

Ministry of Higher Education and Scientific Research
Scientific Supervision and Evaluation Authority
Department of Quality Assurance and Academic Accreditation

A form describing the academic program for the faculties For the school year 2021 - 2022

University name : Southern Technical University

Overall name of : Technical / Shatrah Institute

Scientific Department : Department of Plant Production Techniques

Date of filling file: 2022/ 8 / 1

Name Head of Department :MM Mohamed Bustan Hanoun name Associate

Dean for Academic Affairs : Turkish Diwan Hussein

date : date:

signature : signature:

The file has already been checked

Department of Quality Assurance and University Performance

Name of the Director of the Department of Quality Assurance and

University Performance :Mortada Abdel Karim

History

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	1. Educational institution
Technical Institute / Shatra	2. Scientific Department / Center
Department of Plant Production Techniques	3. Academic or professional program name
Technical Diploma	4. Final certificate name
semester system	5. school system
Theoretical and practical study	6. Accreditation Program approved
Laboratories • field field, library, internet, agricultural and industrial institutions and agricultural projects	7. Other external influences
2022	8. Description creation date
9. The objectives of the academic program : 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	
1. Knowledge and understanding of agricultural sciences related to plant production sciences and related local, regional and international standards	
2. Scientific skills that enable prediction, evaluation and clarification of the importance of field and horticultural crops in their interaction with other living organisms or with their environment	
3. Thinking and analysis skills that enable solving emerging problems in the field of agricultural sciences in the field of agriculture and basic sciences, according to local, regional and international standards.	

4. Skills to use and self-development that enable him to compete with others in the labor market

10.Required program outcomes and methods of teaching, learning and assessment

A -Cognitive goals

A1- Communicating the acquired information related to the agricultural field to the beneficiaries and linking it with other sciences to reach a solution to the problems related to the various agricultural operations.

A2 -Acquisition and proof Efficiency in

a Maha ra t laboratory Specialized Titles for its For for the application of in a Research vegetarianism.

A3- Demonstrate the ability to analyze experimental measurements related to the specialization of plant production and the accuracy of preparing reports on observations and analysis.

A4- Clearly communicate and discuss scientific concepts, empirical results and analytical arguments, orally and in writing.

A5 - Develop appropriate technology to solve farmers' problems and encourage research aimed at progress in all disciplines for long-term technical development.

A - 6 Attracting qualified and talented scientific cadres to conduct scientific research at the Institute.

A 7- To deliver knowledge and technology to farmers and farmers on a larger scale through training workers and officials of the agricultural administration on recent developments in all fields through specialists.

B - Skills objectives of the program

B - 1 conduct laboratory and field trials, as well as a statistical analysis and interpretation of data results.

B - 2 Preparing and submitting agricultural research reports.

B - 3 communication with professionals and non - professionals involved in agricultural cooperation and the private sector.

B-4 - Developing and using computer programs in the fields of designing and analyzing agricultural experiments.

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
<ul style="list-style-type: none"> - Daily and monthly exams - Semester and final exams <ul style="list-style-type: none"> - Participation scores for competition questions for academic subjects - Scores for homework and report writing
<p>C -Emotional and value goals</p> <p>C1 -Applying knowledge in agricultural sciences in order to address agricultural problems.</p> <p>C2 - Design and implementation of agricultural scientific experiments, as well as analysis and interpretation of data.</p> <p>C3 - Designing an integrated or partial agricultural system or following a treatment system to meet the required agricultural needs within realistic constraints related to the economy, environment, health and safety.</p> <p>C -4 Demonstrating the creative and innovative ability in plant protection and finding agricultural solutions in the field of formulating some designs related to plants.</p> <p>C5 - Use of modern techniques, skills and tools necessary for agricultural technical practices.</p>

<p>d -Transferred general and rehabilitative skills) other skills related to employability and personal development. (</p> <p>D1 -Diagnose, formulate and address agricultural problems.</p> <p>D 2 - Enable students to pass job interviews.</p> <p>D3 - Enable students to pass professional exams organized by local, regional and international bodies.</p> <p>D 4 - To enable students to develop continuous self-development after graduation.</p>				
12.Certifications and Credit Hours	11.Program Structure			
	Credit hours	Course or course name	Course or course code	level/year
The degree of the Technical Diploma Require (x) credit hours				first 2021
				first 2021
128				first 2021
				first 2021
				first 2021

13.Planning for personal development

- Enable requester From Use skills Empowerment self
 - Ability On Analysis and give Instructions
 - skills Solve problems the operation
 - Knowledge and understanding
- education students From Use Planning and implement engineering Gardens
- education students to prepare fields vegetables and conduct Processes Agriculture
- education students planting trees the fruit Always evergreen and consistent papers and conduct operations the service
- education students a lot the plants by roads modern to multiply the plants by farming histological
- education students a lot the plants seed and green in a canopy vegetarian education students On Agriculture vegetables in a houses plastic in a Agriculture protected

14.Acceptance criterion) Od p regulations relating to attend the college or institute(

Central / according to the requirements of the Ministry of Higher Education and Scientific Research

15.The most important sources of information about the program

- .1The Central Library in the Covenant
- .2Internet information network
- .3The experiences of Arab and international universities
- .4Current Curriculum

Curriculum Skills Outline													
Boxes corresponding to the individual learning outcomes from the program being evaluated													
Skills required from the program													
2	Subject-specific skills					knowledge and understanding				Basic mother optional	Course Name	Course Code	year / level
	c1	b4	b3	b2	b1	A4	A3	A2	A1				
√			√				√			Basic	winter field crops	PPT100	2021 /first
√			√			√				Basic	Winter vegetable crops	PPT101	
√			√				√			Basic	Nurseries and forests	PPT10 2	2021 /first
√			√				√			Basic	plant protection	PPT10 3	
				√			√			my choice	general soil	PPT10 4	2021 /first
				√		√				Basic	fruit production	PPT10 5	
√					√		√			my choice	Pullers and agricultural machines	PPT10 6	2021 /first
√					√			√		my choice	animal production	PPT10 7	

n 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.

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

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

C - emotional and value goals.

- C -1 To 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 The development of the ethics of the profession in . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

10. Course structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The importance of the production of field crops, the economic and political importance of the production of winter crops, the problems of producing winter crops, the division of winter crops according to the cultivation season and use.	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	The preparation of the process of processing the land for planting (plowing) the importance to take place, types Mahaarb used, (smoothing) the importance conducted machines used for smoothing (leveling) importance 'machinery used to them.	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Methods of growing and serving crops (prose, calligraphy, marrows), disadvantages and advantages of each method.	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Wheat crop production, economic importance, appropriate environmental conditions, planting date, seed quantity, fertilization, irrigation, wheat crop growth stages.	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Structure of a grain of wheat, stages of maturity of the grain, type of seed, the difference between fine and coarse wheat, steps for producing wheat flour.	My knowledge and skills	1theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgrou	Lecture and practical lesson	Barley crop production, economic importance, appropriate conditions, planting date, cultivation method, seed quantity, fertilization, irrigation, stages of growth, maturity and harvest.	My knowledge and skills	1theoretical 3 practical	VI

ps					
Case study Practical exercise and work groups	Lecture and practical lesson	Production of wheat crop Helma - Altrtequila, economic importance, origin, appropriate environmental conditions, planting date, method of planting, sowing, fertilization, irrigation, stages of maturity and harvest, prepare seeds for storage and processing.	My knowledg e and skills	1theoretical 3 practi cal	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Sugar beet crop production, economic importance, appropriate environmental conditions, planting date, cultivation method, seed quantity, fertilization, irrigation, crop growth stages.	My knowledg e and skills	1theoretical 3 practi cal	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Sugar cane crop production, economic importance, appropriate environmental conditions, planting date, planting method, seed quantity, fertilization, irrigation, maturity, harvest, harvest.	My knowledg e and skills	1theoretical 3 practi cal	ninth
Ask group work questions	Lecture and practical lesson	Qualitative characteristics of cane and beet and stages of sugar production and processing.	My knowledg e and skills	1theoretical 3 practi cal	The tenth
Mini- lesson work groups	Lecture and practical lesson	Production of the bean crop , economic importance, appropriate environmental conditions, planting date, planting method, seed quantity, irrigation fertilization, maturity, harvest and harvest.	My knowledg e and skills	1theoretical 3 practi cal	eleventh
Practical exercise and workgroup s	Lecture and practical lesson	Chickpea and lentil crops production, economic importance, appropriate environmental conditions, planting date, cultivation method, seed quantity, fertilization, irrigation.	My knowledg e and skills	1theoretical 3 practi cal	twelveth
ask	Lecture	Production of flax and	My	1theoretical 3 practi	Thirteenth

questions	and practical lesson	safflower crops, economic importance, appropriate environmental conditions, planting date, planting method, fertilization, irrigation, seed quantity.	knowledge and skills	cal	h
Asking practice questions	Lecture and practical lesson	Agricultural cycles for winter crops, definition of agricultural cycles, types of cycles, how to design agricultural cycles with various examples.	My knowledge and skills	1theoretical 3 practical	Fourteen and fifteen

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

12. course development plan
<ul style="list-style-type: none"> - 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.

course description form

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

A - cognitive goals

- A -1 Teaching students how to deal with winter vegetable crops so that they have modern scientific specifications, methods of their management, and factors affecting their productivity.
- A -2 Introducing students to how to develop winter vegetable crops so that they are able to describe and serve them of various kinds.
- A -3 Enable the student to know how to deal with laboratory materials and equipment.

B - Skills objectives of the program

- B - 1 providing students with the skills of the application of scientific methods in terms of management of crops vegetables winter.
- B - 2 Training the student to produce winter vegetable crops to reach high productivity.
- B - 3 To provide the student with the necessary skills to conduct laboratory tests related to vegetables and soil and how to give 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

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

C - emotional and value goals.

- C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

<p>D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(</p> <p>D-1</p> <p>D-2</p> <p>D-3</p> <p>D-4</p>

D-2

D-4

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
Crops and winter vegetables/ Winter Vegetable Crops	.3Course name / code
presence education	.4Forms of attendance available
Autumn semester / first stage	.5Semester / year
32hours of theoretical and practical class	.6Number of hours of study) total(
	.7Date of preparation of this description
.8Course 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.	

.10Course Structure

Evaluation method	educational method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Vegetable science - economic and nutritional importance, geographical distribution in Iraq, the Arab world and the world, problems of vegetable production and proposed solutions.	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Methods of dividing vegetables - vegetable division, according to the growth cycle, according to the part used for consumption, thermal division, division according to the method of cultivation, areas of vegetable emergence.	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	The effect of environmental factors on the growth and development of vegetables, climate factors, soil factors.	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Propagation of vegetable crops - sexual reproduction, asexual reproduction ◊ good seed qualities, germination, dormancy, seed treatments.	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Production of vegetable seedlings - definition of the nursery, advantages and disadvantages of the nursery, reasons for the discrepancy in the tolerance of seedlings, agricultural circles, definition of localization ◊ methods of acclimatization ◊ physiological changes of acclimatization.	My knowledge and skills	1theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and	Lecture and practical lesson	Lahana crop production - the original home and importance of Lahana ◊ suitable climate and soil, reproduction, date and method of cultivation, service operations.	My knowledge and skills	1theoretical 3 practical	VI

Workgroups					
Case study Practical exercise and work groups	Lecture and practical lesson	Cauliflower production - origin and importance of cauliflower, climate and soil, reproduction, date and method of cultivation, service operations.	My knowledge and skills	1 theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Production of radish crop, turnip, cress - location and importance of the crop, climate and soil, date and method of cultivation, service 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 the bean crop, peas, fenugreek - the origin and importance of the crop, the climate and soil suitable for propagation, the date and method of cultivation, service operations.	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Production of the onion crop - the origin and importance, climate and suitable soil, reproduction, date and method of cultivation, service operations, early flowering in onions, duplication in onions, production of green onions.	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Production of garlic and shallot crops - origin and importance, suitable climate and soil, reproduction, planting date and method, servicing operations.	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and work groups	Lecture and practical lesson	Production of chard, beet and spinach - the origin and importance, climate and suitable soil, reproduction, planting date and method, service operations, flowers.	My knowledge and skills	1 theoretical 3 practical	twelfth
ask questions	Lecture and practical	Carrot and lettuce crop production - origin and importance, suitable climate and soil, reproduction, planting date	My knowledge and	1 theoretical 3 practical	Thirteenth

	al lesson	and method, service operations, flowering in lettuce.	skills		
Asking practice questions	Lecture and practical lesson	Celery crop production 'Almadnos ' Alchbant original habitat and importance, appropriate climate and soil, reproduction, date and method of agriculture, service operations.	My knowledge and skills	1theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Production of vegetables that are expected to be grown in Iraq (broccoli, Brussels sprouts, watercress, dandelion, Wales onions, chef) - importance and origin, date and method of cultivation, service operations.	My knowledge and skills	1theoretical 3 practical	Fifteenth

.11 Course Development Plan

- 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.

.12 Infrastructure

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
nurseries and forests/ Nurseries and Forestries	.3Course name / code
presence education	.4Forms of attendance available
Autumn semester / first stage	.5Semester / year
32hours of theoretical and practical class	.6Number of hours of study) total(
	.7Date of preparation of this description
.8Course 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.	
.9Course outcomes and methods of teaching, learning and assessment	

A - cognitive goals

- A -1 Teaching students how to deal with nurseries and forests so that they have modern scientific specifications, methods of management and factors affecting their productivity.
- A - 2 Introducing students to how to develop nurseries and forests so that they are able to describe and service them of all kinds.
- A -3 Enable the student to know how to deal with laboratory materials and equipment.
- A -4 Recognize the importance of productive, protective and tourist forests.

B - Skills objectives of the program

- B - 1 To provide the student with the skills of applying scientific methods in relation to the management of nurseries and forests so that he will be able to multiply them using modern methods such as plant tissue cultivation.
- B - 2 Training the student to produce nurseries and forests to reach high productivity.
- B - 3 To provide the student with the necessary skills to conduct laboratory tests related to nurseries, forests and soils, and how to give 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

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

C - emotional and value goals.

- C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The nursery - Nurseries importance - Types of nurseries - Selection of the nursery site - preparation and planning - Some definitions like seedlings , trees , shrubs , stand , forest , silviculture .	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Propagation of plants- Sexual and Asexual Propagation- Advantages and disadvantages of two methods.	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Propagation by seeds- Requirements of germination- Viability of seeds- Environmental and internal factors- Methods of sowing of seeds- Methods of transplanting to permanent place- Agricultural media.	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Methods of vegetative propagation - propagation by cuttings - Kinds of cuttings - Sorts of stem cuttings - Origin of roots in hardwood cuttings - factors influencing root formation.	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Auxins - Kinds of Auxins - Auxin used methods in the stem cuttings - Layering - Kinds of Layering - Sorts of ground layering - Air Layering - Bulbs - Forms of bulbs - Suckers - Plants propagated by suckers.	My knowledge and skills	1theoretical 3 practical	Fifth
Mini Lesson Discussion	Lecture and practical	Pruning and Training - Objective of Pruning and Training - Plant parts	My knowledge and	1theoretical 3 practical	VI

Practical Exercise and Workgroups	lesson	- Framework - Methods of Training. The central leader - Modified leader - Open center - Modern methods .	skills		
Case study Practical exercise and work groups	Lecture and practical lesson	Tissue culture - Micropropagation stages - Selection of explant - Sterilization of explants - Establishment stage - Nutrient medium - Multiplication stage - Rooting stage - Acclimatization stage.	My knowledge and skills	1theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The Forest - Introduction - Characters of trees - Distribution of forest in the world - Tropical and sub- Tropical forests - Moderate - Cold region forests - Moderate - Warm region forests - Gallery and Namboos Forests.	My knowledge and skills	1theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Forests in Iraq - Natural Forests - According to density - Open Forests - Mid - density forests - Density forests - According to species - Oak forests - Pine forests - Riverine forests - Artificial Forest.	My knowledge and skills	1theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Scientific visit to one of the forest nurseries .	My knowledge and skills	1theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Advantages of Forests – Productional advantages – Protectional advantages – Recreational advantages	My knowledge and skills	1theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Basic advantages - Wood , Rubber , Waste of papers ... etc . Secondary advantages - Bark - Production suberine , Insulator, For nutrition -	My knowledge and skills	1theoretical 3 practical	twelveth

		Alcoholic Production, Aromatic, Perfume, Druge , Medicine, Soap extraction - Gums - Rein and glue.			
ask questions	Lecture and practical lesson	Vegetative Cover - Forest - Maquiois - Tundra - Savana - Steppe - Desert. Developmental stages of trees - Seedling stage - Saplungs stage - Pole stage - Young Timber stage - Mature stage 0 Over mature stage.	My knowledge and skills	1theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Pure Foresta - Naturally cases to form pure Forest - Characteristics of Pure Forest .	My knowledge and skills	1theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Mixed Forest - Equality of mix (Blend) - Rules for establishment of mixed forest - Cayer Rule - Forms of mix - Equal mix - Lineal mix - Strips mix - Groups mix.	My knowledge and skills	1theoretical 3 practical	Fifteenth

.11Course Development Plan

- 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.

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
plant protection/ Plants Protection	.3Course name / code
presence education	.4Forms of attendance available
Autumn semester / first stage	.5Semester / year
2 3hours per semester theoretical and practical	.6Number of hours of study) total(
	.7Date of preparation of this description
.8Course 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.

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

A - cognitive goals

- A - 1 Teaching students how to deal with insects and diseases, ways of transmission and the spread of plant diseases.
- A -2 Introducing students to the economic importance of insects and plant diseases and the damage they cause.
- A -3 Enable the student to know how to deal with laboratory materials and equipment.

B - Skills objectives of the program

- B - 1 To provide the student with the skills of applying scientific methods with regard to plant protection.
- B - 2 Training the student on plant protection to achieve crop protection and high productivity.
- B - 3 To provide the student with the necessary skills to conduct laboratory tests related to plant and soil protection and how to give 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

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

C - emotional and value goals.

- C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Insect harms and benefits.	My knowledge and skills	1theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Factors for the success of insects and their spread in nature.	My knowledge and skills	1theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Reproduction and growth - Methods of insect reproduction.	My knowledge and skills	1theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Types of nutrition in insects.	My knowledge and skills	1theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	The environments in which insects live.	My knowledge and skills	1theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Pests and animal non - insect rank dream.	My knowledge and skills	1theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Pests and animal insecticides is the rank of rodents.	My knowledge and skills	1theoretical 2 practical	seventh
Listening and asking practical exercise questions	Lecture and practical lesson	Pests of animal insecticides is the rank of birds and rodents.	My knowledge and skills	1theoretical 2 practical	VIII

and work groups					
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The economic importance of plant diseases and the losses resulting from them, give examples of the most important diseases in Iraq and the world	My knowledge and skills	1theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Some definitions of plant pathology and its role in future topics.	My knowledge and skills	1theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	The manner or manner in which the pathogen enters the plant tissue.	My knowledge and skills	1theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Transmission and spread of plant diseases.	My knowledge and skills	1theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Factors predisposing to plant diseases.	My knowledge and skills	1theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Fungi - characteristics of fungi, ways of feeding fungi, ways of reproduction of fungi, division of fungi.	My knowledge and skills	1theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Snakeworms as causative agents of plant diseases- Structure of the body of a nematode ‘ the type of damage it causes.	My knowledge and skills	1theoretical 2 practical	Fifteenth

.11 Course Development Plan

- 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.

.12 Infrastructure

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

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	.1 Educational Institution
Department of Plant Production Techniques	.2 Scientific Department / Center
general soil/ General Soil	.3 Course name / code

[illegible]

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

A - cognitive goals

A -1 Teaching students how to study the physical properties of soil such as density, moisture, mechanical analysis, and others.

A -2 Introducing students to the chemical properties of soil such as salinity , PH ,lime , gypsum and others.

A -3 Enable the student to know how to deal with laboratory materials and equipment.

B - Skills objectives of the program

B - 1 Giving students the qualities of the study skills of morphological soil.

B - 2 Training the student to know the relationship between soil and plants to reach high productivity.

B - 3 To provide the student with the necessary skills to conduct laboratory tests related to plants and soil and how to give 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

Take daily quick exams Quizzes

Conducting monthly exams

Conducting semester and final exams

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

.10Course Structure					
Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Soil science - its branches, importance and purpose of soil analysis.	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Some morphological characteristics of the soil.	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Soil physical properties and their relationship to plant growth.	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Soil physical properties and their relationship to plant growth.	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Soil physical properties and their relationship to plant growth.	My knowledge and skills	1theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	soil water.	My knowledge and skills	1theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Soil temperature and soil air.	My knowledge and skills	1theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Organic colloids.	My knowledge and skills	1theoretical 3 practical	VIII
Asking questions and	Lecture and practical	Clay minerals.	My knowledge and	1theoretical 3 practical	ninth

listening practical exercise and work groups	lesson		skills		
Ask group work questions	Lecture and practical lesson	The ketone exchange capacity of the soil.	My knowledge and skills	1theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Soil electrical connection Ec.	My knowledge and skills	1theoretical 3 practical	eleventh
Practical exercise and workgroup s	Lecture and practical lesson	Soil salinity.	My knowledge and skills	1theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Nutrients and their importance to plants.	My knowledge and skills	1theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Lime and gypsum in the soil.	My knowledge and skills	1theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Lime and gypsum in the soil.	My knowledge and skills	1theoretical 3 practical	Fifteenth

.11Course Development Plan

- 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.

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
Pullers & Agricultural Machines/ Agriculture Machines & Equipments	.3Course name / code
presence education	.4Forms of attendance available
Autumn semester / first stage	.5Semester / year
2 3hours per semester theoretical and practical	.6Number of hours of study) total(
	.7Date of preparation of this description

.8Course 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.

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

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

B - 1 providing students with the skills of maintenance of Tug.

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

Take daily quick exams Quizzes

Conducting monthly exams

Conducting semester and final exams

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure					
Evaluation method	education method	Unit / course or topic name	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	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	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	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	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 usefulness, function and maintenance of each part	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroup s	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	My knowledge and skills	1 theoretical 3 practical	VI
Case study Practical exercise and work	Lecture and practical lesson	Study of the structure of the tug - parts and benefits - guidance system - stops - the trajectory device in the	My knowledge and skills	1 theoretical 3 practical	seventh

groups		tug			
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	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Study plows Almtrahih Dump - plows discoid dump - use - parts - maintenance and methods of plowing out	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	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 - leveling, planning and channel-cutting machines - its importance - its use	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	My knowledge and skills	1 theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Study of the fertilized seed in lines - its parts - its field standardization - laboratory standardization	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Study of farming machines in lines - potato cultivation - types - calibration	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	My knowledge and skills	1 theoretical 3 practical	Fifteenth

		combine harvester			
--	--	-------------------	--	--	--

.11Course Development Plan

- 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.

.12Infrastructure

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

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.

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

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

C - emotional and value goals.

- C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Poultry farming, poultry industry in Iraq.	My knowledge and skills	1theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Types of production in poultry, hatchery, nursery, poultry farming requirements.	My knowledge and skills	1theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Egg production - breeds of laying hens, breeding systems of laying hens, factors affecting egg production.	My knowledge and skills	1theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Meat production - broiler chicken breeds, broiler breeding requirements.	My knowledge and skills	1theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Hatching and hatching management, hatching, hatching machine, specifications of eggs suitable for hatching.	My knowledge and skills	1theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Sheep classification, global sheep breeds, economic importance of sheep.	My knowledge and skills	1theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Reproduction, pregnancy, childbirth in sheep.	My knowledge and skills	1theoretical 2 practical	seventh
Listening and asking	Lecture and	Milk production and wool production in	My knowledge	1theoretical 2 practical	VIII

practical exercise questions and work groups	practical lesson	sheep.	and skills		
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Goat breeds, goat breeding.	My knowledge and skills	1theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Classification of cows and their types, their economic importance.	My knowledge and skills	1theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Breeding in cows.	My knowledge and skills	1theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	The foundations of milk and meat production in cows.	My knowledge and skills	1theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Cow field management.	My knowledge and skills	1theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Fish, types of fish farms and different systems of breeding.	My knowledge and skills	1theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Steps to introduce a meal of fish, breeding, nutrition.	My knowledge and skills	1theoretical 2 practical	Fifteenth

.11Course Development Plan

- 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.

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
calculator/ Computer Application	.3Course name / code

[illegible]

<p>.9Course outcomes and methods of teaching, learning and assessment</p>
<p>A - cognitive goals</p> <p>A -1 teach students to understand parts of calculators and operating systems) Dos - Ms (and its commands for managing the various files and applications available.</p> <p>A -2 Introducing students to important computer programs that help in raising the level of production.</p> <p>A -3 Enable the student to know how to deal with equipment in the computer lab, printers, monitors, and others.</p>
<p>B - Skills objectives of the program</p> <p>B - 1 To provide the student with the skills of using computer applications related to the agricultural specialization and how to deal with them to support agricultural work.</p> <p>B - 2 Training the student to work with the computer to complete the work faster and more accurately to reach high productivity.</p> <p>B - 3 To provide the student with the necessary skills to conduct general computer examinations and how to give appropriate scientific judgments.</p>
<p>Teaching and learning methods</p>
<p>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.</p>
<p>Evaluation methods</p>

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

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	educational method	Unit / course or topic name	Required learning outcomes	hours	the week
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	1theoretical 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, exit the system, and turn off the calculator	My knowledge and skills	1theoretical 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, identifyingRECYCLE BIN ' MY DOCUMENTS	My knowledge and skills	1theoretical 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 BACKGROUND 'change windows colors COLOR 'screen saver SCREEN SAVER	My knowledge and skills	1theoretical 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 ' likeCALCULATOR ' wordpad ,Play video files PLAYER WINDOS WS MEDIA	My knowledge and skills	1theoretical 2 practical	Nineteen - twenty-two
Mini Lesson Discussion Practical Exercise and	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	My knowledge and skills	1theoretical 2 practical	Twenty -third- twenty - fourth

Workgroups		the computer, dealing with one of the anti-virus programs			
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	Internet and development , Internet and Intranet , firewalls, some of the basic concepts of the Internet	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 pageHOME PAGE Closing the browser and disconnecting the Internet, storing favorite pages	My knowledge and skills	1 theoretical 2 practical	twenty-eight
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	E - definition - mail E-MAIL And its advantages, create an email GMAILFrom the Google search engine Google Write a new message, attach files with messages ATTACHMENT , read the message box INBOX Reply to messages REPLAYPassing incoming messages to others FORWARD , Delete messages, out of the e - mail	My knowledge and skills	1 theoretical 2 practical	thirty

.11Course Development Plan

- 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.

.12Infrastructure

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

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.

Giving scientific and theoretical lectures through display screens, PowerPoint and slides.
Evaluation methods
Take daily quick exams Quizzes Conducting monthly exams Conducting semester and final exams
C - emotional and value goals. C -1 To 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 - Transferred general and rehabilitative skills) other skills related to employability and personal development.(D-1 D-2 D-3 D-4

.10Course Structure

Evaluation method	education method	Unit / course or topic name	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	2theoretical	the first
ask questions	Lecture and practical lesson	Human rights in the civilization of Mesopotamia - human rights in the heavenly laws - a special study of human rights in Islam	My knowledge and skills	2theoretical	The second
Listen and ask questions	Lecture and practical lesson	Human rights in the Middle Ages - Rights in sects, schools, theories, corporations, their declarations and constitutions - Human rights in contemporary and modern history - International recognition of human rights in the League of Nations	My knowledge and skills	2theoretical	the third
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	2theoretical	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	2theoretical	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	2theoretical	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	2theoretical	seventh
Listen and ask questions	Lecture and practical	Modern human rights - realities in development - the right to a clean	My knowledge and skills	2theoretical	VIII

and work groups	lesson	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			
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	2theoretical	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	2theoretical	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	2theoretical	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	2theoretical	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	2theoretical	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	2theoretical	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	2theoretical	Fifteenth

.11Course Development Plan

- 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.

.12Infrastructure

Textbook Human Rights as well as Principles of Democracy	.1Required course books
Supporting resources for each course	.2Main references) sources(
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references) scientific journals ‘ reports(0000 ‘
Location www.google.com	b . Electronic references ‘ websites

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.

[illegible]

9 Course outcomes and methods of teaching, learning and assessment

A - cognitive goals

A -1 Teaching students how to deal with summer field crops so that they have modern scientific specifications, methods of their management and factors affecting their productivity.

A -2 Introducing students to how to develop summer field crops so that they are able to describe and service them of all kinds.

A -3 Enable the student to know how to deal with laboratory materials and equipment.

B - Skills objectives of the program

B - 1 To provide the student with the skills of applying scientific methods with regard to the management of summer field crops ‘such as preparing the land and preparing it for the cultivation of each crop.

B - 2 Training the student to produce summer field crops to reach high productivity.

B - 3 To provide the student with the necessary skills to conduct laboratory tests related to crops and soil and how to give 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

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

C - emotional and value goals.

- C -1 To 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 The development of the ethics of the profession in . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Introduction to the objectives and importance of producing summer field crops in the world and Iraq. Division of crops according to daily use and planting dates	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Fertilization, types of fertilizers, the importance of using fertilizers for plants	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Sunflower crop production, economic importance, appropriate environmental conditions, crop service operations, growth stages.	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Cotton production, economic importance, appropriate environmental conditions, crop service operations, signs of maturity, cotton picking, ginning and baling, manufacturing processes	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Yellow corn crop production, economic importance, appropriate environmental conditions, crop service operations, ripening and	My knowledge and skills	1theoretical 3 practical	Fifth

		harvesting, transformational processes			
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Rice crop production, economic importance, appropriate environmental conditions, crop service operations, ripening and harvesting	My knowledge and skills	1theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Sesame crop production, economic importance, appropriate environmental conditions, crop service processes, ripening and harvesting, manufacturing processes.	My knowledge and skills	1theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Production of field pistachio and mash crops, economic importance, appropriate environmental conditions, crop service operations, ripening and harvesting	My knowledge and skills	1theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Soybean production, economic importance, favorable environmental conditions, crop service operations, ripening and harvesting	My knowledge and skills	1theoretical 3 practical	ninth
Ask group work	Lecture and	Tobacco crop production, economic	My knowledge	1theoretical 3 practical	The tenth

questions	practical lesson	importance, appropriate environmental conditions, crop service operations, ripening and harvesting, leaf drying, transformational operations.	and skills		
Mini-lesson work groups	Lecture and practical lesson	Production of jute and jute crops, economic importance, appropriate environmental conditions, crop service operations, ripening and harvesting	My knowledge and skills	1theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Production of sorghum crop, economic importance, appropriate environmental conditions, crop service operations, ripening and harvesting	My knowledge and skills	1theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Presentation of scientific films about the production of the most important summer crops.	My knowledge and skills	1theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Introduction to the objectives and importance of producing summer field crops in the world and Iraq. Division of crops according to daily use and planting dates	My knowledge and skills	1theoretical 3 practical	fourteenth
Asking	Lecture	Fertilization, types of	My	1theoretical 3 practical	Fifteenth

practice questions	and practical lesson	fertilizers, the importance of using fertilizers for plants	knowledge and skills		
--------------------	----------------------	---	----------------------	--	--

.11Infrastructure	
The systematic book of summer field crops	.1Required course books
Supporting resources for each course	.2Main references) sources(
Scientific journals, as well as research, letters and theses of professors in the same specialty	a . Recommended books and references) scientific journals , reports(0000 ,
Location www.google.com	b . Electronic references , websites

.12Course Development Plan
<ul style="list-style-type: none"> - 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.

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center

[illegible]

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

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

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Agricultural cycle, its definition, types (double, triple, quartet, quintuple(	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Potato production, origin, the importance of the crop in terms of economic and nutritional, factors affecting its production, methods of reproduction, varieties, date and method of cultivation, service operations.	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Tomato production † origin, economic and nutritional importance, plant division and varieties, climate and soil, reproduction, date and method of cultivation, service operations	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Eggplant and pepper production, origin and economic and nutritional importance, plant division and varieties, climate and soil, reproduction, date and method of cultivation, service operations.	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Cucumber production, origin and importance, plant division and varieties, climate and soil, reproduction, flowers and sex ratio, date and method of cultivation, service operations.	My knowledge and skills	1theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Production of various types of squash † the original habitat and importance, plant division and varieties, climate and soil, reproduction) zucchini squash † honey squash † arachnid squash(	My knowledge and skills	1theoretical 3 practical	VI

Case study Practical exercise and work groups	Lecture and practical lesson	Watermelon and melon production, origin and importance, plant division and varieties, climate and soil, reproduction, dates and method of cultivation, service operations	My knowledge and skills	1theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Production of beans and cowpeas, origin and importance, plant division and varieties, climate and soil, reproduction, dates and method of cultivation, service operations	My knowledge and skills	1theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Production of okra ‘amaranth ‘ sweet corn, origin and importance, plant division and varieties, climate and soil, reproduction, dates and method of cultivation, service operations	My knowledge and skills	1theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Basil and mint production, origin and importance, plant division and varieties, climate and soil, reproduction, dates and method of cultivation.	My knowledge and skills	1theoretical 3 practical	The tenth
Mini- lesson work groups	Lecture and practical lesson	The vegetables that are hoped to be planted in Iraq (artichokes, taro, and qouta), the origin and importance, the date and method of cultivation, and service operations.	My knowledge and skills	1theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	The vegetables that are hoped to be planted in Iraq (sweet potatoes ‘berbein ‘ asparagus), origin and importance, date and method of cultivation, service operations.	My knowledge and skills	1theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	Growth regulators, division of growth regulators ‘physiological effect ‘ methods of using growth regulators, recent studies in the use of growth regulators.	My knowledge and skills	1theoretical 3 practical	Thirteen th
Asking	Lecture	Interlaced cultivation,	My	1theoretical 3 practical	fourteenth

practice questions	and practical lesson	importance, cultivation models, intensive cultivation, protective covers for soil, advantages and disadvantages of protective covers	knowledge and skills	ical	h
Asking practice questions	Lecture and practical lesson	Mechanization of agricultural operations in vegetable fields, types of mechanization (plowing machines, fertilization machines, hoeing machines, harvesting machines. (	My knowledge and skills	1theoretical 3 practical	Fifteenth

.11 Course Development Plan

- 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.

.12 Infrastructure

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

course description form

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

A - cognitive goals

A -1 Teaching students how to deal with the most important types of perennial trees, methods of their management, factors affecting their productivity and the extent of the success of their cultivation in Iraq.

A -2 Introducing students to how to develop the cultivation of fruit trees so that they are able to describe and serve them in their various types.

A -3 Enable the student to know how to deal with laboratory materials and equipment.

B - Skills objectives of the program

B - 1 providing students with the skills of applying scientific methods in terms of management of fruit trees sustainable.

B - 2 Training the student on the correct foundations in picking, sorting and marketing the fruits to reach high productivity.

B - 3 To provide the student with the necessary skills to conduct laboratory tests related to fruits and soil and how to give 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

Take daily quick exams Quizzes

Conducting monthly exams

Conducting semester and final exams

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

.10Course Structure					
Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Habitat, spread ,economic and nutritional importance , division of citrus.	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	Environmental factors, climate conditions, soil conditions and their impact on citrus cultivation in Iraq.	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	The process of flowering, fruiting and fruit dropping (June fall, pre-combination fall.(	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Cultivation and production of citrus (varieties, origins, reproduction, pruning, fertilization, irrigation, harvesting.(	My knowledge and skills	1theoretical 3 practical	fourth and fifth
Practical exercise, meeting and work groups	Lecture and practical lesson	Environmental factors, climate conditions, soil conditions and their impact on palm cultivation in Iraq.	My knowledge and skills	1theoretical 3 practical	VI
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Vegetative propagation, care of shoots, planting in the nursery, dates of planting them in the permanent place and serving them.	My knowledge and skills	1theoretical 3 practical	seventh
Case study Practical exercise and work groups	Lecture and practical lesson	Service operations for palm trees , fertilization, irrigation, fertilization ,concentration , fruit thinning ,cuttings removal, palm mechanization.	My knowledge and skills	1theoretical 3 practical	VIII
Listening and asking	Lecture and	Metazinia phenomenon , fruit development stages,	My knowledg	1theoretical 3 practical	ninth

practical exercise questions and work groups	practical lesson	pollen extraction, pollination process, review of the ten commercial varieties in the country.	e and skills		
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Olives, habitat, spread, economic and nutritional importance.	My knowledge and skills	1theoretical 3 practical	The tenth
Ask group work questions	Lecture and practical lesson	Environmental factors, floating phenomenon, its causes, and ways to overcome it.	My knowledge and skills	1theoretical 3 practical	eleventh
Mini-lesson work groups	Lecture and practical lesson	Bananas, habitat, spread, economic and nutritional importance, environmental conditions, reproduction, varieties.	My knowledge and skills	1theoretical 3 practical	twelveth
Practical exercise and workgroups	Lecture and practical lesson	Buckthorn ‘basma ‘ habitat, spread, economic and nutritional importance, environmental factors, reproduction, varieties.	My knowledge and skills	1theoretical 3 practical	Thirteenth
ask questions	Lecture and practical lesson	Manco ‘ guava, habitat, spread, economic and nutritional importance, environmental factors, reproduction, varieties.	My knowledge and skills	1theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Scientific visit.	My knowledge and skills	1theoretical 3 practical	Fifteenth

.11Course Development Plan

- 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.

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
Resistant bio/ Biological resistance	.3Course name / code

[illegible]

<p>.9Course outcomes and methods of teaching, learning and assessment</p>
<p>A - cognitive goals</p> <p>identifies the importance of biological resistance to pests and its impact on the growth and spread of pests compared to other methods of resistance</p> <p>A -2 Introducing students to how to develop biological resistance so that it becomes able to characterize it of its various types.</p> <p>A -3 Enable the student to know how to deal with laboratory materials and equipment.</p>
<p>B - Skills objectives of the program</p> <p>B - 1 To provide the student with the skills of applying scientific methods with regard to biological resistance.</p> <p>B - 2 Training the student on the correct foundations of biological resistance to reach high productivity.</p> <p>B - 3 To provide the student with the necessary skills to conduct laboratory tests related to bio-resistance and soil and how to give appropriate scientific judgments.</p>
<p>Teaching and learning methods</p>
<p>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.</p>
<p>Evaluation methods</p>

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

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure					
Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Biological resistance ·its emergence and development	My knowledge and skills	1theoretical 3 practical	the first
ask questions	Lecture and practical lesson	natural selection	My knowledge and skills	1theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Natural resistance to insects	My knowledge and skills	1theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Attributes of natural enemies	My knowledge and skills	1theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Methods used to introduce vital enemies	My knowledge and skills	1theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	defense mechanism in insects	My knowledge and skills	1theoretical 3 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Other methods of biological resistance	My knowledge and skills	1theoretical 3 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Biological resistance to pathogens	My knowledge and skills	1theoretical 3 practical	VIII
Asking	Lecture	Biological resistance to	My	1theoretical 3 practical	ninth

questions and listening practical exercise and work groups	and practical lesson	pathogens	knowledge and skills	al	
Ask group work questions	Lecture and practical lesson	Factors affecting biological resistance programmes	My knowledge and skills	1theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	The biological resistance of the bush	My knowledge and skills	1theoretical 3 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	The biological resistance of the bush	My knowledge and skills	1theoretical 3 practical	twelveth
ask questions	Lecture and practical lesson	The biological resistance of the bush	My knowledge and skills	1theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	pheromones	My knowledge and skills	1theoretical 3 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Anti-feeding substances	My knowledge and skills	1theoretical 3 practical	Fifteenth

.11Course Development Plan

- 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.

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
general insects/ General Insect	.3Course name / code
presence education	.4Forms of attendance available
Spring semester / first stage	.5Semester / year
2 3hours in the classroom theoretical and practical	.6Number of hours of study) total(
	.7Date of preparation of this description

.8Course 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.
.9Course outcomes and methods of teaching, learning and assessment
<p>A - cognitive goals</p> <p>Teaching students about the most important insects that infect each crop.</p> <p>A - 2 Introducing students to how to develop biological methods of control so that he is able to describe them in their various types.</p> <p>A -3 Enable the student to know how to deal with laboratory materials and equipment.</p>
<p>B - Skills objectives of the program</p> <p>B - 1 provide students with methods applied skills biological to combat.</p> <p>B - 2 Training the student on the correct foundations to choose the best method of struggle to reach high productivity.</p> <p>B - 3 To provide the student with the necessary skills to conduct laboratory tests related to insects and soil and how to give appropriate scientific judgments.</p>
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
<p>Take daily quick exams Quizzes</p> <p>Conducting monthly exams</p> <p>Conducting semester and final exams</p>
<p>C - emotional and value goals.</p> <p>C -1 To enable the student to apply theoretical information in a practical way.</p> <p>C -2 To develop the patriotic spirit of the student to increase production in quantity and quality.</p>

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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	educational method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The development of pest control , an overview of the development and stages of agricultural pest control , the reasons that led to the pest control program.	My knowledge and skills	1 theoretical 3 practical	the first
ask questions	Lecture and practical lesson	The life and environment of insects and the foundations of their control, the economic limits of insects in nature.	My knowledge and skills	1 theoretical 3 practical	The second
Listen and ask questions	Lecture and practical lesson	Pest control methods , natural control, definition of their factors, meteorological factors, geographical factors, natural enemies.	My knowledge and skills	1 theoretical 3 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Natural pest control, physical and mechanical control.	My knowledge and skills	1 theoretical 3 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Supplementation of applied control ,branch control , plant quarantine, its objectives, biological control, its benefits and advantages, the most important parasites and common predators in Iraq.	My knowledge and skills	1 theoretical 3 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Chemical pest control , division of chemical pesticides according to the type of pest and the method of entry into the body of the insect, its chemical composition, problems of expanding the use of chemical pesticides.	My knowledge and skills	1 theoretical 3 practical	VI
Case study	Lecture and	Recent trends in pest control, microbial control, use of hormones in control, use	My knowledge	1 theoretical 3 practical	seventh

Practical exercise and work groups	practical lesson	of pheromones in control.	ge and skills		
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Integrated pest management ' its components and benefits, some practical examples of integrated pest management.	My knowledge and skills	1 theoretical 3 practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The most important pests of greenhouses in Iraq and ways to combat them.	My knowledge and skills	1 theoretical 3 practical	ninth
Ask group work questions	Lecture and practical lesson	Cotton pests, cotton nut spiny worm, scientific name, order, family, description of the insect, its life cycle, damages resulting from it, control.	My knowledge and skills	1 theoretical 3 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Pests of wheat and barley, the most important pests affecting the two crops, a detailed study of the Sunn pest.	My knowledge and skills	1 theoretical 3 practical	eleventh
Practical exercise and work groups	Lecture and practical lesson	Corn pests, the most important corn pests, a detailed study of the corn stalk borer insect.	My knowledge and skills	1 theoretical 3 practical	twelfth
ask questions	Lecture and practical lesson	Pests of the saprophytic family and the cruciferous family, a detailed study of the sugar beet worm.	My knowledge and skills	1 theoretical 3 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Legume pests, the most important pests affecting the legume family, a detailed study of an insect from the black bean.	My knowledge and skills	1 theoretical 3 practical	fourteenth

Asking practice questions	Lecture and practical lesson	Pests of warehouse materials , sources of insect infestation in warehouses, appropriate conditions for their spread, symptoms of infection, methods of economic insect prevention.	My knowledge and skills	1theoretical 3 practical	Fifteenth
---------------------------	------------------------------	--	-------------------------	--------------------------	-----------

.11Course Development Plan

- 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.

.12Infrastructure

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

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.

[illegible]

9 Course outcomes and methods of teaching, learning and assessment

A - cognitive goals

students the most important principles of statistics and identifying the types of agricultural experiments, their conditions, and how to implement them.

A -2 Introducing students to how to develop agricultural experiments so that they are able to describe them in their various types.

A -3 Enable the student to know how to deal with, classify and prepare data for statistical analysis.

B - Skills objectives of the program

B - 1 providing students with the skills of applying methods of statistical analysis

B - 2 Training the student on the correct foundations to choose the best method of struggle to reach high productivity.

B - 3 provide students with the skills necessary to conduct the statistical analysis and how to give 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

Take daily quick exams Quizzes

Conducting monthly exams

Conducting semester and final exams

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Historical overview of statistics, definitions and concepts (society, environment, variable, observation, data, sample, types of samples)	My knowledge and skills	1theoretical 2 practical	the first
ask questions	Lecture and practical lesson	Data collection methods, data display : tabular display, graphic display	My knowledge and skills	1theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	Measures of central tendency : median, mode, arithmetic mean	My knowledge and skills	1theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Measures of dispersion: range, variance, standard deviation	My knowledge and skills	1theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Scales of dispersion mean deviation, standard error, coefficient of variation	My knowledge and skills	1theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	simple linear correlation	My knowledge and skills	1theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	simple linear regression	My knowledge and skills	1theoretical 2 practical	seventh
Listening and asking practical	Lecture and practical lesson	Planning agricultural experiments, scientific research, requirements and objectives of scientific research	My knowledge and skills	1theoretical 2 practical	VIII

exercise questions and work groups					
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	Types of agricultural experiments ,human requirements for agricultural experiments, error in agricultural experiments	My knowledge and skills	1theoretical 2 practical	ninth
Ask group work questions	Lecture and practical lesson	Variance analysis .The basic idea of the analysis of variance .Use analysis of variance with experimental designs	My knowledge and skills	1theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Types of experimental designs , choosing the appropriate design, completely randomized design	My knowledge and skills	1theoretical 2 practical	eleventh
Practical exercise and work groups	Lecture and practical lesson	Completely randomized design in case of unequal recurrence	My knowledge and skills	1theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Randomized complete block design	My knowledge and skills	1theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Estimation of missing value in a randomized complete block design	My knowledge and skills	1theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	latin square design	My knowledge and skills	1theoretical 2 practical	Fifteenth

.11Course Development Plan

- 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.

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

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	.1Educational Institution
Department of Plant Production Techniques	.2Scientific Department / Center
Farm management/ Farm man a g e ment	.3Course name / code

[illegible]

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

C - emotional and value goals.

C -1 To 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 The development of the ethics of the profession m . Agricultural engineer among students by following the correct professional behavior.

D - Transferred general and rehabilitative skills) other skills related to employability and personal development.(

D-1

D-2

D-3

D-4

.10Course Structure

Evaluation method	education method	Unit / course or topic name	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Definitions of farm management and its objectives.	My knowledge and skills	1theoretical 2 practical	the first
ask questions	Lecture and practical lesson	production costs.	My knowledge and skills	1theoretical 2 practical	The second
Listen and ask questions	Lecture and practical lesson	The main economic principles and rules used in farm management.	My knowledge and skills	1theoretical 2 practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	A- The principle of diminishing returns.	My knowledge and skills	1theoretical 2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	B - The principle of farm costs and the theory of comparative costs.	My knowledge and skills	1theoretical 2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	C - the principle of determining the level of production .D - the principle of equal returns and the principle of opportunity costs.	My knowledge and skills	1theoretical 2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Replacement or replacement to reduce cost	My knowledge and skills	1theoretical 2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Planning and budgeting for farms.	My knowledge and skills	1theoretical 2 practical	VIII
Asking	Lecture	Farm management	My	1theoretical 2 practical	ninth

questions and listening practical exercise and work groups	and practical lesson	methods A - the complete and partial plan.	knowledge and skills	cal	
Ask group work questions	Lecture and practical lesson	B - The method of substitution and substitution between projects	My knowledge and skills	1theoretical 2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	C - direct comparison method .D - the method of partial change.	My knowledge and skills	1theoretical 2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Farm accounts and extinction and methods of calculating it.	My knowledge and skills	1theoretical 2 practical	twelveth
ask questions	Lecture and practical lesson	Managing the factors of production with efficient work and capital management.	My knowledge and skills	1theoretical 2 practical	Thirteenth
Asking practice questions	Lecture and practical lesson	The economics of buying a farm and methods of valuation.	My knowledge and skills	1theoretical 2 practical	fourteenth
Asking practice questions	Lecture and practical lesson	Measures of the economic efficiency of the farm and the budget work of the farm.	My knowledge and skills	1theoretical 2 practical	Fifteenth

.11Course Development Plan

- 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.

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