







Self-evaluation report for the Department of Plant Production Technologies for the academic year 2024-2025





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استناداً للصلاحيات المخولة لنا بموجب الامر الجامعي ذي العدد 9645/35/7 في 2024/8/11 تقرر ..
تشكيل لجنة كتابة تقرير التقييم الذاتي لقسم تقنيات الانتاج النباتي من الذوات المدرجة اسمائهم وعناوين
وظائفهم ادناه.

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2024/11/١٢

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1- Introduction:

The Agricultural Technical Education Quality Improvement Council strives to develop technical programs on the one hand and to assist in transferring and coordinating agricultural technical education at the institute to develop technical human resources, obtain technical education accreditation, provide advice, and reach the application with the submission of self-evaluation reports and external expert evaluation reports and obtain program accreditation.

In preparation for obtaining academic accreditation for technical educational programs. These standards can also help in self-assessment of institutions, and in developing plans to improve performance, in addition to helping the educational institution as a whole to identify the relative strengths and weaknesses, and work to improve the aspects of activity that have been given priority within the institution's message. Therefore, the proposed technical program standards aim to provide descriptive standards for performance in various forms of activities related to higher education so that those responsible for these sectors can have clear foundations that rely on good practice standards to achieve quality requirements in higher education.

The standard program criteria were developed to meet the needs of the labor market and keep pace with international standards, with attention to self-management skills, continuing education, speaking, writing and communicating in English, and leadership skills. On this occasion, we would like to express our thanks to all those who contributed to the production of this guide, starting with the Ministry of Higher Education and Scientific Research and the members of the Council for Improving the Quality of Agricultural Technical Education in Iraq.



1-1: A historical overview of the department

The Department of Plant Production Technologies was established in 1993 and included a number of laboratories, namely the Plant Breeding Laboratory - Soil Laboratory - Tissue Culture Laboratory - Plant Diseases Laboratory.

The department aims to graduate technical staff capable of carrying out agricultural work in agricultural and municipal departments.

The department also adopts the dissemination of scientific and technical knowledge in the field of agricultural sciences by graduating national cadres at a level of learning that is able to absorb modern technologies and support the process of scientific development to keep pace with scientific developments through: -

Developing future plans to develop educational and training curricula, graduating technical cadres in the field of agriculture, opening up to society in the field of industry, activating the relationship with the private sector in the field of agriculture, training and technical qualification, and using computer and Internet technologies in education and training, as well as focusing on scientific research between academics in the department and industrial staff to solve problems. Agricultural energy.

1-2: The department's strategies in teaching and learning

Through a number of practices, including:

a. Assigning second-year students to prepare their graduation research through:

- Training and qualifying students to conduct laboratory and field experiments.
- Training students to prepare lectures.
- Training students to make posters.
- Training students to hold seminars.

B. Approval of scientific trips for the Department of Plant Production Technologies to view and learn about the field of work, as shown below:

1. A scientific visit to the Al-Mishkhab Research Station - Najaf to learn about:

- Tissue culture laboratories.
- Producing different varieties of rice through hybridization.



- Methods of producing and propagating strawberry crops through tissue culture.

2. A scientific visit to one of the Kifl orchards to learn about:

-Methods of propagation of deciduous fruit plants.

- Applying grafting and compounding methods practically for the purpose of improving qualitative and quantitative characteristics.
- Methods of pruning different fruit trees.

3. A scientific visit to the Silo of Kufa to learn about:

- Methods of storing grains.
- Mechanism for receiving grain crops from farmers.
- Percentage of impurities allowed in grains.

C. Developing the skills of the teaching staff through:

- Encouraging the research activities of professors.
- Nominating faculty members for development programs (computers, teaching methods).
- Encouraging department professors to contribute scientifically to scientific and international conferences.

D. Developing agricultural staff skills through:

- Organizing workshops, scientific seminars, courses and seminars.

And the. Developing the technical and administrative staff through:

- Urging the technical and administrative staff to participate in workshops, scientific seminars, courses and seminars.



1-3: Total hours required for success

(Number of theoretical hours and number of practical hours)

The year	The level	Name of the course	Credit hours	
			Theoretical	Practical
The first class	Autumn course	Department of Plant Production Technologies	17	19
	Spring course		10	20
The second class	Autumn course	Department of Plant Production Technologies	19	21
	Spring course		10	20
Total			56	80
270	Number of hours of systematic training for the first class /summer training			

1-4: Basic lessons / Assistant and supportive lessons

The year	The level	Basic lessons	Assistant lessons	Supportive lessons	
The First year	Autumn semester	Winter Fiel Crops	Plant protection	English language	
		Winter Vegetable crops	General soil		
		Forestry	Pullers and machines		
			Animal production		
			Democracy and human rights		
			Computer Application (1)		
	Spring semester		Arabic language		
		Summer field crops	Statistics and experiment planning		
		Summer vegetable crops	Farm management		
		Sustainable fruit production			
	Nurseries				
	General insects				
		Protected agriculture	Irrigation and		



The Second Year	Autumn semester		salinity	
			Crimes of the Baath Regime in Iraq	
		Plant breeding and improvement		English language
		Seed production	Computer Application	
		Plant diseases	Arabic language	
		Tissue culture and plant cells		
		Production of fallen fruit		
		Graduation research project		
	Spring semester	Decorations and garden engineering	Fertility and fertilization	
		Fodder crops and pastures		
		Care and storage		
		Jungles and their control		
		Beekeeping		
		Organic farming		
Graduation research project				

1-5: Number of units to be attended

The year	The level	Name of the course	Credit hours	
			Theoretical	Practical
The first class	Autumn course	Department of Plant Production Technologies	17	19
	Spring course		10	20
The second class	Autumn course	Department of Plant Production Technologies	19	21
	Spring course		10	20
Total			56	80
271	Number of hours of systematic training for the first class /summer training			



The first standard:: students

2-1: Presentation of students

Students are accepted into the educational program through several channels, as follows:

First: Admission channels with nominal registration and tuition fees.

1- Central Admission Channel: It is a central electronic program used to distribute students graduating from middle school in the country to Iraqi universities and institutes based on the student's grade, geographical location, and the admission plan presented by the college or institute. The following general conditions must be met to enter the central admission program.

A - Iraqi nationality.

B - Holder of the Iraqi preparatory certificate.

C- The student must not be more than 24 years old.

D- Not an employee in the public sector

E - A graduate of the same academic year or the previous academic year who was not centrally accepted for the previous year. The minimum student average for acceptance into the program through this channel changes depending on the results of the central examinations for preparatory studies, but ranges between (55-65%).

2- **A.** Students who graduate from vocational preparatory schools in the corresponding specialization (Plant Production - Agricultural Mechanization) are accepted from the program, as the student who graduates from the specialization corresponding to the program is accepted in the first stage.

B. Must be a graduate of the same academic year.

C. To be unemployed.

3- Distinguished Employees Channel.

a. The student must not be more than forty years old.

B. He has actual service for the two years preceding the year of admission.



C. His registration must not have been updated and he must not have been accepted by other admission channels.

D. An employee accepted into the Technical Institute must have an average of not less than (60%) in preparatory studies in its branches (scientific, vocational).

D.A- Required documents and application deadlines:

1- An equivalent secondary school certificate certified by the authority that issued it, by the Ministry of Foreign Affairs of the country from which it was issued, and by the Iraqi embassy in that country. As for students who have obtained an Iraqi high school diploma, they must present a high school certificate certified by the General Directorate of Education in the governorate in which the student completed his studies.

2- The original birth certificate or a true copy.

3- A copy of the passport.

4- Two (2) personal photos.

5- Special application form.

6- Applications for studies continue until 11/20

2-2: Registration process:

1- Documents required for registration:

a. Original preparatory document.

B. A guarantor bond according to a form prepared by the University's Legal Affairs Department.

C. A colored copy of the identification documents.

D. Three recent photos.

H. Medical examination form.

2- Registration mechanism:

a. The central admission results announced on the official website of the Iraqi Ministry of Higher Education are approved, and the announcement is considered an official notification to the institute to begin registering students. The working day



following the announcement of the results on the website is the official day for the start of registration. Registration at the nominated institute must be completed within 15 working days starting from the start date of registration.

2-3: Evaluate students' performance

There is no initial evaluation in the program for the student to be accepted into the educational program, only reliance is placed on the result of the central examination for middle school studies, where the student must obtain a grade matching or more than the minimum limits for admission specified by the Ministry of Education, in addition to the student's grades in mathematics and physics, which must be The student's grades are not less than (75%).

As for the student's evaluation in the educational program, it depends entirely on oral and written examinations, noting that the passing grade is (50%) according to the following mechanism:

1- The grade for the annual subjects is divided into two parts (50% pursuit and 50% final). The division between practical and theoretical is shown in the table below:

Article containing practical				Article that does not contain practical		
The exam		Theoretical	Practical	The exam		Theoretical
Pursuit	First month exam	%10	%10	Pursuit	First month exam	20%
	Second month exam	%10	%10		Second month exam	20%
Evaluation*		5%	%5	Evaluation		10%
The Final		40%	10%	final exam		50%
The total		65%	35%	Total degree		100%

*** Evaluation is done by the subject teacher and depends on the student's attendance, daily exams, homework, and behavior during the lecture.**

2- Graduation research for second year students, which is based on writing a scientific research and discussion

In addition to continuous monitoring of the student's attendance at the theoretical lecture and laboratory, the student is considered not to have completed the subject if his hours of absence exceed 10% of the total hours for that subject.



2-4: Student transfer

1- General conditions:

a. The successful student has the right to transfer to and from the educational program of the corresponding specialization after obtaining approval from both departments and according to capacity.

B. The student does not have the right to transfer to a corresponding program at another university in the same governorate or to a corresponding program within the same university.

C. The student is not entitled to transfer if he is in the finished stage.

D. The student accepted for central admission is allowed to transfer to evening study in the same year to the corresponding program.

E Transfer procedures begin at the original institute, provided that the subjects studied by the student and the number of study units are attached.

And the. The transfer procedures are completed after the student obtains a no-objection from the institute to which he wishes to transfer.

F. A letter of separation from the original college is issued, and then the registration procedures in the second college must be completed within a period of one week from the date of the letter of separation.

G. The original institute sends the student's file to the institute to which he is transferred within a period of two weeks from the date of issuance of the transfer order.

i. Scientific clearing is carried out in accordance with the controls specified in the subject.

Y. The Student Affairs Department at the two institutes is responsible for following up the student transfer process in accordance with the regulations.

2- Reasons for requesting transfer:

a. A student who experiences the loss of a parent during the same year of transition.

B. Married female student during the study period.



C. The student who separated from her husband during the period of study due to divorce or death.

D. A student who suffers from a chronic disease (diabetes - epilepsy - malignant tumors - kidney failure - loss of sight - loss or disability of a limb).

2-5: Educational guidance

The educational guidance mechanism for the Plant Production Techniques program is summarized in the following points:

1- A meeting between the program students and the dean of the institute and his assistants. This takes place twice in the first academic year at the beginning of the study and the second before the final exams.

2- Periodic meetings between the department's students and the department head, which take place every two months

3- Dividing the students of one stage into groups of approximately 40 students, each group, and assigning one of the professors to each group as an educational supervisor. He organizes periodic meetings with his students once a month to overcome all obstacles to the student's study and take into account his academic, social, and emotional well-being. The student can also visit his educational supervisor at any time in his office to discuss special problems.

2-6: Graduation requirements

The Plant Production Technologies program grants a technical diploma in plant production techniques. In order for the student to obtain the certificate granted by the program, he must meet the following requirements:

1- Passing the two stages of study through

a. Providing attendance hours for each subject that are not less than (90%) of the hours scheduled for the subject.

B. Obtaining a passing grade in each of the academic subjects for the particular year, which is equal to (50%). The grade for each subject is determined based on the evaluation method used and explained in Paragraph Two.

2-7: Graduation documents of an old graduating student modern:



No : 0280104

وثيقة تخرج - المرحلة الاعدادية
Secondary School Certificate

رقم : ٠٢٨٠١٠٤

الفرع الزراعي - Agricultural Section



الاسم الالكتروني

٢٥٢٢٧٠١١٢٠٠٤١

الرقم الامتحاني

خضير عباس خضير عباس

الاسم الرباعي

ضمياء عزيز

اسم الام

ذكر

الجنس

عراقية

الجنسية

٢٠٠٤

الموالي

النجف الاشرف

المحافظة

اعدادية الكوفة المهنية

المدرسة

الزراعي

الاختصاص

٢٠٢٢-٢٠٢١

سنة التخرج



280104

Module Name :

Sex :

Nationality :

Date Of Birth :

Governorate :

School Name :

Specialization :

Academic year :

No	Subjects	النهاية الصغرى Min.Grades	النهاية الكبرى Max.Grades	الدرجة Score	الدرجة كتابية	المواد الدراسية	ت
1	Islamic Education	٥٠	١٠٠	٦٩	تسعة وستون	القران الكريم والتربية الاسلامية	١
2	Arabic Language	٥٠	١٠٠	٦٤	اربعة وستون	اللغة العربية	٢
3	English Language	٥٠	١٠٠	٧٨	ثمانية وسبعون	اللغة الانكليزية	٣
4	Mathematics	٥٠	١٠٠	٦٨	ثمانية وستون	الرياضيات	٤
5	Poultry Breeding	٥٠	١٠٠	٧٣	ثلاثة وسبعون	تربية الدواجن	٥
6	Plants Protection	٥٠	١٠٠	٧٦	سنة وسبعون	وقاية المزروعات	٦
7	Fruit Production	٥٠	١٠٠	٦٢	اثنان وستون	انتاج الفاكهة	٧
8	Dairy Idustry	٥٠	١٠٠	٥٠	خمسون	صناعة الالبان	٨
Total		٤٠٠	٨٠٠	٥٤٠	خمسة واربعون	المجموع	

Final Result **Succeeded**

Round **Second**

النتيجة النهائية **ناجح**

الدور **الثاني**

رفعت سلامة عبد المجيد
مدير قسم شؤون الطلبة

هبه عصام جاسم
م/مدير قسم شؤون الطلبة

شمس عماد جواد
الموظف المختص



2-8: SWOT analysis of the internal and external factors of the department's practices

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis should move away from expectations and possibilities, and the analysis of the external environment, represented by opportunities and threats, which takes into account the actual situation of existing threats and unexploited opportunities, and this was done according to a SWOT analysis. Table (1) reviews the SWOT analysis of the practices of the Plant Production Technologies Department.

Table (1) SWOT analysis of the practices of the Department of Plant Production Technologies at the Technical Institute of Kufa / Al-Furat Al-Awsat Technical University.

Strength point	Weaknesses
1-Students accepted into the department are specialists in agricultural sciences and graduates of the scientific branch. 2- Diverse curricula that suit the labor market.	1- Low acceptance rates, as the department accepts agricultural vocational graduates at a rate of 58% and scientific graduates at a rate of 55%.
Opportunities	Threats
1- Increasing job opportunities for graduates of the department. 2- Employing the department's graduates in both the private and public sectors.	1- The presence of private colleges and competitive evening studies. 2- Lack of job opportunities for graduates of the department. 3- Governments' reluctance to employ graduates of the department.

Department steps for improvement

1- Contributing to the graduate's cognitive development in agricultural sciences in accordance with the goals of the agricultural sector

And service and in harmony with modernization in specialization.

2- Improving the quality of the education process for agricultural specialization in line with preparing graduates who contribute towards an effective approach in the agricultural sector, while paying attention to the educational and social dimensions.

3- Activating the department's role in serving the community by organizing seminars, workshops, and discussion panels, and contributing to continuing education courses, consulting contracts, and social activities with a humanitarian dimension.



3: Second standard: Objectives of the educational program

3-1: Vision:-

Building a bright department to be one of the advanced scientific departments and to provide a highly skilled educational and training service in the fields of plant production, as well as quality in technical education, leadership and distinction in plant production techniques, serving agriculture in the country, and supporting educational and agricultural development and the national economy.

3-2: The message:-

Qualifying and training human cadres scientifically, professionally and technically to work in agricultural production projects and supplying the labor market (both government and private sectors) with staff who hold a scientific degree and are equipped with modern information and techniques in the fields of advanced agriculture.

3-3: Objective:-

The department aims to graduate qualified technical personnel concerned with the production of winter and summer vegetable crops, field crops, protected agriculture, the establishment of gardens, nurseries, fruit orchards, and tissue culture, in addition to the department's contribution to combating agricultural pests and its practice in the nature of agricultural land investment. Using agricultural machinery and equipment in plant production operations and contributing to beekeeping and honey production.

3-4: Consistency between the objectives of the educational program and the department's vision

Educational programs have been developed in the department in order to achieve the department's full vision. Accordingly, the objectives of the scientific department were consistent with the vision of the department and the institute by focusing on technical education and graduating competent technicians in operating and maintaining agricultural projects, marketing plant production, providing and



organizing information, and being able to serve the community in the field of specialization. .

3-5: Graduates' workplaces

- 1- In the field of education as a teaching assistant in institutes with the corresponding specialization and in most state departments.
- 2- In service departments, including (agriculture departments in governorate centers, districts, districts, and municipal departments for all state departments and the private sector.
- 3- Graduating qualified personnel to carry out agricultural projects of all kinds in all governmental and civil departments - working on agricultural projects for the public and private sectors.
- 4- Completing the largest number of applied scientific research in cooperation with relevant ministries and departments.
- 5- Ensuring continuous cooperation between the department and development sectors in advisory fields.

3-6: The process of reconsidering the objectives of the educational program.

The objectives of the educational program are reviewed periodically every three years to develop them with developments taking place in places where samples of work sites are visited by some of the teachers to observe developments and prepare the necessary recommendations for the department so that the educational objectives of the academic program can be reconsidered and the necessary changes are made in accordance with the developments occurring and indicated in the study. Prepared by the work site visit committee, taking into account not to deviate from the department's vision.

3-7: SWOT analysis of the department's educational program objectives.

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis departs from expectations. This was done in accordance with the analysis of SWOT Table (2) presents a SWOT analysis of the objectives of the educational program for the Department of Plant Production Technologies.



Table (2) SWOT analysis of the objectives of the educational program for the Department of Plant Production Technologies.

Strength point	Weaknesses
1- Developing educational programs in the department in order to achieve the department's full vision. 2- The objectives of the scientific department were consistent with the vision of the department and the institute by focusing on technical education and graduating competent technicians. 3- Qualifying and training human cadres scientifically, professionally and technically to work in agricultural production projects	1- Lack of support and interest in the agricultural sector at the country level.
Opportunities	Threats
1- Graduating qualified personnel to carry out agricultural projects of all kinds. 2- Continuous cooperation between the department and development sectors in advisory fields.	1-Lack of agricultural projects for the private sector.

Department steps for improvement

1- Reconsidering the educational objectives of the academic program and making the necessary changes in accordance with the developments occurring and indicated in the study prepared by the work site visitation committee, taking into account not to deviate from the department's vision.



4: Third standard: student outcomes

4-1: Student outcomes

A- Knowledge and understanding

- 1- The ability to establish agricultural projects for all crops, vegetables or fruits, as well as maintain agricultural machinery.
- 2- The ability to produce and multiply beehives and increase honey production.
- 3- The ability to carry out maintenance work for agricultural projects.
- 4- Teaching leadership skills, the value and quality of commitment, ethical behavior and respect for others.

B- Subject-specific skills

- 1- Be able to produce beehives.
- 2- Be able to conduct laboratory experiments
- 3- The ability to maintain all agricultural projects to increase their production.
- 4- Implementation of agricultural business projects.
- 5- Calculating production quantities and studying the feasibility of many agricultural projects.

C- Thinking skill

- 1- Brainstorming
- 2- The ability to analyze
- 3- The ability to solve problems
- 4- The ability to deduce

D- General and transferable skills (other skills related to employability and personal development)

- 1- The ability to work within a team
- 2- The ability to communicate effectively.



3- The ability to adapt to similar specializations (agricultural mechanization - computers - land reclamation).

4- Effective influence on society and the labor market through training and development programs related to the specialty and at various levels.

4-2: The relationship of student outcomes to the educational objectives of the program.

Through the curriculum, teaching methods followed, and the method of dealing with students, those in charge of the program work to obtain outcomes consistent with the educational objectives of the academic program by emphasizing:

1- The point of knowledge and understanding by focusing on fortifying the student with chemistry, biology, and agricultural engineering and using them to solve agricultural problems while building the graduate's personality as a cooperative leadership personality with high professional ethics.

2- Ensure that the graduate of the program is able to analyze, design, implement and maintain (beehives - greenhouses - gardens) in the field of specialization.

3- Training the graduate on teamwork, effective communication with others, effective influence in society, and dealing with specialties close to his specialty.

4-3: SWOT analysis of the relationship of student outcomes to the program's educational objectives

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis departs from expectations. This was done in accordance with the analysis of SWOT Table (3) presents a SWOT analysis of the relationship of student outcomes to the educational objectives of the program.



Table 3: SWOT analysis of the relationship of student outcomes to the program’s educational objectives

Strength point	Weaknesses
1-The ability to establish all agricultural projects. 2-The ability to maintain all agricultural projects to increase their production. 3- Training the graduate on teamwork, effective communication with others, effective influence in society, and dealing with specialties close to his specialty.	1-Lack of financial resources and job opportunities in the agricultural sector at the country level.
Opportunities	Threats
1- Effective influence on society and the labor market through training and development programs related to the specialty and at various levels. 2- The ability to adapt to similar specializations (agricultural mechanization - computers - land reclamation).	1- Lack of government support for establishing agricultural projects for the public and private sectors.

Department steps for improvement

1- The point of knowledge and understanding by focusing on fortifying the student with chemistry, biology, and agricultural engineering and using them to solve agricultural problems while building the graduate’s personality as a cooperative leadership personality with high professional ethics.

2- Ensure that the graduate of the program is able to analyze, design, implement and maintain (beehives - greenhouses - gardens) in the field of specialization.

5: Fourth standard: Continuous improvement

5-1: A plan has been developed for continuous improvement of the program, buildings, and equipment of the department in the short term (two years).

The plan established regarding the continuous improvement of the department for the academic year 2023-2024 has been completed as follows: -



A - Performing a comprehensive renovation of the department by replacing the department's floors and furnishing them with new carbide for all laboratories and rooms, as well as repainting the walls of all laboratories.

B- Develop a future plan for the department's need for advanced degrees in the field of required specializations.

C- Developing the department's greenhouse and wooden canopy project.

5-2: Evaluation of employers

Employers' Evaluation

The Plant Production Technology Department sent an invitation to employers and the department council met with employers on 11/27/2024 for the academic year 2024-2025. Special questionnaire forms were prepared for employers from the public and private sectors to express their opinions regarding the affiliates of the Plant Production Technology Department graduates to know their scientific and practical levels and the extent of their influence in their new field of work in order to improve future plans for theoretical and practical curricula and whether they need additional intensive courses. The council discussed the following topics:

A. Department outputs.

B. Employers' evaluation.

C. Employers' suggestions.

D. Students' axis.

E. Strengths.

F. Weaknesses and threats.



العدد: 28
التاريخ: 2024/11/27

وزارة التعليم العالي والبحث العلمي
جامعة الفرات الاوسط التقنية
المعهد التقني/كوفة
قسم تقنيات الانتاج النباتي



السيد العميد المحترم

م / محاضر جلسة أرباب العمل

على بركة الله ... اجتمع مجلس القسم مع أرباب العمل بتاريخ 2024/11/27 للعام الدراسي 2024 - 2025 في بداية الاجتماع رحب السيد رئيس القسم بالسادة أرباب العمل والتدريسيين والفنيين وتم مناقشة المحاور التالية :-

أولاً: مخرجات القسم :-

- 1- تأهيل وتدريب ملاكات بشرية تأهيلاً علمياً ومهنياً وتقنياً للعمل في مشاريع الانتاج الزراعي ورفع سوق العمل (القطاعات الحكومي والخاص) بكادر يحمل شهادته علميه مزود بمعلومات وتقنيات حديثه في مجالات الزراعة المتطورة .
- 2- استحداث البرامج التعليمية في القسم وذلك لتحقيق رؤية القسم الكاملة.
- 3- جاءت اهداف القسم العلمي متناسقة مع رؤية القسم والمعهد من خلال التركيز على التعليم التقني.
- 4- تخريج تقنيين كفؤين في تشغيل وصيانة المشاريع الزراعية وتسويق الانتاج النباتي وتقديم وتنظيم المعلومات ويكونوا قادرين على خدمة المجتمع في مجال الاختصاص.

ثانياً: محور أرباب العمل (تقييم ارباب العمل):-

1- تم اعداد استمارات خاصة للاستبيانات لأرباب العمل لبيان آرائهم فيما يتعلق بالمنتسبين من خريجين قسم تقنيات الانتاج النباتي والطلبة الحاليين لمعرفة مستوياتهم العلمية والعملية ومدى تأثيرهم في مجال عملهم الجديد من اجل تحسين الخطط المستقبلية للمناهج الدراسية النظرية والعملية وهل يحتاجون دورات مكثفه اضافيه.

2- مقترحات أرباب العمل:

- مفاتحة وزارة التخطيط لتوفير نسبة لفرص التعيين لحملة شهادة الدبلوم التقني الزراعي بعنوان وظيفي (مراقب زراعي) لحاجة مشاريع القطاع الزراعي لهذه الفئة.
- استحداث قسم التقنيات الاحيائية والطبية .
- وإن تم استحداث قسم جديد يبقى الشرط الأساسي لاستقطاب الطلبة الجدد هو تخصيص نسبة في التعيين كوسيلة فعالة لاستقطاب الطلبة وليس الاستحداث بحد ذاته .
- توفير فرص عمل للطلبة الخريجين في القطاع الخاص وخاصة أن الاستثمار الزراعي في محافظة النجف الأشرف يشهد توسعاً كبيراً في بادية النجف الأشرف في مجال زراعة المحاصيل الحقلية بنقانات الري الحديثة وهذا سبب كبير في زيادة استقطاب خريجي المعاهد الزراعية على ان يكون توجيه من قبل المحافظة الى هيئة الاستثمار بوضع شرط على المستثمرين بتعيين الخريجين الزراعيين .

توضيح مهم
هناك لائحة لعدد



ثانياً: محور الطلبة :-

1- نقاط القوة:

- القدرة على تأسيس المشاريع الزراعية كافة.
- القدرة على صيانة المشاريع الزراعية كافة لزيادة إنتاجها.
- تدريب الخريج على العمل الجماعي والاتصال الفعال بالآخرين والتأثير الفاعل بالمجتمع والتعامل مع الاختصاصات القريبة من اختصاصه.
- التأثير الفاعل في المجتمع وسوق العمل من خلال برامج التدريب والتطوير المتعلقة بالاختصاص وعلى مختلف المستويات.
- القدرة على التكيف مع الاختصاصات المشابهة (المكننة الزراعية - الحاسوب - استصلاح الاراضي).

2- نقاط الضعف والتهديدات:

- وجود الكليات الأهلية والحكومية المنافسة التي تقبل الطلبة من خريجي الأعدادية للفرع العلمي والمهني بآدنى المعدلات من دون تخطيط مسبق.
- قلة المورد المالي وفرص العمل في القطاع الزراعي على مستوى البلد.
- عدم توفر الدعم الحكومي لإقامة المشاريع الزراعية للقطاعين العام والخاص.
- قلة الدعم والاهتمام في القطاع الزراعي على مستوى البلد.
- قلة المشاريع الزراعية للقطاع الخاص.

وفي نهاية الاجتماع شكر السيد رئيس القسم الحضور وتمنى لهم الموفقية في عملهم

(واغلق المحضر)

أ.م.د. حيدر عبادي ناصر حسين
رئيس قسم تقنيات الانتاج النباتي

م. زراعي. نصير غني عبد الكريم
ممثل أرباب العمل

ر. م. زراعيين. أياد جاسم جابر
ممثل أرباب العمل

مصادقة السيد العميد المحترم
أ.د. أثير كاظم عبادي



5-3: SWOT analysis for continuous improvement of the Plant Production Technologies Department

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis departs from expectations. This was done in accordance with the analysis of SWOT Table (4) presents a SWOT analysis for the continuous improvement of the Plant Production Technologies Department.

Table (4) SWOT analysis for continuous improvement of the Plant Production Technologies Department.

Strength point	Weaknesses
1- A comprehensive restoration of the section. 2- Develop a future plan for the department's need for advanced degrees in the field of required specializations. 3-Developing the department's greenhouse and wooden canopy project. 4- Preparing special forms for questionnaires and sending them to employers.	1- Weak logistical support for project expansion.
Opportunities	Threats
1-Attracting students to join the department. 2- Increasing students' efficiency to create their own projects after graduation.	1- Weak infrastructure of the department.

Department steps for improvement

- 1- Improving future plans for theoretical and practical curricula and establishing additional intensive courses to raise the scientific and practical level of students.



6: Fifth standard: Course structure

The week	The hours	Hours Required learning	outcomes Name of unit/or subject	Teaching method	Evaluation method
The First	2Theoretical 4 practical	To be able to identify seeds and how to plant them	Learn how to distinguish between crop seeds and their types	a lecture	Evaluation
The Second	=	Knowing the types of winter and summer vegetable crops	Identify vegetable crops such as tomatoes, eggplant, peppers, and others	a lecture	Evaluation
The Third	=	Identify the types of deciduous and perennial fruit trees	Knowledge of fruit trees such as pomegranate, apple and apricot	a lecture	Exam
The Fourth	=	Learn how to establish nurseries and orchards	Learn about the types of nurseries and orchards and how to engineer them	=	Evaluation
The Fifth	=	Learn about forest trees and their benefits	Knowing the types of forest trees, how to propagate and plant them	=	Evaluation
The Sixth	=	Identify the types of agricultural soils and how to preserve and repair them	Identify the types of Coarse and fine soil, how to plow and cultivate it	=	Exam
The Seventh	=	Learn how to establish apiaries, raise bees, and produce honey	Learn about the types of bees and apiaries, how to establish an apiary, how to	=	Exam+ Evaluation



			raise bees, and the types of bees		
The Eighth	=	How to grow crops under protected conditions	Learn how to grow crops under protected conditions	=	Evaluation
The Ninth	=	Working in the field of plant tissue culture in the laboratory	Learn how to produce plants using tissue culture	=	Exam+ Evaluation
The Tenth	=	Harvesting and harvesting field crops	Learn about the use of reaping and harvesting machines	=	Evaluation
The Eleventh	=	The use of agricultural machinery and machinery in agriculture	Identify the types of agricultural machinery and their uses	=	Evaluation
The Twelveth	=	Using modern irrigation methods in agriculture	Learn about ancient and modern irrigation methods	=	Exam+ Evaluation
Thirteenth	=	Contributing to combating jungles and insects	Learn how to control, types of pesticides, and types of sprays	=	Exam+ Evaluation
Fourteenth	=	The most important types of insects and plant diseases	Identify the types of insects and plant diseases that affect agricultural crops	=	Exam+ Evaluation
Fifteenth	=	A scientific visit to the governorate's fields	Conduct a scientific visit to the conservative fields	=	Evaluation + report



10- The Established structure							
Name of the subject	In the Arabic language	محاصيل حقلية شتوية	The Sunnah Academic	Number of weekly hours			
	In the English language	Winter Feild Crops		Theoretical	Practical	Total	Units
	The language of instruction for the subject	The Arabic	The first	2	3	5	5

Objectives of the course:

General aim:

Specific objective: The student will be able to:

- 1- Learn how to prepare the appropriate bed for growing crops.
- 2- He grows crops according to the method of growing each of them.
- 3- Performs all crop service operations required to reach the highest production.
- 4- Learn about the transformational processes of seeds and parts of the crop after harvest.



11-Theoretical vocabulary	
The week	Vocabulary details
The First	The importance of producing field crops, the economic and political importance of producing winter crops, problems of producing winter crops, dividing field crops according to the growing season and use.
The Second	The process of preparing and preparing the land for agriculture, “plowing” the importance of performing it, types of plows used, “smoothing” the importance of performing it, the machines used for smoothing, “leveling” its importance, and the machines used for it.
The Third	Methods of growing and serving crops (prose, lines, pages), disadvantages and advantages of each method.
The Fourth	Wheat crop production - economic importance, suitable environmental conditions, planting date, seed quantity, fertilization, irrigation, wheat crop growth stages.
The Fifth	Composition of the wheat grain, stages of grain maturity, seed quality, the difference between fine and coarse wheat, steps for producing wheat flour.
The Sixth	Barley crop production - economic importance, suitable conditions, planting date, planting method, quantity of seed, fertilization, irrigation, stages of growth, maturity and harvest.
The Seventh	Production of the wheat crop, rye - triticale - economic importance, origin, suitable environmental conditions, planting date, planting method, seeds, fertilization, irrigation, stages of maturity and harvest, preparing seeds for storage and manufacturing.
The Eighth	Sugar beet crop production - economic importance, suitable environmental conditions, planting date, planting method, seed quantity, fertilization, irrigation, crop growth stages.
The Ninth	Sugarcane crop production - economic importance, suitable environmental conditions, planting date, planting method, seed quantity, fertilization, irrigation, maturity, harvest, and harvest.
The Tenth	Qualitative characteristics of cane and beets and stages of sugar production and manufacturing.
The Eleventh	Bean crop production - economic importance, suitable environmental conditions, planting date, planting method, seed quantity, fertilization, irrigation, maturity, harvesting and reaping.
The Twelveth	Production of chickpea and lentil crops - economic importance, suitable environmental conditions, planting date, seed quantity, fertilization, irrigation.
Thirteenth	Production of flax and safflower crops - economic importance, suitable environmental conditions, planting date, planting method, fertilization, irrigation, seed quantity.
Fourteenth	Agricultural cycles for winter crops, definition of agricultural cycles, types of cycles, how to design agricultural cycles, giving various examples.
Fifteenth	Agricultural courses, their definition, types, design of agricultural courses, exercises for types of courses, students performing operations to serve the cultivated crops.



12- Infrastructure	
1- Required prescribed books	Scientific references
2- Main references (sources)	Course books
A. Recommended books and references (scientific journals, reports,...)	Scientific journals - scientific research – reports
B - Electronic references, ...Internet sites	Sources from the Internet

1. Educational institution	Al-Furat Al-Awsat Technical University / Kufa Technical Institute
2. Scientific department/center	Plant production techniques – second class
3. Course name/code	Winter vegetable crops / Pp0101
4. Available forms of attendance	Theoretical lectures, practical lectures
5. Semester/year	Semester
6. Number of study hours (total)	75 semester hours (30 theoretical hours, 45 practical hours)
7. Date this description was prepared	6/2/2025
8. Course objectives	
1- Preparing the land and preparing the appropriate bed for the field crops. 2- The appropriate method for growing each crop. 3- Vegetable crop service operations during different growth stages. 4- The correct way to harvest, sort and grade the fruits.	
9. Course outcomes and teaching, learning and evaluation methods	
A- Cognitive objectives	
1- Introducing the student to the different shrines 2- Introducing the student to the different irrigation systems for incinerators 3- Introducing the student to how to create shrines	
B - The skills objectives of the course.	
1 - Gaining the skill of using machines in constructing fireplaces 2 - Acquiring the skill of managing shrines 3- Acquiring the skill of designing fireplaces	
Teaching and learning methods	
1- Theoretical lectures. 2- Practical lectures.	



3- Scientific visits.
Evaluation methods
1- Daily exams. 2- Monthly exams. 3- Final exams
C- Emotional and value goals 1- Directing students to group work. 2- Activating educational guidance seminars. 3- Follow up and take care of students.
Teaching and learning methods
1-Theoretical lectures. 2-Work training. 3- Scientific films. 4-Scientific visits
Evaluation methods
1- Daily exams. 2- Monthly exams. 3-Final exams.
D - Transferable general and qualifying skills (other skills related to employability and personal development). 1- Applied skills for growing various vegetables. 2- Skills in using irrigation systems. 3- Skills in using various fertilizers for vegetables. 4 - Design skills for some shrines and their implementation.



Theoretical vocabulary	
The week	Vocabulary details
The First	Vegetable science - economic and nutritional importance, geographical distribution in Iraq, the Arab world and the world, problems of vegetable production and proposed solutions.
The Second	Methods of dividing vegetables - vegetative division, according to the growth cycle, according to the part used for consumption, thermal division, division according to the method of cultivation, areas of growth of vegetables.
The Third	The effect of environmental factors on the growth and development of vegetables, climate factors, and soil factors.
The Fourth	Vegetable crop reproduction - sexual reproduction, asexual reproduction, good seed qualities, germination, dormancy, seed treatments.
The Fifth	Production of vegetable seedlings - definition of a nursery, advantages and disadvantages of a nursery, causes of differences in seedling tolerance, agricultural media, definition of acclimatization, methods of acclimatization, physiological changes for acclimatization.
The Sixth	Production of the Lahana crop - the original habitat and importance of the Lahana, suitable climate and soil, reproduction, date and method of cultivation, service operations.
The Seventh	Cauliflower production - the original habitat and importance of cauliflower, climate and soil,



	reproduction, date and method of cultivation, service operations
The Eighth	Production of radish, radish, and cress crops - location and importance of the crop, climate and soil, date and method of cultivation, service operations.
The Ninth	Production of beans, peas, and fenugreek - the original habitat and importance of the crop, climate and soil suitable for reproduction, date and method of cultivation, service operations.
The Tenth	Production of the onion crop - the original habitat and importance, climate and suitable soil, reproduction, date and method of planting, service operations, early flowering in onions, duplication in onions, production of green onions.
The Eleventh	Garlic and leek crop production - original habitat and importance, climate and suitable soil, reproduction, date and method of cultivation, service operations.
The Twelveth	Production of Swiss chard, beets, and spinach - the original habitat and importance, climate and suitable soil, reproduction, date and method of cultivation, service operations, flowers.
Thirteenth	Production of carrots and lettuce - the original habitat and importance, climate and suitable soil, reproduction, date and method of cultivation, service operations, flowering in lettuce.
Fourteenth	Production of celery, mint, and dill - the original habitat and importance, climate and suitable soil, reproduction, date and method of cultivation, service operations.
Fifteenth	Production of vegetables hoped to be grown in Iraq (broccoli, Brussels sprouts, watercress, chicory, Welsh onion, chef) - importance and place of origin, date and method of cultivation, service operations



14- Infrastructure	
1- Required prescribed books	Reference books
2- Main references (sources)	Scientific research - dissertations and dissertations - Internet sources
A.Recommended books and references (scientific journals, reports,...)	Reputable scientific journals – reports
B - Electronic references, Internet sites...	Various internet sources



6-1: Program vocabulary

Program vocabulary for the first year

Autumn semester

No	Subject	The number of hours			Number Units	Subject Type	Instruction of Language
		Th	P	T			
1	Winter Fiel Crops	2	3	5	5	Specialized	Arabic
2	Winter Vegetable crops	2	3	5	5	Specialized	Arabic
3	Forestry	1	3	4	4	Specialized	English
4	Plant Protection	1	2	3	3	Assistant	Arabic
5	General Soil	1	3	4	4	Assistant	Arabic
6	Agri. Machines & Equipments	2	2	4	4	Assistant	Arabic
7	Animal Production	1	2	3	3	Assistant	Arabic
8	Democracy and human rights	2	-	2	2	General	Arabic
9	English language	2	-	2	2	General	English
10	Computer applications/1	1	2	3	2	Assistant	Arabic
11	Arabic language	2	-	2	2	General	Arabic
Total		17	20	37	36		



Program vocabulary for the first year

Spring semester

No	Subject	The number of hours			Number Units	Subject Type	Instruction of Language
		Th	P	T			
1	Summer Field Crops	2	3	5	5	Specialized	Arabic
2	Summer Vegetable crops	2	3	5	5	Specialized	Arabic
3	Evergreen Fruit trees	2	3	5	5	Specialized	Arabic
4	Nurseries	1	3	4	4	Specialized	English
5	General Insect	1	3	4	4	Specialized	Arabic
6	Statistic & Experiment Design	1	3	4	4	Assistant	Arabic
7	Farm Management	1	2	3	3	Assistant	Arabic
Total		10	20	30	30		



2-Program vocabulary for the second year

Autumn semester

No	Subject	The number of hours			Number Units	Subject Type	Instruction of Language
		Th	P	T			
1	Protected Agriculture	2	3	5	5	Specialized	Arabic
2	Plant Breeding and improvement	2	2	4	4	Specialized	Arabic
3	Seeds production	2	2	4	4	Specialized	Arabic
4	Plant Diseases	2	2	4	4	Specialized	English
5	T.C. & Plant Cell	1	3	4	4	Specialized	Arabic
6	Deciduous Fruit trees	2	3	5	5	Specialized	Arabic
7	Soil Salinity & Irrigation	1	3	4	4	Assistant	Arabic
8	Gradute Project Research	-	2	2	2	Specialized	Arabic
9	Crimes of the Baath Regime in Iraq	1	-	1	1	Assistant	Arabic
10	English language	1	-	1	1	Assistant	English
11	Computer Application/2	1	2	3	2	Assistant	Arabic
12	Arabic language	1	-	1	1	Assistant	Arabic
Total		19	22	41	40		



Program vocabulary for the second year

Spring semester

No	Subject	The number of hours			Number Units	Subject Type	Instruction of Language
		Th	P	T			
1	Floriculture & Landscap	2	2	4	4	Specialized	Arabic
2	Forage Crops	1	3	4	4	Specialized	Arabic
3	Post-Harvest Crops	1	3	4	4	Specialized	Arabic
4	Weeds & Weeds Control	2	2	4	4	Specialized	English
5	Bees Breeding	1	3	4	4	Specialized	Arabic
6	Organic Culture	2	2	4	4	Specialized	Arabic
7	Soil Fertility & Fertilizers	1	3	4	4	Assistant	Arabic
8	Gradute Project Research	-	2	2	2	Specialized	Arabic
Total		10	20	30	30		



6-2:Lineage

NO	Description	Number	NOTES
1	Total number of units for two years	136	
2	Total number of hours for two years	137	
3	The theoretical number of hours for two years	50	
4	Number of practical hours for two years	86	
5	Percentage of the theoretical number of hours for two years	37.3	
6	Percentage of practical hours for two years	62.7	
7	Number of specialized hours for two years	91	
8	Number of assistant hours for two years	41	
9	Number of general hours for two years	4	
10	Percentage of the number of specialized hours for the two years	74.9	
11	Percentage of the number of assistant hours for the two years	22.2	
12	Percentage of the number of general hours for the two years	2.9	
13	Number of hours of systematic training for the first stage/summer training	271	
14	The total number of hours with systematic training for the first stage	2310	



6-3: Curriculum skills chart

Learning outcomes required from the programme																		
Year/level	Course Code	Course Name	Basic or optional	Cognitive objectives				kills objectives of the programme				Emotional and value objectives				Transferable general and qualifying skills) and other skills related to employability and personal development		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
First year	Pp0101	Winter field crops	Basic (Specialist)			✓	✓		✓	✓	✓			✓	✓		✓	✓
Autumn course	Pp0102	Winter vegetable crops	Basic (Specialist)			✓	✓		✓	✓	✓			✓	✓		✓	✓
	Pp0103	Forests	Basic (Specialist)			✓	✓		✓	✓	✓			✓	✓		✓	✓
	Pp0104	Plant protection	Assistant			✓	✓		✓	✓	✓			✓	✓		✓	✓
	Pp0105	General soil	Assistant			✓	✓		✓	✓	✓			✓	✓		✓	✓
	Pp0106	Agricultural tractors and machines	Assistant			✓	✓		✓	✓	✓			✓	✓		✓	✓
	Pp0107	Animal production	Assistant			✓	✓		✓	✓	✓			✓	✓		✓	✓
	Pp0109	Democracy and human rights	General	✓	✓		✓	✓	✓				✓	✓		✓	✓	
	Pp0110	English language	General		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0108	Computer applications/1	Assistant	✓		✓		✓	✓			✓		✓				



		Arabic language	Assistant	✓		✓		✓	✓			✓		✓				
Spring course	Pp0111	Summer field crops	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0112	Summer vegetable crops	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0113	Permanent fruit production	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0114	Nurseries	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0115	General insects	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0116	Statistics and planning experiments	Assistant		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0117	Farm management	Assistant		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
Second year	Pp01121	Protected agriculture	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
Autumn course	Pp0122	Plant breeding and improvement	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0123	Seed production	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0124	Plant diseases	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0125	Tissue culture and plant cells	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0126	Production of falling fruit	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0127	Irrigation and soil salinity	Assistant		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0128	Graduation research project	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓



	Pp0138	Crime of the Baath Regime in Iraq	Assistant		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0130	English language	General		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0129	Computers applications	Assistant		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
		Arabic language	General		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
Spring course	Pp0131	Decorations and garden engineering	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0132	Attention and storage	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0133	Forage and pasture crops	Basic (Specialist)		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0134	Jungles and their control*	Basic specialty		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0135	Beekeeping	Basic specialty		✓	✓		✓	✓	✓			✓	✓		✓	✓	✓
	Pp0136	Organic Agriculture *	Basic specialty		✓	✓			✓	✓			✓	✓	✓		✓	✓
	Pp0137	Soil Fertility & Fertilizers *	Assistant		✓	✓			✓	✓			✓	✓	✓		✓	✓
	Pp0128	Graduation research project*	Basic specialty		✓	✓			✓	✓			✓	✓	✓		✓	✓



- Through methodological vocabulary in some courses, which includes chemistry and biology requirements that the student needs to work in the field of specialization, as the curriculum contains courses related to maintenance work for agricultural projects and in the field of plant production. In addition to the project in the final year, which relies on examinations and evaluation of productions based on the subjects taught in the years of study preceding the year of the project.
- The program allows cooperative learning to achieve methodological vocabulary, which is a type of educational method.

6-4: SWOT analysis of the course structure

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis departs from expectations. This was done in accordance with the analysis of SWOT Table (5) presents a SWOT analysis of the course structure for the Department of Plant Production Technologies.

Table (5): SWOT analysis of the course structure for the Department of Plant Production Technologies

Strength point	Weaknesses
1- The curricula contain courses related to maintenance work for agricultural projects and in the field of plant production. 2- The graduation project in the final year, which depends on examinations and evaluation of the results, based on the subjects taught in the years of study preceding the year of the project. 3- The curriculum vocabulary includes the chemistry and biology requirements that the student needs in his work in the field of specialization.	1- Lack of combating desertification in the methodological vocabulary.
Opportunities	Threats
1- Identify the types of agricultural soils and how to preserve and reclaim them. 2- Learn how to establish apiaries, raise bees, and produce honey. 3- How to grow crops under protected	1- Razing agricultural lands and turning them into random housing units. 2- Lack of irrigation projects.



conditions. 4- Contributing to combating jungles and insects.	
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Department steps for improvement

- 1- Adding the subject of combating desertification to the methodological vocabulary.
- 2- Through cooperative education to achieve methodological vocabulary, which is a type of educational method.

7: Sixth Standard 1: The Institute

7-1: Institute qualifications

The institute is characterized by good capabilities in terms of human capabilities, infrastructure, laboratories, computers, and good areas of wasteland and agricultural land that can be used to establish agricultural departments and other scientific departments. There are also halls for raising calves and poultry, lakes, and plastic fields, as well as modern buildings and a good Internet center. These are all factors that qualify the institute. To become a good scientific edifice that helps develop the country and raise the scientific level of students, and it has independent financial funds that contribute to supporting the scientific process with ease.

Table 6-1. institute Qualifications

Name of Program



Instructions: Complete table for each member of the faculty in the program.

Level of Activity ⁴ H, M, or L			Profession	Years of Experience		FT or PT ³	Type of Academic Appointment ²	Rank ¹	Highest Degree Earned-Field and Year	Institute Name
Consulting/summer work in	Professional Development	Professional Organizations		This Institution	Teaching					
				18		FT	T	L	PHD	Haider Abadi Nasser
				4		FT	T	L	PHD	Shather Abdel Hamza
				2		FT	T	L	PHD	Raghad Khalil Ahmed
				19		FT	T	L	PHD	Hussein Abdel Zahra
				19		FT	T	AST	M.Sc	Haider Ali Abdul Hussein
				2		FT	T	AST	M.Sc	Ali Samir Maeen
				2		FT	T	AST	M.Sc	Ahmed Jawad Kazem
				2		FT	T	AST	M.Sc	Ali Razaq Jassim
				2		FT	T	AST	M.Sc	Ghufran Mohsin Bashah
				2		FT	T	AST	M.Sc	Anaam Jalli Adhbib

Instructions: Complete table for each member of the faculty in the program.

Add additional rows or use additional sheets if necessary. Updated information is to be provided at the time of the visit.

**1. Code: P = Professor ASC = Associate Professor AST = Assistant Professor L = Lecturer AL = Assistant Lecturer I = Instructor
A = Adjunct O = Other**

2. Code: TT = Tenure Track T = Tenured NTT = Non Tenure Track

3. At the institution

4. The level of activity, high, medium or low, should reflect an average over the year prior to the visit plus the two p



7-2: Department teaching work.

Table 6-2. Faculty Workload Summary

Name of Program

% of Time Devoted to the Program ⁵		Program Activity Distribution ³		Classes Taught (Course No./Credit Hrs.) Term and Year ²	PT or FT ¹	Faculty Member (name)
	Other ⁴	Research or Scholarship	Teaching			
20%	20%	30%	60%	(CERQ 449/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Haider Abadi Nasser
30%	15%	30%	60%	(COTE 224/6H/W) 1 st & 2 nd Term , 2017/2018	FT	Shather Abdel Hamza
35%	20%	20%	60%	(CERQ 214/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Raghad Khalil Ahmed
35%	10%	20%	70%	(CERQ 333/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Hussein Abdel Zahra
30%	10%	20%	70%	(COTE 335/6H/W) 1 st & 2 nd Term , 2015/2016/2017/2018	FT	Haider Ali Abdul Hussein
35%	10%	20%	70%	(CERQ 449/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Ali Samir Maeen
30%	20%	15%	65%	(COTE 245/6H/W) 1 st & 2 nd Term , 2017/2018	FT	Ahmed Jawad Kazem
35%	20%	20%	60%	(CERQ 214/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Ali Razaq Jassim
35%	20%	20%	60%	(CERQ 214/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Ghufran Mohsin Bashah
35%	20%	20%	60%	(CERQ 214/3H/W) 1 st & 2 nd Term , 2017/2018	FT	Anaam Jalli Adhbib

1. FT = Full Time Faculty or PT = Part Time Faculty, at the institution
2. For the academic year for which the Self-Study Report is being prepared.
3. Program activity distribution should be in percent of effort in the program and should total 100
4. Indicate sabbatical leave, etc., under "Other."
5. Out of the total time employed at the institution.



7-3: Size of the institute

1- The Technical Institute / Kufa provides all methods, according to the capabilities available to the program, and conducts scientific visits to electrical projects in the governorate and the rest of the governorates and Baghdad in order to increase the efficiency and practical experience of students before appointment and enroll them in practical courses in addition to summer training, which adds to their accumulated experience.

2- The Institute holds specialized courses through continuing education as services to society of all segments and educational levels at reasonable prices.

3- The Institute partners with the labor market by manufacturing some devices and equipment and putting them on the local market. Students participate with the labor market (private sector) and benefit from the experiences of employers in developing students and graduates and knowing their levels by conducting questionnaires for employers in the public sectors and the private.

7-4: Specialized development

The specialized development of each faculty member



CV



Personal information	
Full name and surname	Dr. Haider Abadi Nasser Hussein Al-Issawi
Scientific title	Assistant Professor Doctor
Sex	Male
Birthplace	Najaf/Kufa
Date of birth	7/11/1981
Governorate	Najaf
Marital status	Married
E-mail	haider-alisawi@atu.edu.iq
Phone number	07811610722

	Qualifications	
BSC	The university	Kufa
	The college	Agriculture
	Department	Plant Protection
	Graduation Year	2011
	General specialization	Plant protection
	Specialization	Plant protection
	Graduation research title	The effect of some pesticides on controlling whiteflies in protected agriculture
MSC	The university	Kufa
	The college	Agriculture
	Department	Plant Protection
	Graduation Year	2015
	General specialization	Plant protection
	Specialization	Plant diseases
	Thesis of title	Testing the effect of some induction,



		nano- and biological agents on the fungus <i>Fusarium solani</i> , which causes root rot disease of orange trees and seedlings
PHD	The university	Kufa
	The college	Agriculture
	Department	Plant Protection
	Graduation Year	2020
	General specialization	Plant protection
	Specialization	Plant diseases
	Thesis of title	Evaluation of chemical, physical and biological factors in controlling grape cluster rot caused by <i>Aspergillus niger</i>
Professional experience		
Course of the Department of Plant Production Technologies from 10-19-2021 until 2022		
of the Plant Production Technologies Department President		
The academic subjects you have taught		
	Summer field crops	Plant diseases
		General insects
		Plant protection
		Winter vegetable crops
Published research		
-Effects of applying cold and hot aqueous extracts of ginger to control onion rot disease caused by <i>Aspergillus niger</i>		
-Morphological and molecular identification of <i>Cladosporium sphaerospermum</i> isolates collected from tomato plant residues		
-ISOLATION AND IDENTIFICATION OF FUNGI ASSOCIATED WITH SEEDLINGS ROOTS OF CITRUS AURANTIUM AND ENHANCE ITS GROWTH BY USING SOME ORGANIC EXTRACTS		
Molecular diagnosis of different isolates of <i>Aspergillus niger</i> isolated from grapes-		
-THE EFFECT OF SOME BIOLOGICAL RESISTANCE FACTORS ON CONTROLLING THE FUNGUS THIELAVOPSIS PARADOXA THAT CAUSES BLACK SCORCH BLIGHT IN PALMS		



-EFFECTS OF SOME CHEMICALS AND BIO-PRODUCTS ON BLACK MOLD CAUSED BY ASPERGILLUS NIGER AND GROWTH AND YIELD COMPONENT OF GRAPEVINES UNDER FIELD CONDITION.

-Efficacy of three biological control agents on black mold caused by *Aspergillus niger* fungus and growth and yield components of grapevines (*Vitis vinifera* L.) under field conditions

- The Effect of Some Plant Extracts on Resistance to Orange Fruit Rot Disease *Citrus sinensis* L. in Laboratory and Storage Conditions.

CV



Personal information	
Full name and surname	Shathar Abdulhamza Imran Alaamer
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Sex	Male
Birthplace	Bablon
Date of birth	1968
Governorate	Bablon
Marital status	Married
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Phone number	07801189063

Qualifications		
BSC	The university	Bagdad
	The college	Agricultural –Bagdad
	Department	Soil
	Graduation Year	1989-1990
	General specialization	Soil
	Specialization	Soil
	Graduation research title	The effect of organic matter on some



		physical properties of soil
MSC	The university	AL-Furat AL-Awsat Technical University
	The college	Al-Musaib Technical College
	Department	Plant Production Techniquese
	Graduation Year	2010
	General specialization	Plant Production Techniquese
	Specialization	PLANT PROPAGATION AND PLANT IMPROVEMEN
	Thesis of title	EFFECT OF NITROGEN LEVELS AND SOME GENOTYPES ON YIELD AND QUALITY OF RICE <i>Oryza sativa</i> L.ON ALNAJAF
PHD	The university	AL-Furat AL-Awsat Technical University
	The college	Al-Musaib Technical College
	Department	Plant Production Techniquese
	Graduation Year	2014
	General specialization	Plant Production Techniquese
	Specialization	Field crops
	Thesis of title	THE EFFECT OF SPRAYING ETHEPHON AND ALGAE FERTILIZAR ON GROWTH, YIELD AND QUALITY OF RICE ANBER33 (<i>Oryza sativa</i> L.) UNDER DIFFERENT IRRIGATION PERIODS
Professional experience		
<p>Propagation of plants through various methods, the use of cell and plant tissue culture technology in tissue agriculture, as well as the cultivation of various vegetable crops in greenhouses, the manufacture and use of organic fertilizers, and expertise in the field of preserving various crops for post-harvest operations on crops, especially strategic grain crops .</p>		
The academic subjects you have taught		
plant cell and tissue culture		
general soil		
fertility and fertilization		
care and storage		
Published research		
-Sustainable use of sub-surface drip irrigation system for corn growth and productivity		
-Levelling machines and its effect on the growth characteristics and productivity for two corn cultivars		
-Effect of Organic Fertilizer Extract on Morphological Characteristics for		



Bread Wheat

-Influence of Husking Machine Type, and its Clearance on the Factory Rice, Mashkhab (M-33) Cultivar

- Effect of Subsurface Drip Irrigation System and Two Levels Nitrogen Fertilizer on Corn Growth and Yield

-Performance Evaluation of Local Design Machine (LDSM Type) on Productivity and Growth of Wheat

-Wheat Parameters Under Influence of the Depths and Cultivation Machinery

-A test of the Threshing Machine (LMS Type) at Different Feed Rates and Speeds on Some Corn Properties

-Effect of some mechanical planting methods on potato tuber characteristics

-Effect of Some Planting Depths on Wheat Characteristics for Two Varieties (Iba'a 99 and Alnoor)

- EFFECT OF MECHANICAL PROPERTIES ON SOME GROWTH CHARACTERISTICS FOR MAIZE, SYN5018 VARIETY

- Affecting mechanical on some growth properties for corn , MAHA cultivar

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CV



Personal information	
Full name and surname	Dr. Hussein Abdulzahra Khalaf Daoud Al-Hajami
Scientific title	Lecturer
Sex	Male
Birthplace	Najaf / Kufa
Date of birth	1984/1/6
Governorate	Najaf
Marital status	Married
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Phone number	07813304010

Qualifications		
BSC	The university	Kufa
	The college	Agriculture
	Department	Plant Protection
	Graduation Year	2010/2009
	General specialization	Plant Protection
	Specialization	Plant Protection
	Graduation research title	
MSC	The university	Kufa
	The college	Agriculture
	Department	Plant Protection
	Graduation Year	2018/2017
	General specialization	Plant Protection
	Specialization	Plant Diseases
	Thesis of title	Effect of feeding males laboratories mice on oyster



		mushroom (<i>Pleurotus ostreatus</i>) in some Biochemical standards of Blood
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PHD	The university	Kufa
	The college	Agriculture
	Department	Plant Protection
	Graduation Year	2023
	General specialization	Plant Protection
	Specialization	Plant Diseases
	Thesis of title	Efficacy of plant remains composted by the fungus <i>Pleurotus ostreatus</i> and the fungicide Difenoconazole on the fungi <i>Fusarium oxysporum</i> and <i>Alternaria solani</i> on tomato plants

Professional experience		

The academic subjects you have taught		
	Farm Management	
	Seeds production	
	Plant Diseases	
	Forage Crops	
	Bees Breeding	
	Gradute project Research	

Published research		
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CV



Personal information	
Full name and surname	Dr. Raghad Khalil Ahmed Alarkwazi
Scientific title	Lecturer
Sex	Female
Birthplace	Iraq/Najaf
Date of birth	29/9/1988
Governorate	Najaf
Marital status	Single
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Phone number	07756118761

Qualifications		
BSC	The university	University of Kufa
	The college	Education for girls
	Department	Biology
	Graduation Year	2014
	General specialization	Biology
	Specialization	Biology
	Graduation research title	
MSC	The university	University of Kufa
	The college	Education for girls
	Department	Biology
	Graduation Year	2018
	General specialization	Biology
	Specialization	Plant Taxonomy
	Thesis of title	Taxonomical study of the genera <i>Anastatica</i> L. , <i>Anchonium</i> DC. , <i>Aubrieta</i> Adans. , <i>Barbarea</i> R.Rr. and



		<i>Coronopus Zinn.</i> (Cruciferae) in Iraq.
PHD	The university	University of Kufa
	The college	Education for girls
	Department	Biology
	Graduation Year	2021
	General specialization	Biology
	Specialization	Medicine Plants
	Thesis of title	Studying the Chemical content and Molecular Markers of some Medicinal plants in Bahr al-Najaf depression
Professional experience		
Teaching at Al-Kafeel University / College of Pharmacy (formerly)		
Responsible for the Scientific Division/College of Pharmacy (formerly)		
Member of the Examination Committee/College of Pharmacy (formerly)		
Teaching in the Department of Plant Production Technologies/currently		
Course of the Department of Plant Production Technologies from 2024		
Member of the Quality and Accreditation Committee		
Member of the examination subcommittee		
The academic subjects you have taught		
Pharmacognacy		
Protected agriculture		
Plant diseases		
Organic farming		
Summer vegetable crops		
Farm management		
Published research		
-Comparative palynological study for the species of the genera <i>Anastatica</i>, <i>Anchonium</i>, <i>Aubreita</i>, <i>Barbarea</i> and <i>Coronopus</i> in Iraq		
-Secondary Metabolism Compounds Study of Essential Oils for the <i>Mentha spicata</i> L. and <i>Ocimum basilicum</i> L.		
-Determination Of The Genetic Relationships Among Five Species From Families Boraginaceae, Papaveraceae, Plantaginaceae And Polygonaceae by RFLP And ISSR Analysis In Iraq		
-Pharmaceutical and Biological Properties of Dill : A Review		
-Biochemical analysis of leaves for the species <i>Fagonia burguieri</i> DC. ,<i>Zygophyllum coccineum</i> L. <i>Zygophyllum fabago</i> L. (Zygophyllaceae) in Bahr al-Najaf depression in Iraq based on GC-Mass technology .		



Estimation of some glycosidic compounds in leaves extract of Stevia rebudiana.

CV



Personal information	
Full name and surname	Ali Sameer Mueen Almarzoog
Scientific title	Assistant Lecturer
Sex	Male
Birthplace	Kifl/Babylon
Date of birth	1 1991/1/
Governorate	Babylon
Marital status	Marred
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Phone number	07700546200

Qualifications		
BSC	The university	Babylon
	The college	College of Agriculture
	Department	Field crops
	Graduation Year	2013/2014
	General specialization	Field crops
	Specialization	Field crops
	Graduation research title	The effect of different levels of nitrogen on the yield of beans
MSC	The university	Al-Qasim Green University
	The college	College of Agriculture
	Department	Field crops
	Graduation Year	2019
	General specialization	Field crops
	Specialization	Field crops
	Thesis of title	Phenotypic and molecular



		characterization using RAPD indicators for several bread wheat cultivars
PHD	The university	
	The college	
	Department	
	Graduation Year	
	General specialization	
	Specialization	
	Thesis of title	
Professional experience		
Course of the Department of Plant Production Technologies 2023-2024 Member of the examination subcommittee Member of the Quality and Accreditation Committee Supervision of agricultural projects		
The academic subjects you have taught		
Fodder crops and pastures		
Winter field crops		
Plant breeding and improvement		
Statistics and planning experiments		
Farm management		
Published research		
-Create molecular databases to Iraqi bread wheat cultivars -		
-Effect of Organic Fertilizer Extract on Morphological Characteristics for Bread Wheat		



CV



Personal information	
Full name and surname	Ahmed Jawad Kadhim Alhmedawi
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Qualifications		
BSC	The university	Al- Kufa university
	The college	agriculture
	Department	plant protection
	Graduation Year	2003_ 2004
	General specialization	plant protection
	Specialization	plant protection
	Graduation research title	
MSC	The university	sumy national agrarian university
	The college	Agriculture
	Department	plant protection
	Graduation Year	2012
	General specialization	plant protection
	Specialization	plant protection
	Thesis of title	Resistant of commercial varieties of soft winter wheat to orang leaf rust
	The university	
	The college	



PHD	Department	
	Graduation Year	
	General specialization	
	Specialization	
	Thesis of title	
Professional experience		
The academic subjects you have taught		
forest -3	2- nursery	pullers and agriculture -1
weed and control	5- animal production	plant protection -4
Published research		
		-



CV



Personal information		
Full name and surname	Haider Ali Abdul Hussein Ali ALali	
Scientific title	Assistant Lecturer	
Sex	Male	
Birthplace	Al-Najaf Al-Ashraf - Kufa	
Date of birth	26 / 3 / 1981	
Governorate	Al-Najaf Al-Ashraf	
Marital status	married	
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Phone number	07809269998	
	Qualifications	
BSC	The university	Kufa
	The college	Agriculture
	Department	Horticulture and landscaping
	Graduation Year	2010 - 2011
	General specialization	Horticulture and landscaping
	Specialization	Horticulture and landscaping
	Graduation research title	The effect of spraying with sugar solution and planting date on the cucumber variety (saefe)
	The university	Kufa



MSC	The college	Agriculture
	Department	Horticulture and landscaping
	Graduation Year	2019
	General specialization	Horticulture and landscaping
	Specialization	Fruit production
	Thesis of title	Effect of Foliar spray with , Arginine , Ascorbic acid and Seaweed Extract on some Vegetative , Fruit and Yield characteristic of Grape Cultivar Shada Baidha (Vitis vinifera L(.
PHD	The university	
	The college	
	Department	
	Graduation Year	
	General specialization	
	Specialization	
	Thesis of title	
Professional experience		
Head of the Translation and Consolidation Division at Al-Furat Al-Awsat Technical University		
Course of the Department of Animal Production Technologies		
Course of the Department of Plant Production Technologies		
Director of Student Affairs		
The academic subjects you have taught		
Production of fallen fruit		
Sustainable fruit production		
Organicagriculture		
Published research		
-		



CV



Personal information	
Full name and surname	Ali Razzaq Jasim Alsaidi
Scientific title	Assistant Lecturer
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Birthplace	Najaf
Date of birth	28/9/1995
Governorate	Najaf
Marital status	Married
E-mail	ali.hraen.iku@atu.edu.iq
Phone number	07814422005

Qualifications		
BSC	The university	University of Kufa
	The college	Faculty of Agriculture
	Department	Horticulture and Garden Engineering
	Graduation Year	2019
	General specialization	Horticulture and Garden Engineering
	Specialization	
	Graduation research title	Effect of foliar of Urea and Boric Acid on Growth parameters and Yield of Eggplant <i>Solanum Melongana L</i>
MSC	The university	University of Kufa
	The college	Faculty of Agriculture
	Department	Horticulture and Garden Engineering
	Graduation Year	2023
	General specialization	Horticulture and Garden Engineering
	Specialization	
	Thesis of title	Response of Snake Cucumber to the addition of fractionated NPK fertilizer



		Application of nano-boron in growth indicators and yield Cultivated in the unheated plastic houses.
PHD	The university	
	The college	
	Department	
	Graduation Year	
	General specialization	
	Specialization	
	Thesis of title	
Professional experience		
Lecturer in the Department of Plant Production Technologies		
Farm management		
Garden design and engineering		
Nurseries		
The academic subjects you have taught		
Deciduous fruit production		
Irrigation and soil salinity		
Forage and pasture crops		
Ornamental plants and landscaping		
Animal production		
Published research		
Effect of foliar of Urea and Boric Acid on Growth parameters and Yield of Eggplant <i>Solanum Melongana</i> L.		
RESPONSE OF CHEMICAL AND QUALITATIVE CONTENT OF ARMENIAN CUCUMBER TO ADDING N.P.K FERTILIZER AND SPRAYING NANO-BORON UNDER PROTECTED HOUSES CONDITIONS		
RESPONSE GROWTH AND YIELD SNAKE CUCUMBER UNDER PLASTIC HOUSES UNHEATED CONDITIONS TO NPK FERTILIZER SPLIT NANO-BORON SPRAYING		



CV



Personal information	
Full name and surname	Ghufuran Moahsin Bashah Alibrahimi
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Sex	Female
Birthplace	Iraq/Najaf
Date of birth	18/1/1997
Governorate	Najaf
Marital status	Married
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Phone number	07867667127

Qualifications		
BSC	The university	University of Kufa
	The college	Gollege of Agriculture
	Department	Plant Protection
	Graduation Year	2019
	General specialization	Plant Protection
	Specialization	Plant Protection
	Graduation research title	
MSC	The university	University of Kufa
	The college	Gollege of Agriculture
	Department	Plant Protection
	Graduation Year	2022
	General specialization	Plant Protection
	Specialization	Plant Diseases
	Thesis of title	Isolation and identification of fungi causing damping off disease on cucumber and controlling it by using the integration of



		some cultivars with Trichoderma longibrachiatum
PHD	The university	
	The college	
	Department	
	Graduation Year	
	General specialization	
	Specialization	
	Thesis of title	
Professional experience		
The academic subjects you have taught		
Practical Plant Diseases		
Published research		
Evaluate the susceptibility of different varieties of cucumber to damping- off pathogens under field conditions”		
The effect of Trichoderma longibrachiatum Against Damping-off Pathogens on Different Varieties of Cucumber in Vitro		
Authors		



CV



Personal information	
Full name and surname	Anaam Jali Ethbeab AL – hecheemi
Scientific title	Assistant Lecturer
Sex	Female
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Date of birth	24/6/1994
Governorate	Najaf
Marital status	Marred
E-mail	anaam.ethbeab.iku@atu.edu.iq
Phone number	07800347243

Qualifications		
BSC	The university	University of Thi Qar
	The college	College of Agriculture
	Department	Field crops
	Graduation Year	2019
	General specialization	Field crops
	Specialization	Field crops
	Graduation research title	
MSC	The university	AL-QASIM GREEN UNIVERSITY
	The college	Agriculture science
	Department	Field crops
	Graduation Year	2022
	General specialization	Field crops
	Specialization	Field crops
	Thesis of title	Response of three faba bean(vicia faba) cultivars to adding of tow animal manure.

Professional experience	
Teaching in the Department of Plant Production Technologies/currently	
The academic subjects you have taught	



Beekeeping

Published research

Response of three faba bean varieties to adding of tow animal manure

Effect of adding organic fertilizer on yield traits of three cultivars of broad bean (Vicia faba L).

8: Seventh standard: Facilities

8-1: offices, classrooms, and laboratories

1- Offices: The work of the academic program includes a number of administrative and legal procedures and facilities to overcome obstacles in front of students to reach the required student outcomes, as the offices of the head of the department and the rapporteur of the department are always open to students to listen to the problems that hinder the student's study and to overcome these obstacles as for his studies during the study period. In addition to the presence of a number of teaching assistants who are close to the students to support them scientifically, morally, and sometimes financially.

2- The educational program has a number of classrooms equipped with the late educational technologies to assist the teacher in delivering the scientific material to the student, in addition to auxiliary systems such as (air conditioning, heating, lighting, etc.) that give the student psychological comfort during the lecture.

3-The Plant Production Technologies program supports its methodological components through a number of laboratories (approximately 5 laboratories) distributed over seven spaces. The department also includes a number of electronic computer laboratories that benefit the educational program and are located in the electronic calculator center at the institute.

8-2: Library services

In fact, the institute's library is available to serve the educational program, and there is also a central library for the entire university program that contains a large number of specialized and modern books, in addition to a number of specialized periodicals and magazines. In addition, the library contains an electronic library that includes more than thirty thousand titles in various specializations available to students.



8-3: Comprehensive comments about the facilities

Everything that is prepared in the educational program or department within the group of facilities (devices, library, laboratories, computer resources, etc.) is to meet the students' need to complete the educational project and implement the required outputs, as in periodic periods the work of these matters is reviewed to develop their performance, update them, or conduct Calibrate it or remove it from service and replace it with something better.

8-4: SWOT analysis of facilities

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis departs from expectations. This was done in accordance with the analysis of SWOT Table (7) presents the SWOT analysis of the facilities.

Table (7) SWOT analysis of facilities

Strength point	Weaknesses
1- The presence of the institute's library at the service of the educational program. 2- There is a central library for the entire university program that contains a large number of specialized and modern books, in addition to a number of specialized periodicals and magazines. 3- An electronic library that includes more than thirty thousand titles in various specializations available to students. 4-The educational program has a number of classrooms. 5- The Plant Production Technologies program supports its methodological vocabulary through a number of laboratories (approximately 5 laboratories).	1- There is no financial resource for the department. 2- Lack of financial allocation to support the capabilities of the scientific department through the availability of better educational platforms
Opportunities	Threats
1- Graduating students qualified to work	1- There is no direct impact from the



in both the public and private sectors. 2- Graduating competent students qualified to compete in the labor market.	scientific department on research due to the lack of job opportunities.
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Department steps for improvement

1- Overcoming obstacles in front of students to reach the required student outcomes, as the offices of the department head and rapporteur are always open to students to listen to the problems that hinder the student's study and to overcome these obstacles regarding his studies during the study period.

9: Eighth standard: institutional support

9-1: leadership.

The leadership of the educational program is represented by the person of the head of the department, who is assisted in performing his duties by the department rapporteur, as there are certain specifications that must be met by the head of the department, such as a certificate. It is preferable for him to have a doctorate or a scientific title (assistant professor), and he has experience in administrative work and within the specialty, where the head of the department and the rapporteur are entrusted with carrying out the work. Routine activities, including preparing educational supplies, following up on the progress of the educational process, following up on students' problems, organizing the weekly schedule, semester and final exams, and other routine matters. In addition, important and crucial decisions related to the program or students are discussed and taken by the department council, which includes a number of professors in the department. The department council meeting is held every two weeks to discuss important matters and make the necessary decisions. Among the matters being discussed in the Department Council are the approval of the results of the semester and final examinations, the financial situation of the educational program and the mechanism for disbursing the program's budget, the formation of the educational program committees, and others.

9-2: The program budget and financial support

1- The educational program does not have a special budget, as it depends entirely on the institute to meet all its fixed and changing needs.

2- Annually, a sabbatical is given to a number of professors and technicians to participate in conferences and workshops that work to develop the educational program as well as provide opportunities to complete studies for those holding bachelor's degrees.



3- In fact, there is no source of funding for the educational program other than institutional funding in order to provide maintenance and modernization of the infrastructure, necessary supplies, and equipment used in the program.

4 -The fact that the funding sources for the program are sufficient to meet the program's needs to ensure the achievement of the student's outcomes required in the program.

9-3: Employment

During unspecified periods of time, a number of administrative and technical people are appointed to support the work of the program and complete the students' journey, and as needed, an announcement is made in which the conditions that must be met by the person who wishes to work are set, and then the people wishing to work in the program are interviewed, and through the interview an evaluation is made. The person, in addition to other criteria, is adopted to make a comparison between applicants for work, such as theoretical and practical tests and choosing the most qualified among them.

9-4: Creating and disabling branches in the department.

1- Branches and departments are created in specific institutes through the following steps:

A - A committee of teachers at the institute with different specializations is assigned to submit a study on the development of new branches, including the vision, mission, goals, labor market need for the creation, and the branches proposed in the department, provided that the number of branches is not less than two branches in

Department A (there are conditions and controls for the development of branches and scientific departments that must be provided To create).

B- The proposed study is presented to the institute's council to be discussed and approved and submitted to Al-Furat Al-Awsat Technical University to approve the reason for opening those branches.

C- The study is submitted to the Department of Planning and Follow-up in the Iraqi Ministry of Higher Education and Scientific Research to observe the provision of conditions and controls stipulated in the applicable laws, and then the Minister's approval for the development is obtained.



2 - A specific section is closed if:

- 1-The number of students is less than 50 students.
- 2- Lack of a building for the department.
- 3-There is not enough staff to open the department.

9-5: Support for the department's professional development

Annually, before the start of the academic year, each educational program presents the complete plan for the academic year, including courses, workshops, seminars, student activities, cultural, artistic, sporting, and others, in order to make financial allocations and provide other requirements necessary to implement the submitted plan.

9-6: Comprehensive comments about facilities

Everything that is prepared in the educational program or college within the group of facilities (devices, library, laboratories, computer resources, etc.) is to meet the students' need to complete the educational project and implement the required outputs, as in periodic periods the work of these matters is reviewed to develop their performance, update them, or conduct Periodic calibration or removing the unsuitable for operation from service and replacing it with something better.

9-7: SWOT analysis of institutional support

This analysis reviews the strengths, weaknesses, opportunities, and threats. This analysis consists of two parts: the analysis of the internal situation, represented by the strengths and weaknesses, which must be limited to the strengths and weaknesses that actually exist, and the analysis departs from expectations. This was done in accordance with the analysis of SWOT Table (8) presents the SWOT analysis of institutional support.



Table (8) SWOT analysis of institutional support

Strength point	Weaknesses
<p>1- The presence of a department head who holds a doctorate and holds the scientific title of Assistant Professor.</p> <p>2- Follow up on the progress of the educational process, follow up on students' problems on a daily basis, organize the weekly schedule, semester and final exams, etc.</p> <p>3- Important and crucial decisions related to the program or students are discussed and taken by the department council, which includes a number of professors in the department, and the department council meeting is held every two weeks.</p>	<p>1-The educational program does not have a special budget, as it depends entirely on the institute to meet all its fixed and changing needs.</p>
Opportunities	Threats
<p>1- The fact that the funding sources for the program are sufficient to meet the program's needs to ensure the achievement of the student's outcomes required in the program.</p>	<p>1- The presence of competing private colleges.</p> <p>2- Lack of job opportunities for graduates of the department.</p> <p>3- Lack of appointment for graduate students.</p>

Department steps for improvement

1- Overcoming obstacles facing students and providing their academic requirements to reach the required student outcomes, as the offices of the department head and rapporteur are always open to students to listen to problems.

2- Giving a sabbatical to a number of professors and technicians to participate in conferences and workshops that work to develop the educational program, as well as providing opportunities to complete studies for diploma, bachelor's, and master's degree holders among them.



Course description: General soil

University: Al-Furat Al-Awsat Technical University

College Institute: Technical Institute / Kufa

Scientific Section: Plant Production Techniques

Material: **General soil**

Date of filling out the file: 6/2/2025



The signature :

Headquarters Preparer:

Assist. Pro. Dr Shather Abdel Hamza Omran

Date: 6/2/2025



The signature :

Name of department head:

Assist. Pro. Dr. Haider Abadi Nasser

Date: 6/2/2025



Course description form for general soil subject

Course description

Study of physical soil characteristics such as density, moisture, mechanical analysis, etc. Studying the chemical properties of soil such as salinity, pH, lime, gypsum, etc. Study of the morphological characteristics of soil. Knowing the relationship of the above characteristics to plant growth and crop production.

1-Educational Institution	Al-Furat Al-Awsat University
2-University / Institute	Technical Institute / Kufa
3-Scientific Department	Plant Production Techniques
4-Name/code of the course	General Soil / Pp0105
5-Available forms of attendance	Mandatory
6-Semester/Year	Semester/2024-2025
7-The total number of study hours	The total number of study hours is (1) theoretical hour, (3) practical hours
8-Date of preparing the description	6/2/2025
Objectives of the course	Providing the student with information that enables him to know many of the basics of soil science first, then studying the physical and chemical characteristics of soil for each type and the importance of each of them agriculturally. As a result, the student will be familiar with the general concepts of soil science and each type separately and the types of characteristics that distinguish them, and enabling the student to know them from various samples. Its type is determined by the shape of its tissue and its chemical and physical characteristics.

10- Required program outcomes and teaching and evaluation methods

A- Cognitive objectives

- 1- The student's ability to define general soil science and understand its importance and interaction with other branches of life science.
- 2- Introducing students to soil science terminology and differentiating between different types of soil.
- 3- Learn how to take samples and models and analyze them chemically and physically
- 4- Knowing the relationship of the above characteristics to plant growth and crop



production
B- The program's skill objectives
B1- The ability to deal with soil testing devices B2- Preparing chemicals for testing soil samples B3- Diagnosing soil types based on differences in their textures and agricultural characteristics.
Teaching and teaching methods
1- Using the method of discussion and eliciting the answer in giving the practical lecture when teaching the theoretical aspect 2- Use the display or screen to display pictures or scientific films to attract the student's attention to interact with the lecture. 3- Use the blackboard and colored pens to illustrate certain diagrams and terms. 4- Use the microscope and laboratory tools when teaching the practical aspect of the lecture
Evaluation methods
1- Conducting surprise and quick tests in an attempt to evaluate and evaluate the previous lecture. 2- Requesting the preparation of reports on practical experiments and seminars on topics related to the curriculum to encourage scientific research 3- Conducting oral and practical tests.
C- Thinking skills
C1-The ability to make decisions by identifying and identifying soil types C2- The ability to organize information and apply it practically to determine and conduct the correct test to determine all types of soil C3- The ability to research and investigate to increase experience and awareness C3- Cultivating and developing qualitative qualities such as love of superiority, altruism, and cooperation
Teaching and learning methods
Blackboard, slides, demonstrations using the screen or data show, performing practical experiments, seminars
Evaluation methods
Daily exams, oral exams, quarterly exams, performing scientific experiments, writing reports
D- General and qualifying transferable skills (other skills related to characterization and personal development)
1- Preparing students who have the ability to diagnose soil texture and the ability to identify and withdraw appropriate samples and choose the correct tests to reach a correct diagnosis of soil types.



Course structure

The week	The Hours	Required learning outcomes	Name of the unit/ subject	Teaching method	Evaluation method
1	1	Understanding the topic and the ability to apply it correctly	Soil science - its branches, importance and purpose of soil analysis	Lectures	Oral exams
2	1	Understanding the topic and the ability to apply it correctly	Some morphological characteristics of soil	Lectures	Oral exams
3	1	Understanding the topic and the ability to apply it correctly	Physical characteristics of soil and their relationship to plant growth	Lectures	Oral exams
4	1	Understanding the topic and the ability to apply it correctly	Physical characteristics of soil and their relationship to plant growth	Lectures	Oral exams
5	1	Understanding the topic and the ability to apply it correctly	Physical characteristics of soil and their relationship to plant growth	Lectures	Oral exams
6	1	Understanding the topic and the ability to apply it correctly	Soil water	Lectures	Oral exams
7	1	Understanding the topic and the ability to apply it correctly	Soil temperature and soil air	Lectures	Oral exams
8	1	Understanding the topic and the ability to apply it correctly	Organic colloids	Lectures	Oral exams
9	1	Understanding the topic and the ability to apply it correctly	Clay minerals	Lectures	Oral exams
10	1	Understanding the topic and the ability to apply it correctly	Cation exchange capacity of soil.	Lectures	Oral exams
11	1	Understanding the topic and the ability to apply it correctly	Electrical conductivity of soil Ec	Lectures	Oral exams
12	1	Understanding the topic and the ability to apply it correctly	Soil salinity	Lectures	Oral exams
13	1	Understanding the topic	Nutrients and their	Lectures	Oral exams



		and the ability to apply it correctly	importance to plants.		
14	1	Understanding the topic and the ability to apply it correctly	Lime and gypsum in the soil	Lectures	Oral exams
15	1	Understanding the topic and the ability to apply it correctly	Lime and gypsum in the soil	Lectures	Oral exams

Infrastructure

No		
1	Educational bags	required course books
2	Main references	Reference books
3	Recommended books and references	(scientific journals, scientific reports)
4	Electronic references	Internet sites

Course development plan:

The attempt to develop any course is done first by evaluating it and then evaluating it to determine or diagnose its strengths and weaknesses and then develop successful solutions to advance the course. I believe that the best way to update the course vocabulary is scientific communication through access to the latest sources, whether books or published research.



Course description of the theoretical subject of forage crops and pastures

University: Al-Furat Al-Awsat Technical University

College Institute: Technical Institute / Kufa

Scientific Section: Plant Production Techniques

Material: **Fodder crops and pastures**

Date of filling out the file: 6/2/2025



The signature :

Headquarters Preparer:

Assist. Lecturer .Ali Samir Moaen

Date: 6/2/2025



The signature :

Name of department head:

Assist. Pro. Dr Haider Abadi Nasser

Date: 6/2/2025



Course description template for fodder crops and pastures

Course description

Teaching the student the foundations and principles of producing forage and pasture crops and their impact on farm animals. Cultivation and service of fodder crops. The appropriate stage for cutting plants and presenting them to animals. Exploiting natural pastures and methods of improving them. Preparing fodder mixtures.

1-Educational Institution	Al-Furat Al-Awsat University
2-University / Institute	Technical Institute / Kufa
3-Scientific Department	Plant Production Techniques
4-Name/code of the course	Fodder crops and pastures / Pp0133
5-Available forms of attendance	Mandatory
6-Semester/Year	Semester/2024-2025
7-The total number of study hours	The total number of study hours is (1) theoretical hour, (3) practical hours
8-Date of preparing the description	6/2/2025
Objectives of the course	Providing the student with information that enables him to know many of the basics of the science of forage and pasture crops, first, then preparing and preparing the land for cultivation for each type, and the agricultural importance of each of them. In the end, the student will be familiar with the concepts of the science of forage and pasture crops, and each type of them separately, and the types of characteristics that distinguish them, and enabling the student to know them from Various samples and determining their type through shape and their effect on farm animals.



10- Required program outcomes and teaching and evaluation methods
A- Cognitive objectives
<ol style="list-style-type: none"> 1- The student's ability to define Fodder crops and pastures science and understand its 2- Introducing students to the terminology of forage and pasture crops and differentiating between different types of crops. 3- Learn how to grow and serve fodder crops. 4- Knowing the relationship of the above characteristics to plant growth and crop production.
B- The program's skill objectives
<ol style="list-style-type: none"> 1- Ability to grow and serve forage crops. 2- The appropriate stage for cutting plants and presenting them to animals. 3- Exploiting natural pastures and methods of improving them. 4- Preparation of feed mixtures.
Teaching and teaching methods
<ol style="list-style-type: none"> 1- Using the method of discussion and eliciting the answer in giving the practical lecture when teaching the theoretical aspect 2- Use the display or screen to display pictures or scientific films to attract the student's attention to interact with the lecture. 3- Use the blackboard and colored pens to illustrate certain diagrams and terms. 4- Use the microscope and laboratory tools when teaching the practical aspect of the lecture.
Evaluation methods
<ol style="list-style-type: none"> 1- Conducting surprise and quick tests in an attempt to evaluate and evaluate the previous lecture. 2- Requesting the preparation of reports on practical experiments and seminars on topics related to the curriculum to encourage scientific research 3- Conducting oral and practical tests.
C- Thinking skills
<ol style="list-style-type: none"> 1-The ability to make decisions by identifying and identifying types of fodder and pasture crops 2- The ability to organize information and apply it practically to determine and conduct the correct test to identify crops of all types 3- The ability to research and investigate to increase experience and awareness 3- Cultivating and developing qualitative qualities such as love of excellence, altruism and cooperation.
Teaching and learning methods
Blackboard, slides, demonstrations using the screen or data show, performing practical experiments, seminars.
Evaluation methods
Daily exams, oral exams, quarterly exams, performing scientific experiments, writing reports.
D- General and qualifying transferable skills (other skills related to characterization and personal development)



1- Preparing students who have the ability to diagnose fodder crops and pastures and the ability to determine the cultivation and service of fodder crops, exploitation of natural pastures and methods for improving them.

Course structure

The week	The hours	Required learning outcomes	Name of the unit/ subject	Teaching method	Evaluation method
1	1	Understanding the topic and the ability to apply it correctly	The importance of livestock, the importance of fodder crops and their role in meeting the fodder needs of livestock, the reality of cultivating fodder crops in Iraq	Lectures	Oral exams
2	1	Understanding the topic and the ability to apply it correctly	Factors affecting fodder production and quality, exploitation of saline and barren lands in the production of fodder crops	Lectures	Oral exams
3	1	Understanding the topic and the ability to apply it correctly	Production of leguminous fodder crops (1) (jet) economic importance, suitable environmental conditions, production of jet seeds	Lectures	Oral exams
4	1	Understanding the topic and the ability to apply it correctly	(2) - (Clover) is the same vocabulary as Jat.	Lectures	Oral exams
5	1	Understanding the topic and the ability to apply it correctly	(3) - (hartman, karat, kakouz) the same vocabulary as before.	Lectures	Oral exams
6	1	Understanding the topic and the ability to apply it correctly	Production of grassy fodder crops (1) yellow corn, including its economic importance, suitable environmental conditions, production foundations, and its fodder uses.	Lectures	Oral exams
7	1	Understanding the topic and the ability to apply it correctly	(2) - (White corn, Sudanese cannabis) The same vocabulary as before, with the mention of species belonging to the genus Sorghum. The danger of green feeding to animals as a result of	Lectures	Oral exams



			poisoning with hydrocyanic acid (HCN).		
8	1	Understanding the topic and the ability to apply it correctly	(3) - (Barley, oats, millet) economic importance, basis of production, species used for the purpose of fodder, exploitation for the purpose of fodder	Lectures	Oral exams
9	1	Understanding the topic and the ability to apply it correctly	Concentrated feed materials, their importance in animal nutrition, their sources, their nutritional content (chemical composition).	Lectures	Oral exams
10	1	Understanding the topic and the ability to apply it correctly	Feed mixtures, their definition, importance, types, basics of the elements included in the feed mixture	Lectures	Oral exams
11	1	Understanding the topic and the ability to apply it correctly	Threshing, its definition, its importance in feeding animals, why do we resort to threshing, determining the appropriate time for cutting according to the stages of growth, drying methods, types of loss of fodder material during the threshing process.	Lectures	Oral exams
12	1	Understanding the topic and the ability to apply it correctly	Silage, its definition, the importance of its manufacture, manufacturing steps, determining the stages of cutting, chemical changes to the feed during preservation, methods of preserving silage, preservatives, types of loss in nutritional value resulting from preservation.	Lectures	Oral exams
13	1	Understanding the topic and the ability to apply it correctly	Pastures, their definition, importance, and types	Lectures	Oral exams
14	1	Understanding the topic and the ability to apply it correctly	Foundations of quantitative assessment of pasture germination, determining pasture	Lectures	Oral exams



			productivity		
15	1	Understanding the topic and the ability to apply it correctly	Reasons for the deterioration of natural pastures, methods for improving natural pastures and how to preserve them	Lectures	Oral exams

Infrastructure

No		
1	Educational bags	required course books
2	Main references	Reference books
3	Recommended books and references	(scientific journals, scientific reports)
4	Electronic references	Internet sites

Course development plan:

The attempt to develop any course is done first by evaluating it and then evaluating it to determine or diagnose its strengths and weaknesses and then develop successful solutions to advance the course. I believe that the best way to update the course vocabulary is scientific communication through access to the latest sources, whether books or published research.



Course description for theoretical plant protection

University: Al-Furat Al-Awsat Technical University

College Institute: Technical Institute / Kufa

Scientific Section: Plant Production Techniques

Material: **Plant protection**

Date of filling out the file: 6/2/2025



The signature :

Headquarters Preparer:

Assist. Pro. Dr .Haider Abadi Nasser

Date: 6/2/2025



The signature :

Name of department head:

Assist. Pro. Dr .Haider Abadi Nasser

Date: 6/2/2025



Course description template for fodder crops and pastures

Course description

Study of insects in terms of internal anatomy, external form, functions, body appendages, and their modification to suit insect living, study of insect behavior, their ranks, and environmental factors affecting insect numbers. This course also deals with the principles of classification. Also studying the causes of diseases such as bacteria, fungi, and viruses, and the way in which these organisms cause disease and its relationship to various weather and environmental factors, and methods of control using pesticides, and other methods, as well as studying the damage caused by insects and methods of combating them.

1-Educational Institution	Al-Furat Al-Awsat University
2-University / Institute	Technical Institute / Kufa
3-Scientific Department	Plant Production Techniques
4-Name/code of the course	Plant protection/ Pp0104
5-Available forms of attendance	Mandatory
6-Semester/Year	Semester/2024-2025
7-The total number of study hours	The total number of study hours is (1) theoretical hour, (3) practical hours
8-Date of preparing the description	6/2/2025
Objectives of the course	Providing the student with information that enables him to know many of the basics of plant protection science first, then studying the diseases and insects of each type and the agricultural importance of each of them. As a result, the student will be familiar with the concepts of diseases and insects and each type of them separately and the types of symptoms they produce and enabling the student to isolate and diagnose them from various samples and determine their type. Through the form of symptoms it causes on plants..



10- Required program outcomes and teaching and evaluation methods
A- Cognitive objectives
1- 1- The student's ability to define the science of plant protection and understand its importance and interaction with other branches of life science. 2- 2- Introducing students to plant protection terminology and differentiating between different types of diseases and insects. 3- 3- Learn how to take samples and disease and insect samples 4- 4- Identify the symptoms and means that facilitate the spread of diseases and insects among plants.
B- The program's skill objectives
B1- The ability to handle a microscope and examine glass slides B2- Preparing glass slides for samples of infected plants B3- Diagnosing fungal and insect species based on differences in the shapes of their colonies on culture dishes.
Teaching and teaching methods
1- Using the method of discussion and eliciting the answer in giving the practical lecture when teaching the theoretical aspect 2- Use the display or screen to display pictures or scientific films to attract the student's attention to interact with the lecture. 3- Use the blackboard and colored pens to illustrate certain diagrams and terms. 4- Use the microscope and laboratory tools when teaching the practical aspect of the lecture
Evaluation methods
1-Conducting surprise and quick tests in an attempt to evaluate and evaluate the previous lecture. 2- Requesting the preparation of reports on practical experiments and seminars on topics related to the curriculum to encourage scientific research 3- Conducting oral and practical tests.
C- Thinking skills
C1-The ability to make decisions by identifying and identifying the pathogen and insect. C2- The ability to organize information and apply it practically to identify and conduct the correct test to identify the pathogen. C3- The ability to research and investigate to increase experience and awareness. C4- Cultivating and developing qualitative qualities such as love of superiority, altruism, and cooperation.
Teaching and learning methods
Blackboard, slides, demonstrations using the screen or data show, performing practical experiments, seminars.
Evaluation methods
Daily exams, oral exams, quarterly exams, performing scientific experiments, writing reports.
D- General and qualifying transferable skills (other skills related to characterization and personal development)
1- Preparing students who have the ability to diagnose diseases and insects and the ability to identify and withdraw appropriate samples and choose the correct tests to



reach a correct diagnosis of the pathogen and insect.

Course structure

The week	The hours	Required learning outcomes	Name of the unit/ subject	Teaching method	Evaluation method
1	1	Understanding the topic and the ability to apply it correctly	Insect harm and benefits	Lectures	Oral exams
2	1	Understanding the topic and the ability to apply it correctly	Factors for the success of insects and their spread in nature	Lectures	Oral exams
3	1	Understanding the topic and the ability to apply it correctly	Reproduction and growth - methods of insect reproduction	Lectures	Oral exams
4	1	Understanding the topic and the ability to apply it correctly	Types of nutrition in insects	Lectures	Oral exams
5	1	Understanding the topic and the ability to apply it correctly	The environments in which insects live	Lectures	Oral exams
6	1	Understanding the topic and the ability to apply it correctly	Non-insect animal pests - mite order	Lectures	Oral exams
7	1	Understanding the topic and the ability to apply it correctly	Non-insect animal pests - order of rodents	Lectures	Oral exams
8	1	Understanding the topic and the ability to apply it correctly	Non-insect animal pests - the order of birds and rodents	Lectures	Oral exams
9	1	Understanding the topic and the ability to apply it correctly	The economic importance of plant diseases and the losses resulting from them, giving examples of the most important diseases in Iraq and the world	Lectures	Oral exams
10	1	Understanding the topic and the ability to apply it correctly	Some definitions in plant pathology and their role in the upcoming topics	Lectures	Oral exams
11	1	Understanding the topic and the ability to apply it correctly	The manner or method by which the pathogen enters plant tissue	Lectures	Oral exams
12	1	Understanding the topic and the ability to apply it correctly	Methods of transmission and spread of plant diseases	Lectures	Oral exams
13	1	Understanding the topic and the ability to apply it correctly	Predisposing factors to plant diseases.	Lectures	Oral exams
14	1	Understanding the	Fungi - characteristics of	Lectures	Oral exams



		topic and the ability to apply it correctly	fungi, methods of feeding fungi, methods of reproduction of fungi, division of fungi.		
15	1	Understanding the topic and the ability to apply it correctly	Nematodes as plant pathogens - nematode body structure, type of damage they cause	Lectures	Oral exams

Infrastructure

No		
1	Educational bags	required course books
2	Main references	Reference books
3	Recommended books and references	(Plant diseases\ George Agrios 2\Natural Enemies An Introduction to Biological Control Ann E. Hajek
4	Electronic references	https://meleigi.com/

Course development plan:

The attempt to develop any course is done first by evaluating it and then evaluating it to determine or diagnose its strengths and weaknesses and then develop successful solutions to advance the course. I believe that the best way to update the course vocabulary is scientific communication through access to the latest sources, whether books or published research.



Description of the course Weeds and control

University: Al-Furat Al-Awsat Technical University

College Institute: Technical Institute / Kufa

Scientific Section: Plant Production Techniques

Material: **Weeds and control**

Date of filling out the file: 6/2/2025



The signature :

Headquarters Preparer:

Assist. Lecturer .Ahmed Jwad Kadhim

Date: 6/2/2025



The signature :

Name of department head:

Assist. Pro. Dr Haider Abadi Nasser

Date: 6/2/2025



Course description template for fodder crops and pastures

Course description

The study of jungles in terms of their external appearance, their benefits and harms to humans, animals and plants, their modification to suit their livelihood, how they spread and reproduce, the appropriate environmental conditions, their types and methods of division, and the environmental factors affecting their numbers. This course also deals with the principles of classification according to families and the environment in which they live. Also studying methods of control using pesticides and other methods.

1-Educational Institution	Al-Furat Al-Awsat University
2-University / Institute	Technical Institute / Kufa
3-Scientific Department	Plant Production Techniques
4-Name/code of the course	Weeds and control /Pp0134
5-Available forms of attendance	Mandatory
6-Semester/Year	Semester/2024-2025
7-The total number of study hours	The total number of study hours is (1) theoretical hour, (3) practical hours
8-Date of preparing the description	6/2/2025
Objectives of the course	Providing the student with information that enables him to learn many of the basics of bush science first, then studying how to diagnose each type and the agricultural importance of each of them. In the end, the student will be familiar with the concepts of bush science and each type separately and the types of damage they produce, enabling the student to collect and diagnose them from various soils and determine their type. Through the form of symptoms it causes on plants.



10- Required program outcomes and teaching and evaluation methods
A- Cognitive objectives
<p>1-The student's ability to define Weeds science and understand its importance and interaction with other branches of life science.</p> <p>2- Introducing students to Weeds terminology and differentiating between different types of Weeds.</p> <p>3- Learn how to take samples and models from the Weeds and how to collect and diagnose them</p> <p>4-Identify the conditions and means that facilitate the spread of Weeds among abundant plants</p>
B- The program's skill objectives
<p>B1- The ability to diagnose Weeds based on the differences in their shapes and types</p> <p>B2- Prepare samples of the bush by collecting them and drying them on special papers</p> <p>B3- Methods of controlling it using pesticides and other methods</p>
Teaching and teaching methods
<p>1- Using the method of discussion and eliciting the answer in giving the practical lecture when teaching the theoretical aspect of it.</p> <p>2-Use the display or screen to display pictures or scientific films to attract the student's attention to interact with the lecture.</p> <p>3-Use the blackboard and colored pens to illustrate certain diagrams and terms.</p> <p>4-Use the microscope and laboratory tools when teaching the practical aspect of the lecture</p>
Evaluation methods
<p>1- Conducting surprise and quick tests in an attempt to evaluate and evaluate the previous lecture.</p> <p>2- Requesting the preparation of reports on practical experiments and seminars on topics related to the curriculum to encourage scientific research</p> <p>3- Conducting oral and practical tests.</p>
C- Thinking skills
<p>C1-The ability to make decisions by identifying and identifying Weeds</p> <p>C2- The ability to organize information and apply it practically to determine and conduct the correct test to identify Weeds</p> <p>C3- The ability to research and investigate to increase experience and awareness</p> <p>C3- Cultivating and developing qualitative qualities such as love of superiority, altruism, and cooperation.</p>
Teaching and learning methods
<p>Blackboard, slides, demonstrations using the screen or data show, performing practical experiments, seminars.</p>
Evaluation methods
<p>Daily exams, oral exams, quarterly exams, performing scientific experiments, writing reports.</p>
D- General and qualifying transferable skills (other skills related to characterization and personal development)



1- 1- Preparing students who have the ability to diagnose Weeds and the ability to identify and collect appropriate samples and choose the correct tests to reach a correct diagnosis of Weeds.

Course structure

The week	The hours	Required learning outcomes	Name of the unit/ subject	Teaching method	Evaluation method
1	1	Understanding the topic and the ability to apply it correctly	Weed science , Aweed , the impoyance , the characterise of weeds .	Lectures	Oral exams
2	1	Understanding the topic and the ability to apply it correctly	The harmful effects of weeds .	Lectures	Oral exams
3	1	Understanding the topic and the ability to apply it correctly	The advantage of weeds .	Lectures	Oral exams
4	1	Understanding the topic and the ability to apply it correctly	The classification and weeds (according the life cycle and the growth season)	Lectures	Oral exams
5	1	Understanding the topic and the ability to apply it correctly	The classification and weeds (according the life cycle and the growth season)	Lectures	Oral exams
6	1	Understanding the topic and the ability to apply it correctly	Reproduction and dissemination of weeds	Lectures	Oral exams
7	1	Understanding the topic and the ability to apply it correctly	Reproduction and dissemination of weeds	Lectures	Oral exams
8	1	Understanding the topic and the ability to apply it correctly	comparison between the mechanical (manual) and chemical methods of weed control .	Lectures	Oral exams
9	1	Understanding the topic and the ability to apply it correctly	Herbicides formulation .	Lectures	Oral exams
10	1	Understanding the topic and the ability to apply it correctly	Prevention of weed spread	Lectures	Oral exams
11	1	Understanding the topic and the ability to apply it correctly	Methods of Herbicides classification .	Lectures	Oral exams
12	1	Understanding the topic and the ability to apply it correctly	Methods of Herbicides classification .	Lectures	Oral exams
13	1	Understanding the topic and the ability to apply it correctly	Methods of Herbicides classification	Lectures	Oral exams



14	1	Understanding the topic and the ability to apply it correctly	Methods of Herbicides classification	Lectures	Oral exams
15	1	Understanding the topic and the ability to apply it correctly	Adjuvants and surface – active agents .	Lectures	Oral exams

Infrastructure

No		
1	Educational bags	required course books
2	Main references	Reference books
3	Recommended books and references (scientific journals, reports)	(scientific journals, reports)
4	Electronic references, Internet sites	Internet sites

Course development plan:

The attempt to develop any course is done first by evaluating it and then evaluating it to determine or diagnose its strengths and weaknesses and then develop successful solutions to advance the course. I believe that the best way to update the course vocabulary is scientific communication through access to the latest sources, whether books or published research.



Course description: Theoretical tractors and agricultural machines

University: Al-Furat Al-Awsat Technical University

College Institute: Technical Institute / Kufa

Scientific Section: Plant Production Techniques

Material: **Agricultural tractors and machines**

Date of filling out the file: 6/2/2025



The signature :

Headquarters Preparer:

Assist. Lecturer .Ahmed Jwad Kadhim

Date: 6/2/2025



The signature :

Name of department head:

Assist. Pro. Dr Haider Abadi Nasser

Date: 6/2/2025



Course description template for fodder crops and pastures

Course description

Studying agricultural tractors and machines in terms of their internal components, external appearance, and functions, identifying agricultural tractors, training on them, how to use them in the field, and performing maintenance on them. This course also addresses knowledge of the importance of agricultural mechanization - types of tractors - public safety. Also, a study of the pulling systems (fuel system - cooling system) - types - important parts and benefits - malfunctions and maintenance.

1-Educational Institution	Al-Furat Al-Awsat University
2-University / Institute	Technical Institute / Kufa
3-Scientific Department	Plant Production Techniques
4-Name/code of the course	Agricultural tractors and machines/ Pp0106
5-Available forms of attendance	Mandatory
6-Semester/Year	Semester/2024-2025
7-The total number of study hours	The total number of study hours is (1) theoretical hour, (3) practical hours
8-Date of preparing the description	6/2/2025
Objectives of the course	Providing the student with information that enables him to know many of the basics of the science of tractors and agricultural machinery first, then studying the main parts of the tractor and the importance and how each part works. In the end, the student will be familiar with the concepts of the operation of tractor systems and identifying faults.



10- Required program outcomes and teaching and evaluation methods
A- Cognitive objectives
<p>1- The student's ability to define the science of tractors and agricultural machinery and understand its importance and interaction with other branches of life science.</p> <p>2-Introducing students to the terminology of tractors and agricultural machinery and differentiating between different types of tractors and machines.</p> <p>3- Learn how to use tractors and agricultural machinery</p> <p>4- Understanding the main parts of the tug, the importance and how each part works</p>
B- The program's skill objectives
<p>B1- The ability to deal with tractors and agricultural machinery.</p> <p>B2- The use of tractors and agricultural machinery, methods of diagnosing faults and maintenance.</p> <p>B3 Knowing the types of plows - the importance of the plowing process - the characteristics of good plowing.</p>
Teaching and teaching methods
<p>1- Using the method of discussion and eliciting the answer in giving the practical lecture when teaching the theoretical aspect of it.</p> <p>2-Use the display or screen to display pictures or scientific films to attract the student's attention to interact with the lecture.</p> <p>3- Use the blackboard and colored pens to illustrate certain diagrams and terms.</p> <p>4- Using machines and tools when teaching the practical side of the lecture</p>
Evaluation methods
<p>1-Conducting surprise and quick tests in an attempt to evaluate and evaluate the previous lecture.</p> <p>2- Requesting the preparation of reports on practical experiments and seminars on topics related to the curriculum to encourage scientific research</p> <p>3-Conducting oral and practical tests.</p>
C- Thinking skills
<p>C1-The ability to make decisions by identifying and identifying malfunctions in agricultural machinery</p> <p>C2- The ability to organize information and apply it practically to determine and conduct the correct test to determine the malfunction</p> <p>C3- The ability to research and investigate to increase experience and awareness</p> <p>C3- Cultivating and developing qualitative qualities such as love of superiority, altruism, and cooperation.</p>
Teaching and learning methods
<p>Blackboard, slides, demonstrations using the screen or data show, performing practical experiments, seminars.</p>
Evaluation methods
<p>Daily exams, oral exams, quarterly exams, performing scientific experiments, writing reports.</p>
D- General and qualifying transferable skills (other skills related to characterization and personal development)



1- Preparing students with the ability to learn how to use tractors and agricultural machinery

Course structure

The week	The hours	Required learning outcomes	Name of the unit/ subject	Teaching method	Evaluation method
1	1	Understanding the topic and the ability to apply it correctly	Knowing the importance of agricultural mechanization - types of tractors - public safety	Lectures	Oral exams
2	1	Understanding the topic and the ability to apply it correctly	Study of the main parts of the tug and the function of each part - transmission devices, their parts and function	Lectures	Oral exams
3	1	Understanding the topic and the ability to apply it correctly	Study of pulling systems (fuel system - cooling system) - types - important parts and benefits - malfunctions and maintenance	Lectures	Oral exams
4	1	Understanding the topic and the ability to apply it correctly	Study of the lubrication system - air purification system - exhaust system and silencer - its parts, function and malfunctions	Lectures	Oral exams
5	1	Understanding the topic and the ability to apply it correctly	Study of the electrical system - parts - the benefit, function and maintenance of each part	Lectures	Oral exams
6	1	Understanding the topic and the ability to apply it correctly	Knowledge of the devices and means of exploiting power in the tug, the hydraulic system - the traction shaft - the rear drive shaft P.T.O - the drive pulley	Lectures	Oral exams
7	1	Understanding the topic and the ability to apply it correctly	Study of the tug structure - parts and benefits - guidance system - stops - tug navigation device	Lectures	Oral exams
8	1	Understanding the topic and the ability to apply it correctly	Knowledge of the types of plows - the importance of the plowing process - the characteristics of good plowing	Lectures	Oral exams
9	1	Understanding the	Study of dumper plows -	Lectures	Oral exams



		topic and the ability to apply it correctly	disc dumper plows - their use - their parts - maintenance and methods of plowing with them.		
10	1	Understanding the topic and the ability to apply it correctly	Study of excavator plows - rotary plows - underground plows - their use - their parts	Lectures	Oral exams
11	1	Understanding the topic and the ability to apply it correctly	Knowledge of soil smoothing equipment - its use - its parts - leveling, planning and channel-digging machines - its importance - its use	Lectures	Oral exams
12	1	Understanding the topic and the ability to apply it correctly	Study of mechanized agriculture - fertilizer and seed spreading machine - its parts - types - calibration	Lectures	Oral exams
13	1	Understanding the topic and the ability to apply it correctly	Study of fertilized seed in brief - its parts - field evaluation - laboratory evaluation	Lectures	Oral exams
14	1	Understanding the topic and the ability to apply it correctly	Study of agricultural machines in lines - potato cultivation - types - standardization	Lectures	Oral exams
15	1	Understanding the topic and the ability to apply it correctly	Fodder cutting machines - their types - their parts, combined harvester - their work - the main assemblies of the harvester	Lectures	Oral exams

Infrastructure

No		
1	Educational bags	required course books
2	Main references	Reference books
3	Recommended books and references (scientific journals, reports)	Scientific journals - scientific research - scientific reports
4	Electronic references, Internet sites	Internet sites



Course development plan:

The attempt to develop any course is done first by evaluating it and then evaluating it to determine or diagnose its strengths and weaknesses and then develop successful solutions to advance the course. I believe that the best way to update the course vocabulary is scientific communication through access to the latest sources, whether books or published research.