencal , websites

This course description provides a brief summary of the most important

characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department /-11 Center
hatchery techniques	Course name / code-12
present learning	Available forms of-13 attendance
Spring Semester / Second Stage	season / year-14
An hour in the classroom, theoretical and 60 practical	Number of hours of study-15th ((total
2022	The date this description-16 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -17 aspects to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -18
- A - Cognitive goals A1 - The student will be familiar with hatching and its types A2 - The student will be familiar with the stages of fetal development A3 - The student will be familiar with hatching machines A 4 - The student recognizes elements Hatching and factors affecting Hatching
B - Skills objectives of the course B1 - The student learns eggs that are suitable for hatching B2 - The student learns the requirements for hatching B 3 - The student learns to set up hatching machines and manage the hatcher
Teaching and learning methods
Explanation and clarification Lecture method Laboratory practical lessons Lessons and field visits
Evaluation methods
theory tests Practical tests Reports and Studies Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. c Emotional and value goals C 1- Thinking skill according to the student's ability C2 - Observation and Perception C3 - Analysis and interpretation C 4- Preparation and calendar
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2

Course structure -19					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The history of the development of the hatchery industry and its methods Learn about hatching machines, their types and specifications, the typical hatcher	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Conditions that must be met in the eggs prepared for hatching, the treatment of the eggs in the fields of the mothers and during transportation Getting to know the scanning device and how it works	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Poultry industry in Iraq / reasons for the deterioration of the poultry industry Identify the system of temperature, humidity, ventilation and agitation inside the hatcheries	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	The basic components of the hatching process Carrying out the cleaning, sterilization and fumigation process for the hatchery	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise,	Lecture and	Fetal development stages in eggs	My knowledge	1 theoretical	Fifth

meeting and work groups	practical lesson	Conducting the grading process and examining the eggs prepared for hatching Examination of eggs,	and skills	3 practical	
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	periods of fetal death, hatching mechanics, abnormal positions of the fetus Laying eggs in the hatching machine and observing the daily development of the fetus, noting deaths Embryos during hatching (period (three weeks	My knowledge and skills	1 theoretical 3 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Fertility in chickens and the factors affecting it Laying eggs in the hatching machine and observing the daily development of the fetus, noting deaths Embryos during hatching (period (three weeks	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Reasons for the low rate of hatching and factors affecting the rate of fertilization in eggs prepared for hatching Laying eggs in the hatching machine and observing the daily development of the fetus, noting deaths Embryos during hatching (period (three weeks	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Production of biological eggs or programmed eggs produced from laying hens or turkeys, and what are ?they Its health and economic importance in the global market Fertility and hatchability ratio calculations	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Production of quail eggs, the economic importance, the scientific basis for egg production Productive performance standards for broiler mothers	My knowledge and skills	3 theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Hatching and quality control in the poultry industry Fertility and hatching traits	My knowledge and skills	1 theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	The most important commercial egg-producing breeds, standard rates and feed consumption schedules during the production period Eggs with statistics and tables of table eggs production and hatching Discussing students' reports on the hatching process	My knowledge and skills	1 theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Non-food feed additives, their effect on hatching eggs, modern hatching techniques Discussing students' reports on the hatching process	My knowledge and skills	1 theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Artificial hatching of poultry, especially turkeys and ducks Hatching with watching	My knowledge and skills	1 theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Dealing with adulterous chicks, marketing chicks A visit to one of the egg production fields	My knowledge and skills	1 theoretical 2 practical	Fifteenth

Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
course development plan -11	

. Providing the possibility of academic support in organizing field visits -
 Providing the appropriate classroom environment that enables the teacher to diversify -
 . teaching strategies
 . Providing information technology in the campus library -
 Hosting experts from outside the institute, or from the work environment for which -
 they are preparing to benefit from their expertise in developing the course according
 . to the actual needs of the labor market

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program

Technical Institute / Shatra	educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
economics of animal production	Course name / code -3
present learning	Available forms of -4 attendance
Spring Semester / Second Stage	season / year -5
hours of theoretical and practical class 30	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course description

Course outcomes and methods of teaching, learning and assessment -9	
A - cognitive goals A 1- Teaching the student about the applications of the economics of natural resources in . agriculture in an economical way and compared to the technical aspect A 2 - The student's knowledge of the economic laws and economic principles used in the . field of agriculture, especially the animal production sector . A 3 - the optimal employment of the elements of agricultural production . A 4- How to achieve optimum levels of production . A 5- How to exploit natural and human resources	
. B - the skill objectives of the course B1 - Introducing the student to agricultural economics in general and the economics of natural resources in particular B 2 - The student's ability to determine the knowledge of the deviation in the optimal use of resources and production from the actual use of them . B 3 - Teaching the student how to achieve the economic efficiency of the farm	
Teaching and learning methods	
Explanation and clarification	
Lecture method	
Lessons and field visits	
Evaluation methods	
theory tests	
Reports and Studies	
Quizzes Take daily quick exams	
Conducting monthly exams	
Conducting semester and final exams	
. c Emotional and value goals	
C 1- Thinking skill according to the student's ability	
C2 - Observation and Perception	
C3 - Analysis and interpretation	
C 4- Preparation and calendar	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development	
-D 1	
-D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The importance of livestock in the Iraqi agricultural economy, the economic importance of animal products, the nutritional importance of animal ..products	My knowledge and skills	2 theoretical 0 practical	the first
ask questions	Lecture and practical lesson	Agricultural economics: the general concept of agricultural economics, the emergence of agricultural economics. The relationship of agricultural .economics to economics	My knowledge and skills	2 theoretical 0 practical	The second
Listen and ask questions	Lecture and	Demand for animal products, demand schedule, factors affecting	My knowledge and skills	2 theoretical	the third

	practical lesson	demand, elasticity of demand for Animal Products, Factors Affecting Elasticity of Demand		0 practical	
Practical exercise, meeting and work groups	Lecture and practical lesson	Supply of animal products, supply schedule, factors affecting supply, influencing factors .in flexibility of supply	My knowledge and skills	2 theoretical 0 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Agricultural production: the concept of agricultural production, agricultural production functions, yield law ..diminishing	My knowledge and skills	2 theoretical 0 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	The principle of the best level of production	My knowledge and skills	1 theoretical 0 practical	VI
case study Practical exercise and workgroups	Lecture and practical lesson	Substitution principle	My knowledge and skills	2 theoretical 0 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	production costs	My knowledge and skills	2 theoretical 0 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Marketing of animal products	My knowledge and skills	2 theoretical 0 practical	ninth
Ask group work questions	Lecture and practical lesson	Livestock Project Management	My knowledge and skills	2 theoretical 0 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Production patterns of animal production projects	My knowledge and skills	2 theoretical 0 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	farm records	My knowledge and skills	2 theoretical 0 practical	twelveth
ask questions	Lecture and practical lesson	Livestock production project planning	My knowledge and skills	2 theoretical 0 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Bases and methods for evaluating livestock projects	My knowledge and skills	2 theoretical 0 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Economic indicators and criteria for evaluating animal production projects	My knowledge and skills	2 theoretical 0 practical	Fifteenth

Infrastructure -12	
method book	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
course development plan -12	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies	

. Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	
This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available .learning opportunities. It must be linked to the description of the program	
Technical Institute / Shatra	Educational institution -1
Animal Production Techniques Department	Scientific Department / -2 Center
The project	Course name / code -3
present learning	Available forms of -4 attendance
Spring Semester / Second Stage	season / year -5
hours of theoretical and practical class 30	Number of hours of study (-6 (total
2022	The date this description -7 was prepared
Course Objectives : Granting the student a diploma in the theoretical and practical -8 aspects to serve the preparation of a graduate of a distinguished level and his .commitment to the practical arena	

Course outcomes and methods of teaching, learning and assessment -9	
A - cognitive goals .A 1 -A 2 -A 3 -A 4 -A 5	
. B - the skill objectives of the course - B 1 - B 2 - b 3	
Teaching and learning methods	
Explanation and clarification	
Lecture method	
Lessons and field visits	
Evaluation methods	
theory tests	
Reports and Studies	
Quizzes Take daily quick exams	
Conducting monthly exams	
Conducting semester and final exams	
. c Emotional and value goals C 1- Thinking skill according to the student's ability C2 - Observation and Perception C3 - Analysis and interpretation C 4- Preparation and calendar	
D - skills of public and rehabilitation transferred (other skills related to the viability of .(employment and personal development -D 1 -D 2	

Course structure -10					
Evaluation method	education method	Unit name / course or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Preparing the barns to receive the animals and determining the spaces, troughs and walkways .allocated for them	My knowledge and skills	0 theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Preparing the primary feed materials and formulating appropriate ration mixtures for fattening and distributing them to animal groups for each ration group that differs from the other for the purpose of comparison between them	My knowledge and skills	0 theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Purchasing, refining and receiving animals in the field, taking care of them and placing them in groups according to weights	My knowledge and skills	0 theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Conducting field operations related to the project (weighing, dosing against (.diseases, numbering ... etc	My knowledge and skills	0 theoretical 2 practical	the fourth
Continuing the fattening					

Practical exercise, meeting and work groups	Lecture and practical lesson	operations, making special schedules and growth reports, and carrying out the daily field operations of the project	My knowledge and skills	0 theoretical 2 practical	Fifth to eleventh
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Prepare the requirements for the slaughter process and start slaughtering animals by the students and apply what they have studied in the subject Meat production and cooling of carcasses until the next day	My knowledge and skills	0 theoretical 2 practical	twelveth
case study Practical exercise and workgroups	Lecture and practical lesson	Cutting the carcasses after weighing and according to the scientific cutting system, studying the proportions of dressing, curing and cutting And the neck for carcasses	My knowledge and skills	0 theoretical 2 practical	thirteen and fourteen
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Calculate project costs Comparison of animal groups for a test group flock Featured	My knowledge and skills	0 theoretical 2 practical	Fifteenth

Infrastructure - -11	
	Required course books .1
	(Main references (sources .2
Scientific journals, as well as research, letters and professors' theses in the same specialty	a . Recommended books and references (scientific journals , (reports , 0000
www.google.com Location Animal Science Journal	b . Electronic references , websites
course development plan -12	
. Providing the possibility of academic support in organizing field visits - Providing the appropriate classroom environment that enables the teacher to diversify - . teaching strategies . Providing information technology in the campus library - Hosting experts from outside the institute , or from the work environment for which - they are preparing to benefit from their expertise in developing the course according . to the actual needs of the labor market	