Ministry of Higher Education and Scientific Research

Scientific Supervision and Evaluation Authority

Department of Quality Assurance and Academic Accreditation

Academic program description form for colleges

For the academic year 2023-2024

University name: Southern Technical University

College name: Technical Institute / Shatrah

Scientific Department: Department of Agricultural Mechanization Techniques

File filling date: 1/8/2023

Head Of Department Name: Malik Reihan Rshieh

signature:

Date: 1/8/2023

Name of the Associate Dean for Scientific Affairs: Assistant Lect. Turki Diwan Hussein

signature:

Date:

Department of Quality Assurance and University Performance

Name of the Director of the Department of Quality Assurance and University Performance: Haider Hussain Naseer

signature:

Date: 2023/8/1

Dean's Endorsement

Prof. Dr. Nowfal A - Al-Hirnawi

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 It is accompanied by a description of . most of the available opportunities each course within the program

Ministry of Higher Education and Scientific Research	1. Educational institution
Technical Institute / Shatra	2. Department Scientific / Center
techniques agricultural mechanization Department of	3. Academic or professional program name
Technical Diploma	4. Final certificate name
semester system	5. system
Theoretical and practical study	6. Accreditation approved Program
field field, library, internet, agricultural , Laboratories and industrial institutions and agricultural projects	7. Other external influences
2023/8/1	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 the sciences related and related local, regional and agricultural mechanization to international standards	
2. Scientific skills assessment and clarification agricultural mechanization fake a of	
3. Thinking and analysis skills that enable solving emerging of agricultural mechanization techniques problems in the field	
4. Skills to use, repair, maintain and develop agricultural	

that enable it to compete with others mechanization techniques in the labor market

methods of teaching, learning and assessment outcomes and program Required .10
Cognitive goals -A agricultural field of information acquired for the delivery of -O1 other Lee beneficiaries and linking them to .E mechanization techniques different agricultural problems related to science to reach a solution to the .operations Acquisition and -A2 application for the its For for t laboratory Specialized Titles proof Efficiency in . of in a The field of agricultural mechanization ability to analyze relevant experimental measurements of demonstrate the -O3 and agricultural techniques mechanization of specialization of the .Reports on observations and analysis counter .E accuracy communicate and discuss scientific concepts, empirical results and A4- Clearly .analytical arguments, and briefly orally and in writing Develop appropriate technology to solve farmers' problems and - A5 research aimed at progress in all disciplines for long-term technical encourage .development Attracting qualified and talented scientific cadres to conduct scientific - 6 A .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
program of the Skills objectives - B conduct laboratory and field trials, as well as a statistical analysis and - 1 B .data results interpretation of . on agricultural mechanization Preparing and submitting research reports - 2 B professionals involved in - communication with professionals and non - 3 B .private sector agricultural cooperation and the Developing and using computer programs in the fields of designing and - B-4 .analyzing agricultural experiments
Teaching and learning methods
Providing students with the basics and additional topics related to previous - . solve practical problems to , learning outcomes of skills

- 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 .
- A visit to the practical laboratories and workshops of the Department of Agricultural Mechanization Techniques by the academic staff .

Evaluation methods

- Daily and monthly exams
- Semester and final exams
- Participation scores for competition questions for academic subjects
- Scores for homework and report writing

C- Emotional and value goals

C1- Applying knowledge in agricultural mechanization sciences in order to address agricultural problems.

C2- Design and implementation of agricultural scientific experiments, as well as analysis and interpretation of data.

C3- Designing an integrated or partial agricultural system or following a treatment system to meet the required agricultural needs within realistic restrictions related to the economy, environment, health and safety.

C4- Demonstrate the creative and innovative ability to use special mechanization in agriculture

C5- Use of modern techniques, skills and tools necessary for agricultural technical practices.

d- Transferred skills (skills rehabilitative and general skills other than those related to personal development and employability) .

D1- Diagnose and treat problems related to agricultural mechanization .

D 2- Enable students to pass job interviews.

D3- Enable students to pass professional exams organized by local, regional and international bodies.

D 4- Enable students to develop continuous self-development after graduation.

11. Program structure

12. Certifications and Credit Hours

Credit hours	Course or course name	Course or course code	level/year

The degree Technical the of Diploma Require (x) credit hours				Second 2023
				Second 2023
132				Second 2023
				Second 2023
				Second 2023
				Second 2023

Planning for personal development.13
- Enable requester from Use skills Empowerment self guidance .E Tender The .E - Ability On Analysis And - skills Solve problems the operation - Knowledge and understanding - education students from Use Modern technologies in agricultural machinery counter Preparing agricultural mechanization for E - education students For use in agricultural fields - education students On how to maintain the different systems in the machines turning machines, coolers and on how to use - education Students maintenance in the workshops - education students On the use of modern irrigation systems systems modern computer education students on
college attend the regulations relating to p Od) Acceptance criterion.14 (institute or
Central / according to the requirements of the Ministry of Higher Education and Scientific Research

The most important sources of information about the program.15
era AD The Central Library in the .1 Internet information network .2 The experiences of Arab and international universities .3 Current Curriculum .4

Curriculum Skills Outline										
esponding to the individual learning outcomes from the program being evaluated										
Learning outcomes required from the program										
bject-specific skills			knowledge and understanding				Basic mother optional	Course Name	Course Code	level / year
3 b	2 b	1 b	4 A	3 A	2 A	1 A				
√				√			Basic	haulage maintenance		second 2023
√			√				Basic	transmission Devices		
√				√			Basic	agricultural machinery electric		second 2023
√				√				hydraulic agricultural machinery		
		√			√		general	Computer 2/ Fundamentals		
√				√			general	English language		second 2023
√			√				Basic	Agricultural tug repair		
√				√			Basic	Reaping and harvesting machines		second 2023
√				√			assistant	animal production mechanization		
	√			√			Basic	The economics of		second 2023

								agricultural mechanization		
	√		√				**basic**	**Reclamation machinery and equipment**		
		√			√		**basic**	**using Basics of machines**		**second 2023**
		√			√		**basic**	**Graduation research project**		**second 2023**

course description form n

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 It must be linked to the description of . opportunities learning available the .the program

Shatra / Technical Institute	Educational institution .1
agricultural Department of techniques mechanization	Center / Department Scientific .2
Tractor maintenance	code / name Course .3
	Available forms of attendance .4
second stage / Autumn semester	year / season .5
theoretical and semester fall hours in the 3 3 practical	Number of hours of .6 (total) study

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

7. The date this description was prepared	1/8/2023
8. course Objectives of the : granting student diploma degree in theoretical and practical side to serve the sticky e prestigious and level graduate meter .E Li .arena process	

goals - A

maintenance definition of 1 A
maintenance conducting how , maintenance books read know to
. dates times and specified According to the
. integrated program as a maintenance conducting to able student a is 2 A

Skills objectives of the program - B

and its schedule according to maintenance performs student The - 1 B
providing while work during rules safety to adheres
. requirements conduct

. extend the life of the agricultural tug to student Enabling the − : B2

Teaching and learning methods

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

Evaluation methods

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

. emotional and value goals - C

. Enable the student to apply theoretical information in a practical way -1 C
develop the patriotic spirit of the student to increase production in To -2 C
. quantity and quality
Instilling the concept of community service and the best way to deal with - 3 C
. the simple strata of society, the peasants and farmers
Agricultural engineer among students by . Develop professional ethics - 4 C
. following the correct professional behavior

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

Course structure .10

Evaluation method	education method	Unit course / name or topic	Required learning outcomes	Hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	The importance of maintenance and maintenance - its definition - getting to know the maintenance and repair workshops.	knowledge and skills	practical 3 theoretical 1	the first
ask questions	Lecture and practical lesson	Maintenance application after (50) working hours - How to charge and maintain the battery.	knowledge and skills	practical 3 theoretical 1	The second
Listen and ask questions	Lecture and practical lesson	The procedure for connecting the spark plug to the generator - how to correct tension - lend it and how to replace it.	knowledge and skills	practical 3 theoretical 1	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Knowing the characteristics of hydraulic oil - treatment of leaching and	knowledge and skills	practical 3 theoretical 1	the fourth

		knowing its System .causes .maintenance			
Practical exercise, meeting and work groups	Lecture and practical lesson	Maintenance After (100) working hours - this maintenance is carried out by the students - the oil change .process	knowledge and skills	practical 3 theoretical 1	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Follow-up maintenance (100) working hours - steps for changing the engine oil and filter - maintenance of .the fuel system	My knowledge and skills	practical 3 theoretical 1	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Conducting the process of expelling air from the fuel system - tire maintenance - the effect of air pressure on the .tires	knowledge and skills	practical 3 theoretical 1	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Maintenance after (250) working hours - the importance of this maintenance and its vocabulary - Valve calibration .procedure	knowledge and skills	practical 3 theoretical 1	eight

Asking questions and listening practical exercise groups work and	Lecture and practical lesson	Follow-up maintenance after (250) working hours - maintenance and calibration of the feed pump and replacement of .extruders	knowledge and skills	practical 3 theoretical 1	ninth
Ask group work questions	Lecture and practical lesson	Follow-up maintenance of the other parts - the procedure for calibrating the clutch and calibrating the .brake	knowledge and skills	practical 3 theoretical 1	The tenth
Mini-lesson work groups	Lecture and practical lesson	Maintenance after (500) working hours - maintenance and replacement of fuel filters in .diesel engines	knowledge and skills	practical 3 theoretical 1	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Maintenance follow-up after (500) working hours - Methods and the importance of maintaining the front wheel bearings and assembling the .axles	knowledge and skills	practical 3 theoretical 1	twelveth
ask questions	Lecture and practical lesson	Maintenance follow-up after (500) working hours - how to maintain the	knowledge and skills	practical 3 theoretical 1	Thirteenth

		cooling system and treat external and .internal leaks			
Asking practice questions	Lecture and practical lesson	Maintenance after a year of actual operation - its importance - making practical applications for .that	knowledge and skills	practical 3 theoretical 1	fourteenth
test	Lecture and practical lesson	How to maintain the performance of transmission devices - steps to store the tug .properly			Fifteenth

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

Infrastructure .12	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty

Electronic . b websites , references	www.google.com Location

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 It must be linked to the description of . opportunities learning available the .the program

Educational institution .13	Shatra / Technical Institute
/ Department Scientific .14 Center	agricultural Department of techniques mechanization
code / name Course .15	Transmission Devices
Available forms of .16 attendance	learning -e present and/ Blended
year / season .17	second stage / Autumn semester
Number of hours of .18 (total) study	hours in the fall semester theoretical 33 and practical
The date this description .19 was prepared	1/8/2023
Granting the student a diploma in the theoretical : Course Objectives .20 and practical aspects to serve the preparation of a graduate of a distinguished .level and his involvement in the practical arena	

methods of teaching, learning and assessment outcomes and Course .21
cognitive goals - A Introducing the student to the transmission gear and training him to use them A1 .correctly, maintain and maintain them A:2 - The student will be able to know the transmission devices in terms of types, components and methods . use and maintenance
Skills objectives of the program - B Be able to know the parts of the chapter, gearbox and transmission group in a :B1 scientific and practical way B2- The student will be able to disassemble and assemble the parts of the .transmission devices
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers Agricultural engineer among students by . Develop professional ethics - 4 C . following the correct professional behavior

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

Course structure .22

the week	hours	Required learning outcomes	Unit course / name or topic	education method	ethod
the first	2 theoretical 3 practical	knowledge and skills	Linear motion, speed, acceleration, representation of speed and acceleration and the importance of each	Lecture and practical lesson	nswers mini ctical lesson
The second	2 theoretical 3practical	knowledge and skills	Rotational motion - representation of velocity - acceleration - the relationship between linear motion and rotational motion	Lecture and practical lesson	sk questions
the third	2 theoretical 3practical	knowledge and skills	Torque and . work - the importance of each and its relationship to transmission	Lecture and practical lesson	sk questions

		devices - examples.			
meeting and work groups	Lecture and practical lesson	Energy - its types - units - power - forms of power - solving exercises.	knowledge and skills	2 theoretical 3practical	the fourth
meeting and work groups	Lecture and practical lesson	Direct transmission - Flexible links - The importance of each - Definition of the flexible joint - Features - Working theory - Uses.	knowledge and skills	2 theoretical 3practical	Fifth
n Discussion Exercise and Workgroups	Lecture and practical lesson	The power take-off shaft - its movement sources - its different designs - drawing different models - the drive pulley in agricultural machines - its use cases.	knowledge and skills	2 theoretical 3practical	VI
ical exercise work groups	Lecture and practical lesson	Drapers and belts - the importance of each - the effect of the sliding process on the belts -	knowledge and skills	2 theoretical 3practical	seventh

		transmission of movement in the way of the belts - drawing different shapes of them - the disadvantages of using them - types of belts - their advantages and .disadvantages			
ng practical ns and work groups	Lecture and practical lesson	Separator - its definition - types - drawing the separator and clarifying its parts - exercises about slipping and friction	knowledge and skills	2 theoretical 3practical	VIII
uestions and cal listening work groups	Lecture lesson practical and	Hydraulic separator and hydraulic torque converter - importance - .components	knowledge and skills	2 theoretical 3practical	ninth
rk questions	Lecture and practical lesson	Gears - Importance of transmission - Metal and shape of gears - Advantages and disadvantages - Types - The forces acting and the reason	knowledge and skills	2 theoretical 3practical	The tenth

		for the reduction.			
work groups	Lecture and practical lesson	Differential gears and differential device - the importance of each - working principle - differential gear designs - working principle of the differential device - its parts - examples.	knowledge and skills	2 theoretical 3practical	eleventh
exercise and workgroups	Lecture and practical lesson	Solar gears - final transmission device - automatic gearbox - features - parts for all of the above.	knowledge and skills	2 theoretical 3practical	twelveth
sk questions	Lecture and practical lesson	Ordinary gearbox - its parts - its advantages and disadvantages - its function - its purpose - its maintenance	knowledge and skills	2 theoretical 3practical	Thirteenth
ce questions	Lecture and practical lesson	Automatic gearbox - advantages and	knowledge and skills	2 theoretical 3practical	fourteenth

		disadvantages - function - purpose - .maintenance			
test	Lecture and practical lesson	Traction devices - tires - types - methods of .slip reduction		2 theoretical 3practical	Fifteenth

course development plan .23
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .24	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty
Electronic . b websites , references	www.google.com Location

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

It must be linked to the description of the . opportunities learning available the .program
methods of teaching, learning and assessment outcomes and Course .33
cognitive goals - A Introduce and train the student on electrical devices and components in : A1 agricultural machines and how to use them .and its maintenance . The student shall be able to use electrical testing and inspection devices - 2 A
Skills objectives of the program - B The student should be familiar with all parts of the electrical system and the - 1 B .maintenance and maintenance thereof . . to know all the faults student Enable the − : B2
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers Agricultural engineer among students by . Develop professional ethics - 4 C . following the correct professional behavior

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

Shatra / Technical Institute	Educational institution .25
agricultural Department of techniques mechanization	/ Department Scientific .26 Center
Agric. machine electricity	code / name Course .27
learning -e present and/ Blended	Available forms of .28 attendance
second stage / Autumn semester	year / season .29
hours in the fall semester theoretical 33 and practical	Number of hours of .30 (total) study
1/8/2023	The date this description .31 was prepared
diploma in the theoretical Granting the student a : Course Objectives .32 and practical aspects to serve the preparation of a graduate of a distinguished .level and his involvement in the practical arena	

Course structure .34					
Evaluation method	education method	Unit course / name or topic	Required learning outcomes	Hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Electrical terms and symbols - Testing and testing devices for the electrical .system	knowledge and skills	2 theoretical 3practical	the first
ask questions	Lecture and practical lesson	Induction - self induction - mutual induction - magnetism - magnetic field - conductors and insulators - electric .circuits	knowledge and skills	2 theoretical 3practical	The second
Listen and ask questions	Lecture and practical lesson	The battery - its installation - how it .works	knowledge and skills	2 theoretical 3practical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Battery maintenance - electrolytic liquid - types of battery charging - battery check - battery .storage	knowledge and skills	2 theoretical 3practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Generator components - work - maintenance - .repair	knowledge and skills	2 theoretical 3practical	Fifth
Mini Lesson	Lecture and	Charging circuit How is	knowledge and skills	2 theoretical 3practical	VI

Discussion Practical Exercise and Workgroups	practical lesson	current transformed in ?the circuit			
Case study Practical exercise and work groups	Lecture and practical lesson	Current regulator - types - work - parts - check .and switch	knowledge and skills	2 theoretical 3practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The work of the primary engine (predecessor) - parts - maintenance - .repair	knowledge and skills	2 theoretical 3practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The starter circuit The starter motor switch The function of each part How to connect and connect the .starter circuit	knowledge and skills	2 theoretical 3practical	ninth
Ask group work questions	Lecture and practical lesson	Works file - work - installation - intensive - installation - .job	knowledge and skills	2 theoretical 3practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Spark distributor - parts - function - calibration - spark breaker - parts - work - .calibration	knowledge and skills	2 theoretical 3practical	eleventh
Practical exercise and	Lecture and	Mug candle - parts -	knowledge and skills	2 theoretical 3practical	twelveth

workgroups	practical lesson	function - types of mug .candles			
ask questions	Lecture and practical lesson	Distributor work - compare it with electrical .distributor	knowledge and skills	2 theoretical 3practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Lighting in haulers and wagons, wire distribution system, traffic lights, maintenance .and repair	knowledge and skills	2 theoretical 3practical	fourteenth
Asking practice questions	Lecture and practical lesson	Maintenance of the electrical system - Inspection and testing of the electrical system of agricultural .machinery		2 theoretical 3practical	Fifteenth

course development plan .35
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .36

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

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 It must be linked to the description of . opportunities learning available the .the program

Educational institution .37	Shatra / Technical Institute
/ Department Scientific .38 Center	agricultural Department of techniques mechanization
code / name Course .39	Irrigation Equipment
Available forms of .40 attendance	learning -e present and/ Blended
year / season .41	second stage / Autumn semester
Number of hours of .42 (total) study	hours in the fall semester theoretical 33 and practical
The date this description .43 was prepared	1/8/2023
Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished .level and his involvement in the practical arena .44	

methods of teaching, learning and assessment outcomes and Course .45
cognitive goals - A Knowing the importance of water and the sources of irrigation water in Iraq and -A1 .identifying irrigation methods and pumps and their types
Skills objectives of the program - B The student will be able to determine the relationship of soil to water and - B1 plants, the type of irrigation, water measurement and pumping
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality

Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers Agricultural engineer among students by . Develop professional ethics - 4 C . following the correct professional behavior
other skills related to) skills rehabilitative general and Transferred - D .(employability and personal development -1 D -2 D -3 D -4 D

Course structure .46

the week	hours	Required learning outcomes	urse or topic / Unit name
the first	2 theoretical 2 practical	knowledge and skills	in Iraq
The second	ز	My knowledge and skills	
the third	2 theoretical 2 practical	knowledge and skills	
the fourth	2 theoretical 2 practical	knowledge and skills	
Fifth	2 theoretical 2 practical	knowledge and skills	
VI	2 theoretical 2 practical	knowledge and skills	easurement
seventh	2 theoretical 2 practical	knowledge and skills	cy

	knowledge and skills	2 theoretical 2 practical	VIII
	knowledge and skills	2 theoretical 2 practical	ninth
	knowledge and skills	2 theoretical 2 practical	The tenth
	knowledge and skills	2 theoretical 2 practical	eleventh
	knowledge and skills	2 theoretical 2 practical	twelveth
	knowledge and skills	2 theoretical 2 practical	Thirteenth
irrigation	knowledge and skills	2 theoretical 2 practical	fourteenth
		2 theoretical 2 practical	Fifteenth

course development plan .47
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .48	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty

Electronic . b websites , references	www.google.com Location

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 It must be linked to the description of . opportunities learning available the .the program

Educational institution .49	Shatra / Technical Institute
/ Department Scientific .50 Center	agricultural Department of techniques mechanization
code / name Course .51	agric. machine hydraulic
Available forms of .52 attendance	learning -e present and/ Blended
year / season .53	second stage / Autumn semester
Number of hours of .54 (total) study	hours in the fall semester theoretical 33 and practical
The date this description .55 was prepared	1/8/2023
Course Objectives .56 : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished .level and his involvement in the practical arena	

methods of teaching, learning and assessment outcomes and Course .57
cognitive goals - A Introducing and training the student on hydraulic devices and systems in -A1 .agricultural machinery .A 2 Define and train the student on the types of open and closed systems
Skills objectives of the program - B Introducing the student to the hydraulic uses in haulers, heavy machines and - B1 .excavators B2 Introducing the student to the nature of hydraulic fluids - their features - their . replacement - the treatment of leaching
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers Agricultural engineer among students by . Develop professional ethics - 4 C

. following the correct professional behavior
other skills related to) skills rehabilitative general and Transferred - D .(employability and personal development -1 D -2 D -3 D -4 D

Course structure .58

Evaluation method	education method	Unit course / name or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Introduction to hydraulics - basic principles of hydraulics - symbols - .units used	knowledge and skills	2 theoretical 3practical	the first
ask questions	Lecture and practical lesson	The main parts of the hydraulic system - types of hydraulic .systems	knowledge and skills	2 theoretical 3practical	The second
Listen and ask questions	Lecture and practical lesson	Open hydraulic systems - types of connection for this type of .system	knowledge and skills	2 theoretical 3practical	the third
Practical exercise,	Lecture and practical lesson	Closed hydraulic	knowledge and skills	2 theoretical 3practical	the fourth

meeting and work groups		systems - types of connection for this type of .system			
Practical exercise, meeting and work groups	Lecture and practical lesson	Comparison of the types of open and closed .systems	knowledge and skills	2 theoretical 3practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Hydraulic applications in agricultural .machinery	knowledge and skills	2 theoretical 3practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	The use of the hydraulic system in the hydraulic driving . .device	knowledge and skills	2 theoretical 3practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	The use of the hydraulic system in the hydraulic position .device	knowledge and skills	2 theoretical 3practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The use of the hydraulic system in the lifting and lowering device of hydraulic equipment in .haulers	knowledge and skills	2 theoretical 3practical	ninth
Ask group work questions	Lecture lesson practical and	Uses of the hydraulic system in	knowledge and skills	2 theoretical 3practical	The tenth

		heavy machinery (excavators - cranes).			
Mini-lesson work groups	Lecture and practical lesson	Hydraulic pumps - definition of the pump - classification of pumps - types.	knowledge and skills	2 theoretical 3practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Hydraulic valves - their types - the function of each type - the location of the valve in the system.	knowledge and skills	2 theoretical 3practical	twelveth
ask questions	Lecture and practical lesson	The hydraulic tank - its components - the conditions to be met - the oil cooler - its types.	knowledge and skills	2 theoretical 3practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Hydraulic fluids - conditions to be met - types of oil cooling.	knowledge and skills	2 theoretical 3practical	fourteenth
Asking practice questions	Lecture and practical lesson	Daily and periodic maintenance of the hydraulic system - how to perform it on time.		2 theoretical 3practical	Fifteenth

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

Infrastructure .60	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty
Electronic . b websites , references	www.google.com Location

course description form

Educational institution .61	Shatra / Technical Institute
/ Department Scientific .62 Center	agricultural Department of techniques mechanization
code / name Course .63	Agriculture crop service
Available forms of .64 attendance	learning -e present and/ Blended
year / season .65	second stage / Autumn semester
Number of hours of .66 (total) study	hours in the fall semester theoretical 33 and practical
The date this description .67 was prepared	1/8/2023

Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his involvement in the practical arena.	68. Course Objectives :

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 It must be linked to the description of . opportunities learning available the the program.

69. methods of teaching, learning and assessment outcomes and Course
A - cognitive goals A1 Helping the student to use the equipment of cultivation, seeding, control and fertilization and compare them with agriculture Handicrafts and their impact on the increase and quality of agricultural production. A 2 distinguish between mechanized farming and manual farming.

Skills objectives of the program - B Using agricultural equipment and servicing the crop in a scientific and practical - B1 manner. B 2 Carrying out the process of tuning, networking, calibration, maintenance and maintenance operations .
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, and a wooden canopy .
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
C - emotional and value goals . C -1 Enable the student to apply theoretical information in a practical way . C -2 To develop the patriotic spirit of the student to increase production in quantity and quality . C - 3 Instilling the concept of community service and the best way to deal with the simple strata of society, the peasants and farmers . C - 4 Develop professional ethics among students by Agricultural engineer . following the correct professional behavior
D - Transferred and general rehabilitative skills (other skills related to employability and personal development). D -1 D -2 D -3 D -4
70. Course structure

tion od	education method	course or / Unit name topic	Required learning outcomes	hours	the week
ons and rs mini lesson	Lecture and practical lesson	The importance of mechanized farming - a comparison between mechanized .and manual farming	knowledge and skills	practical 3 theoretical 1	the first
estions	Lecture and practical lesson	Scattering machine - types - installation - operation - .calibration - use	knowledge and skills	practical 3 theoretical 1	The second
and ask estions	Lecture and practical lesson	Sowing equipment - installation - seed feeding mechanism - types - cavities - mechanism of action - the effect of speed on the quantity of seeds	knowledge and skills	practical 3 theoretical 1	the third
ractical neeting groups	Lecture and practical lesson	Connecting the seed to the tug - Laboratory and field calibration - Types of seed in terms of the method of binding - Mathematical .examples	knowledge and skills	practical 3 theoretical 1	the fourth
ractical neeting groups	Lecture and practical lesson	Planting equipment in lines - models of seed and square cultivation - types of square farming (in the bottom of the waterwheel - on flat ground - on shoulders) - seed storage unit - feeding mechanism - seed tubes - regulation and calibration - coverage unit	knowledge and skills	practical 3 theoretical 1	Fifth

Lesson cussion ractical ise and groups	Lecture and practical lesson	Cultivation of yellow corn - installation - .calibration - use	knowledge and skills	practical 3 theoretical 1	VI
e study xercise groups	Lecture and practical lesson	Cotton cultivation - installation - .calibration - use	knowledge and skills	practical 3 theoretical 1	seventh
ng and ractical xercise ons and groups	Lecture and practical lesson	Cultivation of sugar beet - types - composition - .calibration - use	knowledge and skills	practical 3 theoretical 1	VIII
Asking g and xercise groups	and Lecture practical lesson	A general idea of seedlings mechanical - planting - rice seedling preparation - seed selection - seed .treatment - weeding	and knowledge skills	practical 3 theoretical 1	ninth
p work estions	Lecture and practical lesson	Field preparation (plowing - leveling - immersion) - machine installation - seedling mechanism - .calibration - use	knowledge and skills	practical 3 theoretical 1	The tenth
n work groups	Lecture and practical lesson	An overview of the control operations and sprinklers in general - their types - the pumps used - their types - their .installation	knowledge and skills	practical 3 theoretical 1	eleventh
xercise groups	Lecture and practical lesson	Motorized automatic sprayers - the purpose for which they are used - operating regulations - regulating the amount - calculating the amount of pesticide	knowledge and skills	practical 3 theoretical 1	twelveth
estions	Lecture and	Fogging machines -	knowledge and	practical 3 theoretical 1	Thirteenth

	practical lesson	their types - installation - use - operation - advantages - disadvantages - calculations for regulating the measure.	skills		
ractice estions	Lecture and practical lesson	Fertilizer machines - organic fertilizer machine - installation - calibration - operation.	knowledge and skills	practical 3 theoretical 1	fourteenth
ractice estions	Lecture and practical lesson	Flamethrowers - installation - operation - use.			Fifteenth

course development plan .71	
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market	
Infrastructure .72	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty
Electronic . b websites , references	www.google.com Location

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 It must be linked to the description of . opportunities learning available the .the program

.73 Educational institution	Shatra / Technical Institute
.74 / Department Scientific Center	agricultural Department of techniques mechanization
.75 code / name Course	English Language/2
.76 Available forms of attendance	learning -e present and/ Blended
.77 year / season	second stage / Autumn semester
.78 Number of hours of (total) study	hours in the fall semester theoretical 33 and practical
.79 The date this description was prepared	1/8/2023
.80 Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished .level and his involvement in the practical arena	

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

cognitive goals - A

. to know the meanings of English words The student was able -1 A

know the rules of the English language to student Enable the − : A2

Skills objectives of the program - B

. speak the English language The student is able to - B1

. to understand the English speaker student enable the To − : B2

Teaching and learning methods

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

Evaluation methods

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

. emotional and value goals - C

. Enable the student to apply theoretical information in a practical way -1 C

develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality

Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers

Agricultural engineer among students by . Develop professional ethics - 4 C . following the correct professional behavior

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

Course structure .82					
Evaluation method	education method	Unit course / name or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Theoretical Syllabus	knowledge and skills	2 theoretical	the first
ask questions	Lecture and practical lesson	Whats your name , what is this , translation	knowledge and skills	2 theoretical	The second
Listen and ask questions	Lecture and practical lesson	Countries , pronunciation , cities and contries	knowledge and skills	2 theoretical	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Jobs , negatives , address	knowledge and skills	2 theoretical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	The family , listening , possessive , possessive adjectives	knowledge and skills	2 theoretical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Sports, food and drink, present simple, reading,	knowledge and skills	2 theoretical	VI

		listening			
Case study Practical exercise and work groups	Lecture and practical lesson	The time, present simple, question and negative, translation, listening, writing	knowledge and skills	2 theoretical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Object pronouns , questions words , why and because , listening , reading	knowledge and skills	2 theoretical	VIII
Asking questions and listening practical exercise groups work and	Lecture and practical lesson	Rooms and furniture , preposition , reading and writing , translation	knowledge and skills	2 theoretical	ninth
Ask group work questions	Lecture and practical lesson	Saying years, writing, past simple, irregular verbs, translation	knowledge and skills	2 theoretical	The tenth
Mini-lesson work groups	Lecture and	Past time,	knowledge and skills	2 theoretical	eleventh

	practical lesson	regular verbs, irregular verbs, question and negative			
Practical exercise and workgroups	Lecture and practical lesson	Activities, listening, pronunciation, requests and offers	knowledge and skills	2 theoretical	twelveth
ask questions	Lecture and practical lesson	Want and would like , pronunciation , translation , reading	knowledge and skills	2 theoretical	Thirteenth
Asking practice questions	Lecture and practical lesson	Colors , present continuous , translation , reading	knowledge and skills	2 theoretical	fourteenth
Test	Lecture and practical lesson	Present continuous for future , reading and listening, translation		2 theoretical	Fifteenth

course development plan .83
. 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 -

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

	Infrastructure .84
The systematic book of winter field crops	Required course books .1
Supporting resources for each course	(sources) Main references .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	Recommended books and . a scientific) references (0000 , reports , journals
www.google.com Location	Electronic . b websites , references

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 It must be linked to the description of . opportunities learning available the .the program

Shatra / Technical Institute	Educational institution .85
agricultural Department of techniques mechanization	/ Department Scientific .86 Center
tractor repairing	code / name Course .87
learning -e present and/ Blended	Available forms of .88 attendance
Second Stage / Semester Spring	year / season .89
hours in the fall semester theoretical 33 and practical	Number of hours of .90 (total) study

1/8/2023	.91 The date this description was prepared
Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his involvement in the practical arena.	.92 Course Objectives :

.93 methods of teaching, learning and assessment outcomes and Course
cognitive goals - A Training on how to use tools and devices in repair and training the student on diag . faults and how to fix them .A2 - The student will be able to use the tools and equipme
Skills objectives of the program - B .The student will be able to diagnose faults and how to fi
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, and a wooden canopy.
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams

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

Course structure .94

Evaluation method	education method	Unit course / name or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Definition of repair - the difference between repair and .maintenance	knowledge and skills	practical 3 theoretical 1	the first
ask questions	Lecture and practical lesson	Repair shop - Types of repair shops - Conditions to be met in the repair shop - Safety and security precautions for .workshops	knowledge and skills	practical 3 theoretical 1	The second

Listen and ask questions	Lecture and practical lesson	Engine malfunctions - their diagnosis - how to discover them - the correct ways to use the devices in the process of detecting .faults	knowledge and skills	practical 3 theoretical 1	the third
Practical exercise, meeting and work groups	Lecture and practical lesson	Opening the engine - Precautions to be taken into account when opening the engine - Numbering method for engine parts - Reasons for .numbering	knowledge and skills	practical 3 theoretical 1	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Valves and their rules and the foundations of maintaining .them	knowledge and skills	practical 3 theoretical 1	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Repair of valves and accessories Valve guide Repair of cab shafts Adjusting valve clearances Inspection and treatment of the	knowledge and skills	practical 3 theoretical 1	VI

		cylinder block Consumption detection - valve clearance .treatment			
Case study Practical exercise and work groups	Lecture and practical lesson	Inspect and repair pistons with the required technical bases - piston shapes - method of limiting expansion - checking piston rings - how to install .them	knowledge and skills	practical 3 theoretical 1	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Cylinder repair - cylinder shapes - checking - cylinder turning - smoothing methods - replacement of cylinders and connecting rods - detection of bending - .torsion	knowledge and skills	practical 3 theoretical 1	eight
Asking questions and listening practical exercise and	Lecture and practical lesson	Crankshaft repairs and methods of checking its parts - Detection of	My knowledge and skills	practical 3 theoretical 1	ninth

work groups		static balance - Checking the crankshaft - machining - Detection of machining .accuracy			
Ask group work questions	Lecture lesson practical and	Repairing the camshaft, emphasizing the importance of its connection to the crankshaft and connecting .rod	knowledge and skills	practical 3 theoretical 1	The tenth
Mini-lesson work groups	Lecture and practical lesson	A scientific visit to find out the actual work of the basics of repair of .engine parts	knowledge and skills	practical 3 theoretical 1	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Repairing the diesel fuel system - diagnosing faults - performing .repairs	knowledge and skills	practical 3 theoretical 1	twelveth
ask questions	Lecture and practical lesson	Gasoline fuel system repair - fault diagnosis - steps for calibrator repair and .calibration	knowledge and skills	practical 3 theoretical 1	Thirteenth
Asking practice	Lecture and practical lesson	Repair of the cooling and	knowledge and skills	practical 3 theoretical 1	fourteenth

questions		lubrication .system			
Asking practice questions	Lecture and practical lesson	Repair of mechanical and hydraulic brakes - mechanical brakes of two types - diagnosing faults for each .- Repair steps			Fifteenth

course development plan .95
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .96	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty
Electronic . b websites , references	www.google.com Location

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 It must be linked to the description of . opportunities learning available the .the program

.97 Educational institution	Shatra / Technical Institute
.98 / Department Scientific Center	agricultural Department of techniques mechanization
.99 code / name Course	Basics of using machines
.100 Available forms of attendance	learning -e present and/ Blended
.101 year / season	Second Stage / Spring Semester
.102 Number of hours of (total) study	hours in the fall semester theoretical 33 and practical
.103 The date this description was prepared	1/8/2023
.104 Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level .and his involvement in the practical arena	

methods of teaching, learning and assessment outcomes and Course .105
cognitive goals - A The student gets acquainted with and learns the scientific and practical A1 foundations on which machines are used in the fields of work and determine their numbers, sizes, capabilities, and the period necessary to complete the tasks assigned to perform and work. Understand all forms of power and the units used in it, and how power is -A2 formed in a machine.
Skills objectives of the program - B Understand the forms of power exploitation, know the external forces affecting - B1 the drawer, and know the cases in which the coup takes place. learn and understand how to calculate the consumption of fuel and oil when - B 2 operating and how to conduct an examination on the tug.
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, and a wooden canopy .
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C . develop the To -2 C patriotic spirit of the student to increase production in quantity and quality . Instilling the concept of community service and the best way to deal with - 3 C the simple strata of society, the peasants and farmers . Develop professional ethics - 4 C Agricultural engineer among students by following the correct professional behavior .

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

Course structure .106

Evaluation method	education method	Unit course / name or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Units of measurement for length, area, weight and volume in the French and English systems.	knowledge and skills	2 theoretical 3practical	the first
ask questions	Lecture and practical lesson	The definition of power - the law that governs power - how to calculate each form of it - calculates the power formed from the movement of a specific body.	knowledge and skills	2 theoretical 3practical	The second
Listen and ask questions	Lecture and practical lesson	Defining each form of ability distinguishes between the forms of ability and the units used in it in both the French and English	knowledge and skills	2 theoretical 3practical	the third

		.systems			
Practical exercise, meeting and work groups	Lecture and practical lesson	Work done on the engine - engine power - rated power usage - braking power .usage	knowledge and skills	2 theoretical 3practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	How to invest engine power on the intake shaft and on the rear drive shaft of the .hauler	knowledge and skills	2 theoretical 3practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	The puller as a simple lever - the external forces acting on the puller - the determination of the forces .and reactions	knowledge and skills	2 theoretical 3practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Determining the perpendicular forces acting on the tug and the reaction of each force - statement of the algebraic sum of the moments in each axis of .the tug	knowledge and skills	2 theoretical 3practical	seventh
Listening and asking practical exercise questions	Lecture and practical lesson	Methods for determining the center of gravity - by weight - by	knowledge and skills	2 theoretical 3practical	VIII

and work groups		suspension - finding the distance of the center of gravity from the rear axle and from the middle of the tug - longitudinal and lateral balance - slip and factors affecting the efficiency of .traction			
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	The relationship of the center of gravity to the overturn in terms of its height - the relationship of the effective tug width to .the overturn	knowledge and skills	2 theoretical 3practical	ninth
Ask group work questions	Lecture and practical lesson	Types of friction - normal pressure - coefficient of friction - determining the factors affecting friction - calculating the coefficient of .friction	knowledge and skills	2 theoretical 3practical	The tenth
Mini-lesson work groups	Lecture and practical	Define distance, time, velocity,	knowledge and skills	2 theoretical 3practical	eleventh

	lesson	acceleration, and the relationship .between them			
Practical exercise and workgroups	Lecture and practical lesson	Applications related to the tug - Determining the distance and time of parking from the moment the parking is .used	knowledge and skills	2 theoretical 3practical	twelveth
ask questions	Lecture and practical lesson	Definition of the ground acceleration of free falling objects - acceleration of deceleration - the relationship of acceleration to mass - acceleration of .acceleration	knowledge and skills	2 theoretical 3practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Fuel use to produce power - fuel consumption - oil consumption .in the engine	knowledge and skills	2 theoretical 3practical	fourteenth
test	Lecture and practical lesson	The most important international examination centers - procedures and examinations		2 theoretical 3practical	Fifteenth

		on the tug - Writing examination .reports			

course development plan .107
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .108	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references (0000 , reports , journals	Scientific journals, as well as research, letters and theses of professors in the same specialty
Electronic . b websites , references	www.google.com Location

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 It must be linked to the description of . opportunities learning available the .the program

Educational institution .109	Shatra / Technical Institute
Center / Department Scientific .110	agricultural Department of techniques mechanization

code / name Course .111	harvesting machines
Available forms of attendance .112	learning -e present and/ Blended
year / season .113	second stage / Autumn semester
Number of hours of .114 (total) study	hours in the fall semester theoretical and 33 practical
The date this description was .115 prepared	1/8/2023
Course Objectives : Granting the student a diploma in the theoretical and .116 practical aspects to serve the preparation of a graduate of a distinguished level .and his involvement in the practical arena	

methods of teaching, learning and assessment outcomes and Course .117

cognitive goals - A

Informing and training on wheat and barley harvesters, sugar beet - A1 harvesters, tuber crop cultivars, green fodder plowing, cotton yard, bale press, . and other weeds

its system of operation, and how to , parts of the harvester Knowing the - A2 .operate and maintain it

Skills objectives of the program - B

Introducing the student to how to operate and operate reaping and harvesting - B1 .equipment and quarries

Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams monthly exams Conducting Conducting semester and final exams
. emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers Agricultural engineer among students by . Develop professional ethics - 4 C . following the correct professional behavior
other skills related to) skills rehabilitative general and Transferred - D .(employability and personal development -1 D -2 D -3 D -4 D

Course structure .118

luation ethod	education method	course or / Unit name topic	Required learning outcomes	hours	the week
tions and wers mini practical lesson	Lecture and practical lesson	Automatic harvesting and its benefits - a comparison between automatic and manual harvesting - division of harvesting and	knowledge and skills	2 theoretical 3practical	the first

		.harvesting equipment			
questions	Lecture and practical lesson	Units and aggregates of the harvester - its operation - its operation - its maintenance - how to transfer the .movement	knowledge and skills	2 theoretical 3practical	The second
n and ask questions	Lecture and practical lesson	Parts set - its parts - installation - calibration - grain losses - .maintenance	knowledge and skills	2 theoretical 3practical	the third
Practical exercise, eting and rk groups	Lecture and practical lesson	The transmission assembly - its parts - how it works - its calibration and .maintenance	knowledge and skills	2 theoretical 3practical	the fourth
Practical exercise, eting and rk groups	Lecture and practical lesson	Aces group - calibrated parts - study of losses - treatment - how they .work	knowledge and skills	2 theoretical 3practical	Fifth
ni Lesson iscussion Practical rcise and orkgroups	Lecture and practical lesson	Separation and cleaning group - parts - the itinerary of the crop - how to adjust and .reduce losses	knowledge and skills	2 theoretical 3practical	VI
ase study Practical rcise and rk groups	Lecture and practical lesson	How to transfer the movement from the engine to the aggregates and parts of the harvester - working theory of spurs - belts - .gears	knowledge and skills	2 theoretical 3practical	seventh
ening and asking practical exercise tions and rk groups	Lecture and practical lesson	Seasonal maintenance of the wheat and barley combine harvester - modification of the harvester to harvest .other crops	knowledge and skills	2 theoretical 3practical	VIII
Asking tions and listening practical	Lecture and practical lesson	Sugar beet harvesting machine - types of extractors - its operation - its parts -	knowledge and skills	2 theoretical 3practical	ninth

rcise and rk groups		adjusting and .calibrating the machine			
sk group ons work	and Lecture practical lesson	Tuber crops Qalat Qalat theory types potato .work each calibrated	knowledge and skills	2 theoretical 3practical	The tenth
ni-lesson rk groups	Lecture and practical lesson	Feed cutting machines - installation - working theory - types - maintenance and .storage	knowledge and skills	2 theoretical 3practical	eleventh
Practical rcise and rkgroups	Lecture and practical lesson	Machines for pressing and transporting fodder - types - working theory .- maintenance	knowledge and skills	2 theoretical 3practical	twelveth
questions	Lecture and practical lesson	Feed pelleting machine - packet - how it works .- calibrate - store it	knowledge and skills	2 theoretical 3practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Cotton collecting machine - its working system - its types - its .composition	knowledge and skills	2 theoretical 3practical	fourteenth
test	Lecture and practical lesson	How the cotton janitor works with its systems - .maintenance		2 theoretical 3practical	Fifteenth

Infrastructure .119	
The systematic book of winter field crops	Required course books .1
Supporting resources for each course	(sources) Main references .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	Recommended books and . a scientific) references (0000 , reports , journals
www.google.com Location	Electronic . b websites , references

course development plan .120
. 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 - or from the work environment for , Hosting experts from outside the institute -

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 It must be linked to the description of . opportunities learning available the the program.

.121 Educational institution	Shatra / Technical Institute
.122 Center / Department Scientific	agricultural Department of techniques mechanization
.123 code / name Course	animal production mechanization
.124 Available forms of attendance	learning -e present and/ Blended
.125 year / season	Second Stage / Spring Semester
.126 Number of hours of (total) study	hours in the fall semester theoretical and 33 practical
.127 The date this description was prepared	
.128 Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his involvement in the practical arena.	

methods of teaching, learning and assessment outcomes and Course .129
A- Cognitive goals of animal mechanization Training the student and his knowledge of the -A1 .production and how to operate, maintain and maintain it The student shall be able to operate devices and equipment in the fields of -A2 poultry, cows and sheep
B - Skills objectives of the program electric generators, water , fodder plants, massacres .E student to enables the - B 1 . .pumps, maintenance and repair circuit .
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory . equipment and equipment, and a wooden canopy
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
. emotional and value goals - C . Enable the student to apply theoretical information in a practical way -1 C develop the patriotic spirit of the student to increase production in To -2 C . quantity and quality Instilling the concept of community service and the best way to deal with - 3 C . the simple strata of society, the peasants and farmers

Agricultural engineer among students by . Develop professional ethics - 4 C . following the correct professional behavior
other skills related to) skills rehabilitative general and Transferred - D .(employability and personal development -1 D -2 D -3 D -4 D

Course structure .130

the week	hours	Required learning outcomes	course or / Unit name topic	education method	tion od
the first	practical 3 theoretical 1	knowledge and skills	A general idea of the mechanization of animal production fields - hatcheries - slaughterhouses - feed factories - cow, sheep and poultry fields, water filters and .electric generators	Lecture and practical lesson	as and s mini ctical esson
The second	practical 3 theoretical 1	knowledge and skills	The use of the blacksmith's workshop and gas welding - the tools, tools and .devices in it	Lecture and practical lesson	stions
the third	practical 3 theoretical 1	knowledge and skills	The use of electric arc welding - the importance of electric .welding and its uses	Lecture and practical lesson	d ask stions
the fourth	practical 3 theoretical 1	knowledge and skills	Electricity in animal production fields - single-phase and three-phase electricity -	Lecture and practical lesson	ctical ercise, g and roups

		electrical cycle - electrical terms and .symbols			
ctical ercise, g and roups	Lecture and practical lesson	Mechanization of poultry incubators - the importance of incubators - the devices in them - devices for inserting eggs - devices for storing and examining .eggs - incubators	knowledge and skills	practical 3 theoretical 1	Fifth
esson ussion ctical e and roups	Lecture and practical lesson	Mechanization of broiler fields - electric and gas incubators - air conditioners - troughs - manholes - cages for laying hens .types of cages	knowledge and skills	practical 3 theoretical 1	VI
study ctical e and roups	Lecture and practical lesson	Mechanization of concentrated feed processing - types of feed mills - parts of the feed mill - types of grinders and mixers - maintenance and .repair	knowledge and skills	practical 3 theoretical 1	seventh
g and sking ctical ercise s and roups	Lecture and practical lesson	Mechanization of cow and sheep fields - tools and equipment - devices for cleaning feeders, drinkers - cooling and spraying devices - wool shearing and .immersing devices	knowledge and skills	practical 3 theoretical 1	VIII
sking s and ening ctical e and roups	Lecture and practical lesson	Automatic milking machine parts - the function of each part - types of milking machines - milk .preservation devices	knowledge and skills	practical 3 theoretical 1	ninth

group work	and Lecture practical lesson	Green fodder processing machinery - harvesters forage green hay balers - types, - .maintenance, repair	and knowledge skills	practical 3 theoretical 1	The tenth
esson roups	Lecture and practical lesson	Mechanization of poultry slaughterhouses - livestock slaughterhouses - slaughter methods - meat cutting and .preservation devices	knowledge and skills	practical 3 theoretical 1	eleventh
ctical se and roups	Lecture and practical lesson	Water pumps - their types - operation, maintenance, and .repair	knowledge and skills	practical 3 theoretical 1	twelveth
stions	Lecture and practical lesson	Generators - their types - their operation .- maintenance	knowledge and skills	practical 3 theoretical 1	Thirteenth
sking actice stions	Lecture and practical lesson	project Account of the need generators energy calculate the required to run project the Alsaady .E of electrical a of .endowed	knowledge and skills	practical 3 theoretical 1	fourteenth
test	Lecture and practical lesson	Mechanization of the manufacture of animal protein from massacres waste (feathers, blood, (internal viscera			Fifteenth

Infrastructure .131	
Required course books .1	The systematic book of winter field crops
(sources) Main references .2	Supporting resources for each course
Recommended books and . a scientific) references	Scientific journals, as well as research, letters and theses of professors in the same

(0000 , reports , journals	specialty
Electronic . b websites , references	www.google.com Location

course development plan .132
- 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 , for the work environment or from 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 opportunities learning available the . It must be linked to the description of the program.

Educational institution .133	Shatra / Technical Institute
Center / Department Scientific .134	agricultural Department of techniques mechanization
code / name Course .135	agricultural machine economics
Available forms of attendance .136	learning -e present and/ Blended

year / season .137	Second Stage / Spring Semester
Number of hours of .138 (total) study	hours in the fall semester theoretical and 33 practical
The date this description was .139 prepared	1/8/2023
Course Objectives : Granting the student a diploma in the theoretical and .140 practical aspects to serve the preparation of a graduate of a distinguished level and his involvement in the practical arena.	

methods of teaching, learning and assessment outcomes and Course .141
cognitive goals - A A1- : Introducing the student to the concept of production and optimal use of agricultural mechanization and the application of economic evaluation criteria to it. A2 The student should be able to: Determine the costs of agricultural production in terms of his knowledge of the elasticities of demand and supply on agricultural products.
Skills objectives of the program - B B1- Determining the optimal use of machines and the level of cost adequacy. B2. Selecting the appropriate agricultural machine and determining its number.
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, and a wooden canopy .

Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams
C - emotional and value goals . C -1 Enable the student to apply theoretical information in a practical way . C -2 To develop the patriotic spirit of the student to increase production in quantity and quality . C - 3 Instilling the concept of community service and the best way to deal with the simple strata of society, the peasants and farmers . C - 4 Develop professional ethics among students by Agricultural engineer following the correct professional behavior .
D - other skills related to skills rehabilitative general and Transferred (employability and personal development). D -1 D -2 D -3 D -4

142. Course structure

tion od	education method	course or Unit / topic name	Required learning outcomes	hours	the week
ns and s mini ctical esson	Lecture and practical lesson	Introduction to the economics of production - the concept of economics - agricultural economics - sections and branches of agricultural economics.	knowledge and skills	practical 2 theoretical 1	the first
stions	Lecture and practical lesson	The concept of production - types of production factors - forms of agricultural	knowledge and skills	practical 2 theoretical 1	The second

		production functions - .stages of production			
nd ask stions	Lecture and practical lesson	Demand for agricultural products - demand curve - demand elasticity, supply - supply curve - supply elasticity - .equilibrium price	knowledge and skills	practical 2 theoretical 1	the third
ctical ercise, g and roups	Lecture and practical lesson	Types of production costs - cost functions in the short and long term - ways to reduce .costs	knowledge and skills	practical 2 theoretical 1	the fourth
ctical ercise, g and roups	Lecture and practical lesson	The productivity of agricultural labor - methods of measuring labor productivity - the .factors affecting it	knowledge and skills	practical 2 theoretical 1	Fifth
esson ussion ctical se and roups	Lecture and practical lesson	The main economic .principles	knowledge and skills	practical 2 theoretical 1	VI
study ctical se and roups	Lecture and practical lesson	Capacity economics of machines and calculation of theoretical and real field capacity and field .efficiency	knowledge and skills	practical 2 theoretical 1	seventh
g and sking ctical ercise ns and roups	Lecture and practical lesson	Calculating the costs of agricultural work - its types - extinction, its causes and methods .of calculating it	knowledge and skills	practical 2 theoretical 1	VIII
sking ns and tening ctical se and roups	Lecture and practical lesson	Optimum use of machines - heavy horizontal use of machines - indicators of sufficient level of .condensation	knowledge and skills	practical 2 theoretical 1	ninth

group work	and Lecture practical lesson	Agricultural marketing - its importance - basic the in functions marketing .Iraq	and knowledge skills	practical 2 theoretical 1	The tenth
esson roups	Lecture and practical lesson	The selection of the agricultural machine - analysis of time - the balance between the size of the machine .and the time available	knowledge and skills	practical 2 theoretical 1	eleventh
ctical se and roups	Lecture and practical lesson	Capacity needs of the agricultural machine - forms of capacity - requirements for .capacity	knowledge and skills	practical 2 theoretical 1	twelveth
stions	Lecture and practical lesson	Linear programming - its fields of use - Methods for solving linear programming .problems	knowledge and skills	practical 2 theoretical 1	Thirteenth
sking actice stions	Lecture and practical lesson	Technological map for determining the number of machines - Organization of the .technological map	knowledge and skills	practical 2 theoretical 1	fourteenth
sking actice stions	Lecture and practical lesson	Application of economic evaluation criteria in agricultural .mechanization		practical 2 theoretical 1	Fifteenth

course development plan .143
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market
Infrastructure .144

Required course books .1	The systematic book of winter field crops

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

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 It must be linked to the description of . opportunities learning available the .the program

Shatra / Technical Institute	Educational institution .145
agricultural Department of techniques mechanization	Center / Department Scientific .146
Reclamation machine & equipment	code / name Course .147
learning -e present and/ Blended	Available forms of attendance .148
Second Stage / Spring Semester	year / season .149
hours in the fall semester theoretical and 33 practical	Number of hours of .150 (total) study

	.151 The date this description was prepared
.152 Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his involvement in the practical arena.	

.153 methods of teaching, learning and assessment outcomes and Course
A - cognitive goals A 1- Enabling the student to use land reclamation equipment and its characteristics and maintenance .
B - Skills objectives of the program B1 - : - Enable the student to use the machine in the correct ways and how to repair it.
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, and a wooden canopy .
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams

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

Course structure .154

Evaluation method	education method	Unit course / name or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	Tractors - Uses of tractors - Types of tractors - .Scalability	knowledge and skills	2 theoretical 3practical	the first
ask questions	Lecture and practical lesson	Bull tractors - uses - the difference between crawler and wheel	knowledge and skills	2 theoretical 3practical	The second
Listen and ask questions	Lecture and practical lesson	Installed bull .tractors	knowledge and skills	2 theoretical 3practical	the third

Practical exercise, meeting and work groups	Lecture and practical lesson	Types of equipment used - hydraulic .system	knowledge and skills	2 theoretical 3practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Tractor quenching bull - repairs and .maintenance	knowledge and skills	2 theoretical 3practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Front end - loaders - uses - types and sizes - types .of equipment	knowledge and skills	2 theoretical 3practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Take out front loaders - loaders - problems - .maintenance	knowledge and skills	2 theoretical 3practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Scrapers - Types and Sizes - Running a scraper - a time cycle for	knowledge and skills	2 theoretical 3practical	VIII
Asking questions and listening practical exercise and work groups	Lecture and practical lesson	.scraper	knowledge and skills	2 theoretical 3practical	ninth
Ask group work questions	Lecture lesson practical and	Equipment types - hydraulic system - maintenance -	knowledge and skills	2 theoretical 3practical	The tenth

		.problems			
Mini-lesson work groups	Lecture and practical lesson	Motor grader Types of motor grader Types of equipment .Uses	knowledge and skills	2 theoretical 3practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Motor grader output - hydraulic system - .maintenance	knowledge and skills	2 theoretical 3practical	twelveth
ask questions	Lecture and practical lesson	Drilling equipment - types of equipment - - towing lines	knowledge and skills	2 theoretical 3practical	Thirteenth
Asking practice questions	Lecture and practical lesson	Trenching machines - basic parts - types of trenching .machines	knowledge and skills	2 theoretical 3practical	fourteenth
test	Lecture and practical lesson	Hydraulic intake lines - main parts - hydraulic - system		2 theoretical 3practical	Fifteenth

course development plan .155
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .156	
Required course books .1	The systematic book of winter field crops

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

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 It must be linked to the description of . opportunities learning available the .the program

Educational institution .157	Shatra / Technical Institute
Center / Department Scientific .158	agricultural Department of techniques mechanization
code / name Course .159	Graduation project
Available forms of attendance .160	learning -e present and/ Blended
year / season .161	second stage / Autumn semester
Number of hours of .162 (total) study	hours in the fall semester theoretical and 33 practical

	.163 The date this description was prepared
.164 Course Objectives : Granting the student a diploma in the theoretical and practical aspects to serve the preparation of a graduate of a distinguished level and his involvement in the practical arena.	

.165 methods of teaching, learning and assessment outcomes and Course
cognitive goals - A The student will be able to implement and manage agricultural projects -A1 The student will be able to determine the cost of the project and determine its require A3 - The student will be able to use, calibrate and adjust machines and machine **project management** for period of their use
Skills objectives of the program - B shall be able to carry out maintenance, maintenance and storage operations for t equipment and machinery used in the project B 2 - be able to calculate the profits for the project and face obstacles and ove
Teaching and learning methods
Giving scientific and theoretical lectures through displays, powerpoints, slides, microscopes, experiments in examining plant samples, using various laboratory equipment and equipment, and a wooden canopy.
Evaluation methods
Quizzes Take daily quick exams Conducting monthly exams Conducting semester and final exams

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

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

Course structure .166

Evaluation method	education method	Unit course / name or topic	Required learning outcomes	hours	the week
Questions and answers mini practical lesson	Lecture and practical lesson	How to use the library and find and choose .resources	knowledge and skills	2 practical	the first
ask questions	Lecture and practical lesson	How the Internet is used to collect information about each .experiment	knowledge and skills	2 practical	The second
Listen and ask questions	Lecture and practical lesson	Learn how to design and plan agricultural experiments	knowledge and skills	2 practical	the third

Practical exercise, meeting and work groups	Lecture and practical lesson	Preparing the project, determining the allocated space, and preparing the machines required to prepare the .seedbed	knowledge and skills	2 practical	the fourth
Practical exercise, meeting and work groups	Lecture and practical lesson	Begin the plowing process and follow the appropriate .method	My knowledge and skills	2 practical	Fifth
Mini Lesson Discussion Practical Exercise and Workgroups	Lecture and practical lesson	Carry out the leveling process using the leveling machine and determine the heights and depressions	knowledge and skills	2 practical	VI
Case study Practical exercise and work groups	Lecture and practical lesson	Configure the cultivation machine in brief with the work of laboratory .calibration	knowledge and skills	2 practical	seventh
Listening and asking practical exercise questions and work groups	Lecture and practical lesson	Discussing the seminars prepared by each student under the supervision of .the teachers	knowledge and skills	2 practical	VIII
Asking questions and listening	Lecture and practical lesson	Collect data for each experiment from the	knowledge and skills	2 practical	ninth

practical exercise and work groups		library and the Internet			
Ask group work questions	Lecture and practical lesson	Learn the steps of preparing and writing a research	knowledge and skills	2 practical	The tenth
Mini-lesson work groups	Lecture and practical lesson	Cultivation of the crop with the work of shoulders and the opening of the waterways, and the determination of the amount of seeds in the dunam and .also manure	knowledge and skills	2 practical	eleventh
Practical exercise and workgroups	Lecture and practical lesson	Watering the planted crop, operating and maintaining pumps, following up the crop in terms of maturity and preparing harvesting .equipment	knowledge and skills	2 practical	twelveth
ask questions	Lecture and practical lesson	Calculating the germination percentage of the crop and studying the efficiency of the machine cultivation	knowledge and skills	2 practical	Thirteenth

		.process			
Asking practice questions	Lecture and practical lesson	Watering the crop and operating baling .machines	knowledge and skills	2 practical	fourteenth
test	Lecture and practical lesson	Monitoring the germination of the crop and determining the moisture content in the fruits of the .crop		2 practical	Fifteenth

course development plan .167
. 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 - or from the work environment for , Hosting experts from outside the institute - which they are preparing to benefit from their expertise in developing the . course according to the actual needs of the labor market

Infrastructure .168	
The systematic book of winter field crops	Required course books .1
Supporting resources for each course	(sources) Main references .2
Scientific journals, as well as research, letters and theses of professors in the same specialty	Recommended books and . a scientific) references (0000 , reports , journals
www.google.com Location	Electronic . b websites , references

Course description

1. The Crimes Of The Baath Regime In Iraq
2. Course Code:

3. Semester / Year :Second Year, Semester 2 2023-2024					
2024/1/18 :Description Preparation Date .4					
Student attendance:Available Attendance Forms .5					
(Number of Credit Hours (Total) / Number of Units (Total .6					
Course objectives .7					
1.Enabling the student to know the crimes of the Baath regime according to the documentation of the court's laws The Iraqi Supreme Criminal Court in 2005 2. Empowering students about the types of international crimes. 3. Empowering the student with knowledge of violations of Iraqi laws.				Objectives of the study subject	
Teaching and Learning Strategies					
The Explanation. Brainstorming. Dialogue and discussion. Use references and sources, Using modern teaching methods				Strategies	
Course Structure10					
Evaluation method	Teaching method	Name of unit or subject	Requirement learning outcomes	hours	week
Question and answer	Lecture	Introduction, crimes of the Baath regime in .Iraq	The student learns about the crimes of the Baath Party according to the Iraqi Criminal Court law	2 hour	1
Question and answer	Giving the lecture	Regime crimes according to the Iraqi Criminal Court Law of 2005, the concept of And its crimes divisions, definition of crime linguistically and ,terminologically	To distinguish between the concept of crimes and their categories	2 hour	2
Question and answer	Giving the lecture	Types of international	To clarify the term and	2 hour	3

		crimes	language to the student		
Question and answer	Giving the lecture	Decisions issued by the Supreme Criminal Court	To learn about crime departments	2 hour	4
Question and answer	Giving the lecture	Psychological and social crimes and their effects and the most prominent violations of the Baathist regime in Iraq	To learn about crime departments	2 hour	5
Question and answer	Giving the lecture	Psychological crimes, mechanisms of psychological crimes	To learn about the decisions issued by the Criminal Court	2 hour	6
Question and answer	Giving the lecture	Psychological effects of crimes	To learn about psychological and social crimes and the most prominent violations of the Baath Party	2 hour	7
Question and answer	Giving the lecture	Social crimes, militarization of society, the regime's position on religion	To identify psychological crimes	2 hour	8
Question and answer	Giving the lecture	Violations of Iraqi laws, pictures of human rights violations and crimes of power	To learn about the mechanisms of psychological crimes	2 hour	9
oral test	Giving the lecture	Some decisions regarding political and military violations of the Baath regime, prison and detention sites of	To identify the effects of psychological crimes	2 hour	10

		the Baath regime			
Question and answer	Giving the lecture	Environmental crimes of the Baath regime, military and radioactive pollution, and the use of internationally banned ًweapons	To learn about social crimes	2 hour	11
Question and answer	Giving the lecture	Pollution with radioactive materials, destruction of cities and villages (scorched earth policy), drying up the marshes, bulldozing palm groves, trees and .crops	To clarify the concept of militarization of society	2 hour	12
Question and answer	Giving the lecture	Mass grave crimes, genocide grave events committed by the Baathist regime in Iraq	To learn about the Baath position on religion	2 hour	13
Question and answer	Giving the lecture	Chronological classification of genocide graves in Iraq for the period 1963 - 2003 AD, Tanomah Road site, Hilla Religious University site, Khan Al-Rub' ,cemetery	To identify violations of Iraqi laws	2 hour	14

test	Giving the lecture	Karbala Road Martyrs Site, Khanaqin Bakhtiari Cemetery, Malja Cemetery, Zarka Cemetery	To identify pictures of human rights violations	2 hour	15

11. Course evaluation	
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation and daily, oral, and monthly exams.	
12. Education and teaching resources	
The crimes of the Baath regime in Iraq	The required textbooks ((methodology, if any
Archives of the Political Prisoners Foundation	Main references (sources)
	Mainstream books and references recommended by scientific journals, (....Reports
	Electronic references, Internet sites