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



# Academic Program and Course Description Guide

# Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

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## **Concepts and terminology:**

<u>Academic Program Description</u>: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**<u>Program Vision</u>**: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**<u>Program Mission</u>**: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**<u>Program Objectives</u>**: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

<u>Curriculum Structure</u>: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

<u>Teaching and learning strategies</u>: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

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# **Academic Program Description Form**

University Name: Al-Furat Al-Awsat Technical University Faculty/Institute: Kufa Technical Institute Scientific Department: Department of Plant Production Technologies Academic or Professional Program Name: Department of Plant Production Technologies Final Certificate Name: Technical Diploma Academic System: Corsi system Description Preparation Date : 29/2/2024 File Completion Date: 29/2/2024

Signature: Head of Department Name: Assist. Pro.Dr. Haider Abadi Nasser Hussein Al-Issawi Date: 29/2/2024 Signature: Scientific Associate Name: Assist. Pro.Dr. Muhammad Subhi Al-Zubaidi Date: 29/2/2024

The file is checked by: Department of Quality Assurance and University Performance Director of the Quality Assurance and University Performance Department: Kholoud Muzaffar Abdel Ali Date: / 3/2024 Signature:

Approval of the Dean

#### 1. Program 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.

## 2. Program Mission

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. Program Objectives

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.

# 4. Program Accreditation

Program accreditation has not been obtained for the Department of Plant Production Technologies

# 5. Other external influences

There is a relationship between graduate students, the labor market and other productive institutions.

| 6. Program Structure        |                      |              |            |                     |  |  |  |  |  |
|-----------------------------|----------------------|--------------|------------|---------------------|--|--|--|--|--|
| Program Structure           | Number of<br>Courses | Credit hours | Percentage | Reviews*            |  |  |  |  |  |
| Institution                 |                      |              |            |                     |  |  |  |  |  |
| Requirements                |                      |              |            |                     |  |  |  |  |  |
| <b>College Requirements</b> |                      |              |            |                     |  |  |  |  |  |
| Department                  | 35                   | 140          | 100%       | The course is basic |  |  |  |  |  |
| Requirements                |                      |              |            |                     |  |  |  |  |  |
| Summer Training             | 270                  | -            |            |                     |  |  |  |  |  |
| Other                       |                      |              |            |                     |  |  |  |  |  |

\* This can include notes whether the course is basic or optional.

| 7. Prog         | 7. Program Description |  |                                  |             |            |  |  |  |  |
|-----------------|------------------------|--|----------------------------------|-------------|------------|--|--|--|--|
| Y               | Year/Level             |  | Course Name                      | Cre         | edit Hours |  |  |  |  |
|                 |                        |  |                                  | theoretical | practical  |  |  |  |  |
| The first       | Autumn course          |  | Department of                    | 13          | 20         |  |  |  |  |
| class           | Spring course          |  | Plant Production<br>Technologies | 13          | 22         |  |  |  |  |
| The             | Autumn course          |  | Department of                    | 13          | 22         |  |  |  |  |
| second<br>class | Spring course          |  | Plant Production<br>Technologies | 11          | 22         |  |  |  |  |

| 8. Expected learning outcomes of the program  |   |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|
| Knowledge   |   |  |  |  |  |  |  |  |
| Learning outcomes 1<br>A- The program's cognitive objectives<br>1- Plant protection and farm management<br>2- Soil and beekeeping<br>3- Summer and winter field crops<br>4- Production of deciduous and persistent fruits<br>5- Plant diseases and general insects<br>6- Livestock production and protected agriculture | Learning Outcomes Statement 2<br>A- The cognitive objectives of the course<br>1- Controlling insect and non-insect pests<br>2- How to use modern irrigation systems and<br>overcome soil salinity<br>3- Production of summer and winter field crops<br>4- Production and propagation of various<br>seedlings of deciduous and perennial fruit trees.<br>5- How to develop integrated programs to<br>manage plant diseases and pests.<br>6- How to establish poultry and protected<br>agriculture projects |  |  |  |  |  |  |  |
| Skills  |   |  |  |  |  |  |  |  |
| Learning outcomes 1<br>B- The program's skill objectives<br>1-Learn about irrigation systems, control programs,<br>and orchard planning<br>2 - Improving maintenance and maintenance in the<br>use of agricultural devices and equipment<br>3 - Acquire skills in agriculture, control, irrigation<br>and planning      | Learning Outcomes Statement 2<br>B- The skills objectives of the course.<br>1 - Establishing and examining agricultural<br>systems<br>2- Determine the location of the defect<br>3 - How to manage several fields at once<br>4- Controlling other side effects  |  |  |  |  |  |  |  |
| Ethics  | 1   |  |  |  |  |  |  |  |

| Learning outcomes 1                                  | Learning Outcomes Statement 2                    |
|--|--|
| C- The emotional and value objectives of the         | C- The emotional and value objectives of the     |
| programme.   | course.  |
| 1- Production of seedlings and seedlings.            | 1- The student will have the ability to make     |
| 2- Thinking and diversifying ways to cultivate       | agricultural designs and calculations for        |
| modern and productive products.                      | production projects.                             |
| 3- Controlling the factors that help agriculture and | 2- Acquire the skill of protecting the field and |
| increase production.                                 | increasing production.                           |
| 4-The ability to work in agricultural institutions   | 3-Knowledge of service operations and systems    |
| and companies.                                       | development.                                     |
|  | 4- Teaching the student to prepare a research    |
|  | plan.  |

#### 9. Teaching and Learning Strategies

#### **Teaching Strategies**

It includes a set of general rules and broad outlines that concern means of achieving the desired goals of teaching through advance planning and setting future plans for (presentation - coordination - training - discussion), organizing the classroom environment, and classroom management for the purpose of developing students' education.

#### Learning strategies

It includes the behaviors and procedures that students engage in that aim to influence how they are able to process information and learn different tasks. Learning is strategic when students are aware of the special skills and strategies (specific procedures and methods) that they use in learning.

## **10. Evaluation methods**

Daily exams Oral exams Daily and monthly exams final exams

| 11.Faculty          |         |          |                                |             |               |                  |
|---------------------|---------|----------|--------------------------------|-------------|---------------|------------------|
| Faculty Members     |         |          |                                |             |               |                  |
| Academic Rank       | Specia  | lization | Spec<br>Requireme<br>(if appli | ents/Skills | Number of the | e teaching staff |
|                     | General | Special  |                                |             | Staff         | Lecturer         |
| Assistant Professor | 0       | 2        |                                |             | 2             | 0                |
| Lecturer            | 0       | 1        |                                |             | 1             | 0                |

| Assistant Lecturer | 0 | 4 |  | 4 | 0 | ļ |
|--------------------|---|---|--|---|---|---|
|                    |   |   |  |   |   |   |

| Professional Development                    |
|---|
| Mentoring new faculty members               |
| 1-Guidance.                                 |
| 2- Workshops.                               |
| 3-Discussions.                              |
| 4- Scientific seminars.                     |
| Professional development of faculty members |
| 1- Through the scientific conference        |
| 2- Scientific seminars in the department.   |
| 3- Discussions for professors and students. |
| 4- Research seminars.                       |
| 5- Seminars.                                |
| 6- Workshops                                |
| 7- Courses.                                 |

#### 12. Acceptance Criterion

Average: 60

Branch graduated from: Scientific - Applied - Biological - Vocational (Agricultural)

#### 13. The most important sources of information about the program

- 1- Methodical books
- 2- Professors' lectures
- 3- Scientific bags
- 4- Scientific research and theses
- 5- Internet sources

#### **14.Program 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.

|                   |                  |                | F                          | Program S            | kills        | Outli        | ne    |       |              |              |              |           |              |              |              |    |
|-------------------|------------------|----------------|----------------------------|----------------------|--------------|--------------|-------|-------|--------------|--------------|--------------|-----------|--------------|--------------|--------------|----|
|                   |                  |                |                            |                      |              |              |       | Requi | red pr       | ogran        | ı Learı      | ning ou   | itcome       | s            |              |    |
| Year/             | Level            | Course<br>Code | Course Name                | Basic or<br>optional |              | Knov         | wledg | e     |              | SI           | cills        |           |              | Eth          | nics         |    |
|                   |                  |                |                            |                      | A1           | A2           | A3    | A4    | <b>B1</b>    | <b>B2</b>    | <b>B3</b>    | <b>B4</b> | C1           | C2           | C3           | C4 |
|                   |                  | Pp0101         | Winter field crops         | Basic<br>specialty   | ✓            | ~            |       |       | ~            | ~            | $\checkmark$ |           | $\checkmark$ | ✓            |              |    |
|                   |                  | Pp0102         | Winter vegetable crops     | Basic<br>specialty   | $\checkmark$ | $\checkmark$ |       |       | $\checkmark$ | $\checkmark$ | $\checkmark$ |           | $\checkmark$ | ✓            |              |    |
|                   |                  | Pp0103         | Forests                    | Basic<br>specialty   | $\checkmark$ | ~            |       |       | ✓            | ~            | $\checkmark$ |           | ✓            | ~            |              |    |
|                   |                  | Pp0104         | Plant protection           | Assistant            | $\checkmark$ | $\checkmark$ |       |       | $\checkmark$ | $\checkmark$ | ✓            |           | $\checkmark$ | $\checkmark$ |              |    |
|                   |                  | Pp0105         | General soil               | Assistant            | $\checkmark$ | $\checkmark$ |       |       | $\checkmark$ | $\checkmark$ | $\checkmark$ |           | $\checkmark$ | $\checkmark$ |              |    |
|                   |                  | Pp0106         | Pullers and machines       | Assistant            | $\checkmark$ | $\checkmark$ |       |       | $\checkmark$ | $\checkmark$ | $\checkmark$ |           | $\checkmark$ | $\checkmark$ |              |    |
| The First<br>year | Autumn<br>course | <b>Pp07</b>    | Animal production          | Assistant            | $\checkmark$ | $\checkmark$ |       |       | $\checkmark$ | $\checkmark$ | $\checkmark$ |           | $\checkmark$ | ~            | $\checkmark$ |    |
| ·                 |                  | Pp0108         | Computer<br>applications/1 | Assistant            | ~            |              | ✓     |       | $\checkmark$ | $\checkmark$ |              |           | $\checkmark$ |              | $\checkmark$ |    |
|                   |                  | Pp0110         | English language           | General              | $\checkmark$ |              | ✓     |       | $\checkmark$ | $\checkmark$ |              |           | $\checkmark$ |              | $\checkmark$ |    |

|   |       | Pp0109        | Democracy and human<br>rights      | Assistant          | $\checkmark$ | ,   | / | ✓            | $\checkmark$ | ~            | ✓            |  |
|---|-------|---------------|------------------------------------|--------------------|--------------|-----|---|--------------|--------------|--------------|--------------|--|
|   |       | Pp0111        | Summer field crops                 | Basic<br>specialty | $\checkmark$ | ſ   | 1 | $\checkmark$ | $\checkmark$ | $\checkmark$ | ✓            |  |
|   |       | Pp0112        | Summer vegetable<br>crops          | Basic<br>specialty | $\checkmark$ | ,   | / | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|   |       | Pp0113        | Sustainable fruit<br>production*   | Basic<br>specialty | $\checkmark$ | ``  | 1 | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  |
|   | pring | Pp0114        | Nurseries*                         | Basic<br>specialty | $\checkmark$ | ``  |   | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  |
| C | ourse | Pp0115        | General insects                    | Basic<br>specialty | $\checkmark$ | ,   | 1 | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  |
|   |       | <b>Pp0116</b> | Statistics and experiment planning | Assistant          | $\checkmark$ | ``  | 1 | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  |
|   |       | Pp0117        | Farm management                    | Assistant          | $\checkmark$ | , I |   | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|   |       | Pp0108        | Computer applications              | Assistant          | $\checkmark$ | ``  | 1 | ✓            | $\checkmark$ | ✓            | ✓            |  |
|   |       | Pp0110        | English language                   | General            | $\checkmark$ | r   | / | ✓            | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|   |       | Pp0121        | Protected agriculture              | Basic<br>specialty | ~            | ſ   | / | ~            | $\checkmark$ | ~            | ✓            |  |
|   |       | Pp0122        | Breeding and<br>improving plants*  | Basic<br>specialty | $\checkmark$ | ,   | 1 | ✓            | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |

|                |        | Pp0123 | Seed production                       | Basic<br>specialty | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | ✓            |
|----------------|--------|--------|---------------------------------------|--------------------|--------------|--------------|--------------|--------------|--|--------------|--------------|
|                |        | Pp0124 | Plant diseases                        | Basic<br>specialty | $\checkmark$ | ✓            | $\checkmark$ | ~            |  | $\checkmark$ | ✓            |
| The            | Autumn | Pp0125 | Tissue and plant cell<br>culture*     | Basic<br>specialty | ~            | ✓            | $\checkmark$ | $\checkmark$ |  | ✓            | ✓            |
| second<br>Year | course | Pp0126 | Fall fruit production*                | Basic<br>specialty | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  | ✓            | ✓            |
|                |        | Pp0127 | Irrigation and<br>salinity*           | Assistant          | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  | ✓            | ✓            |
|                |        | Pp0128 | Graduation research<br>project*       | Basic<br>specialty | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  | ✓            | ✓            |
|                |        | Pp0129 | Computer applications                 | Assistant          | $\checkmark$ | $\checkmark$ | $\checkmark$ | ✓            |  | $\checkmark$ | ✓            |
|                |        | Pp0130 | English language                      | General            | $\checkmark$ | $\checkmark$ | ✓            | $\checkmark$ |  | ✓            | ✓            |
|                |        | Pp0138 | Baath Party crimes in<br>Iraq         | Assistant          | $\checkmark$ | $\checkmark$ | ~            | $\checkmark$ |  | ✓            | ✓            |
|                |        | Pp0131 | Decorations and garden<br>engineering | Basic<br>specialty | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | ✓            |
|                |        | Pp0133 | Fodder crops and<br>pastures          | Basic<br>specialty | $\checkmark$ | ✓            | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | ✓            |
|                |        | Pp0132 | Care and storage*                     | Basic              | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |

|   |                |        |                                 | specialty          |              |              |              |              |              |              |              |  |
|---|----------------|--------|---------------------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
|   |                | Pp0134 | Jungles and their<br>control*   | Basic<br>specialty | $\checkmark$ | ✓            | $\checkmark$ | ✓            |              | ~            | ✓            |  |
| _ | pring<br>ourse | Pp0135 | Beekeeping                      | Basic specialty    | $\checkmark$ | $\checkmark$ | $\checkmark$ | ~            |              | $\checkmark$ | $\checkmark$ |  |
|   |                | Pp0136 | Organic agriculture *           | Basic<br>specialty | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |              |  |
|   |                | Pp0137 | Fertility and fertilization*    | Assistant          | $\checkmark$ | $\checkmark$ | $\checkmark$ | ~            | $\checkmark$ | $\checkmark$ |              |  |
|   |                | Pp0128 | Graduation research<br>project* | Basic<br>specialty | $\checkmark$ | $\checkmark$ | $\checkmark$ | ~            |              | $\checkmark$ | ~            |  |
|   |                | Pp0129 | Computer applications           | Assistant          | $\checkmark$ | $\checkmark$ | ✓            | ✓            |              | $\checkmark$ | $\checkmark$ |  |
|   |                | Pp0130 | English language                | General            | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |              | $\checkmark$ | $\checkmark$ |  |

• Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

# **Course Description Form**

1. Course Name:

Department of Plant Production Technologies

2. Course Code:

3. Semester / Year:

Corsi

4. Description Preparation Date:

29/2/2024

5. Available Attendance Forms:

Class

6. Number of Credit Hours (Total) / Number of Units (Total)

140/140

7. Course administrator's name (mention all, if more than one name) Name: Assis. Pro. Dr Haider Abadi Nasser Al-Issawi

Email: haider-alisawi@atu.edu.iq

8. Course Objectives

| -                 |  |
|-------------------|--|
| Course Objectives | <ul> <li>Introducing the student to the most important agricultural systems, methods of establishing an maintaining them, and the movement of machinery.</li> <li>Developing the student's skills and administrative aspects to obtain the most production at the lowest cost and in shortening time.</li> <li>Learn about methods of combating various</li> </ul> |
|                   | agricultural pests and diseases, how to control<br>jungles, and provide the best protection for crop   |

# 9. Teaching and Learning Strategies

| Strategy | Education strategies  |
|----------|---|
|          | It includes a set of general rules and broad outlines that concern means of achiev  |
|          | the desired goals of teaching through advance planning and setting future plans     |
|          | (presentation - coordination - training - discussion), organizing the classro       |
|          | environment, and classroom management for the purpose of developing stude           |
|          | education.  |
|          | Learning strategies   |
|          | It includes the behaviors and procedures that students engage in that aim to influe |
|          | how they are able to process information and learn different tasks. Learning        |
|          | strategic when students are aware of the special skills and strategies (spec        |
|          | procedures and methods) that they use in learning.                                  |

|           | e Structu              |                                    |   |           |                     |
|-----------|------------------------|------------------------------------|---|-----------|---------------------|
| Week      | Hours                  | Required Learning                  | Unit or subject                             | Learning  | Evaluation          |
|           | <b>A</b> TE <b>A</b> D | Outcomes                           | name  | method    | method              |
| The first | 2T- 4P                 | To be able to                      | Learn how to distinguish between            | Alecture  | Evaluation          |
|           |                        | identify seeds and                 | distinguish between<br>crop seeds and their |           |                     |
|           |                        | how to plant them                  | types                                       |           |                     |
| The       | 2T- 4P                 | Knowing the types                  | Identify vegetable                          | Alecture  | Evaluation          |
| Second    |                        | of winter and                      | crops, suchas, tomatoes,                    |           |                     |
|           |                        | summer vegetable                   | eggplant,peppes,and                         |           |                     |
|           |                        | crops                              | others                                      |           |                     |
| The Third | 2T- 4P                 | Identify the types                 | Knowledge of fruit                          | Alecture  | Exam                |
|           |                        | of deciduous and                   | trees such as                               |           |                     |
|           |                        | perennial fruit trees              | pomegranate, apple                          |           |                     |
|           | AT 4D                  | Tarin 1 (                          | and apricot                                 | A 1 /     | E                   |
| The       | 2T- 4P                 | Learn how to                       | Learn about the types<br>of nurseries and   | Alecture  | Evaluation          |
| Fourth    |                        | create nurseries                   | orchards and how to                         |           |                     |
|           |                        | and orchards                       | engineer them                               |           |                     |
| The Fifth | 2T- 4P                 | Learn about forest                 | Knowing the types of                        | Alecture  | Evaluation          |
|           |                        | trees and their                    | forest trees, how to                        |           |                     |
|           |                        | benefits                           | propagate and plant                         |           |                     |
|           |                        |                                    | them  |           |                     |
| The Sixth | 2T- 4P                 | Identify the types                 | Identify the types of                       | Alecture  | Exam                |
|           |                        | of agricultural soils              | coarse and fine soil<br>and how to plow and |           |                     |
|           |                        | and how to                         | cultivate them                              |           |                     |
|           |                        | preserve and repair                | cultivate them                              |           |                     |
| The       | 2T- 4P                 | them                               | Learn about the types                       | A 1       | E                   |
| Seventh   | 21-4P                  | Learn how to establish apiaries,   | of bees and apiaries,                       | Alecture  | Exam+<br>Evaluation |
| Seventii  |                        | raise bees, and                    | how to establish an                         |           | Evaluation          |
|           |                        | produce honey                      | apiary, how to raise                        |           |                     |
|           |                        | produce noney                      | bees, and the types of                      |           |                     |
|           |                        |                                    | bees  |           |                     |
| The       | 2T- 4P                 | How to grow crops                  | Learn how to                                | Alecture  | Evaluation          |
| Eighth    |                        | under protected                    | Growcrops, under                            |           |                     |
|           |                        | conditions                         | Protected conditions                        | . 1       |                     |
| The Ninth | 2T- 4P                 | Working in the                     | Learn how to                                | Alecture  | Exam +              |
|           |                        | field of plant tissue              | produce plants using tissue culture         |           | Evaluation          |
|           |                        | culture in the                     |   |           |                     |
| The 441   | 2T 4D                  | laboratory                         | Learn about the use of                      | A 1.0 - 4 | Excluse the se      |
| The tenth | 2T- 4P                 | Harvesting and                     | reaping and harvesting                      | Alecture  | Evaluation          |
|           |                        | harvesting field                   | machines                                    |           |                     |
| Eleventh  | 2T- 4P                 | crops                              | Identify the types of                       | Alastura  | Evaluation          |
| Lieventin | 21-4P                  | Use of agricultural                | agricultural machinery                      | Alecture  | Evaluation          |
|           |                        | machinery and                      | and their uses                              |           |                     |
|           |                        | machinery in                       |   |           |                     |
| Twelveth  | 2T- 4P                 | agriculture                        | Learn about ancient                         | Alecture  | Exam +              |
| 1 weiveth | 21-4P                  | Using modern<br>irrigation methods | and modern irrigation                       | Alecture  | Exam + Evaluation   |
|           | 1                      | Inigation methods                  | and modern miganon                          |           |                     |

|            |        | combating jungles and insects                                   | control, types of<br>pesticides, and types<br>of sprays                                  |          | Exam +<br>Evaluation   |
|------------|--------|---|--|----------|------------------------|
| Fourteenth | 2T- 4P | The most<br>important types of<br>insects and plant<br>diseases | Identify the types of<br>insects and plant<br>diseases that affect<br>agricultural crops | Alecture | Exam +<br>Evaluation   |
| Fifteenth  | 2T- 4P | A scientific visit to<br>the governorate's<br>fields            | Conduct a scientific<br>visit to the<br>conservative fields                              | Alecture | Evaluation +<br>report |

The student's evaluation in the educational program depends entirely on daily preparation, daily, oral, monthly and written exams and reports, noting that the passing grade is (50%) and 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 my work |                     |             |           | Article that does not contain my work |                     |             |
|----------------------------|---------------------|-------------|-----------|---------------------------------------|---------------------|-------------|
| The exam                   |                     | Theoretical | Practical | The exam                              |                     | Theoretical |
|                            | <b>First month</b>  | 10%         | 10%       |                                       | First month         | 20%         |
| Pursuit                    | exam                |             |           | Pursuit                               | exam                |             |
|                            | Second              | 10%         | 10%       |                                       | Second              | 20%         |
|                            | month exam          |             |           |                                       | month exam          |             |
|                            | <b>Evaluation</b> * | 5%          | 5%        |                                       | <b>Evaluation</b> * | 10%         |
|                            | Final               | 40%         | 10%       |                                       | final exam          | 50%         |
|                            | The total           | 65%         | 35%       |                                       | Total               | 100%        |
|                            |                     |             |           |                                       | degree              |             |

\* 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 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.

| 12. Learning and Teaching Resources                             |   |
|---|---|
| Required textbooks (curricular books, if any)                   | Book of basics of plant diseases - Book of how<br>to become a beekeeper - Book of soil fertility<br>and plant nutrition - Book of garden insects -<br>Book of the botanist - Book of plant<br>biotechnology |
| Main references (sources)                                       | First: peer-reviewed scientific journals.<br>Second: Academic books.<br>Third: Websites.<br>Fourth: Scientific encyclopedias.<br>Fifth: Scientific research.  |
| Recommended books and references (scientific journals, reports) | Methodical books - educational portfolios -<br>laboratories - summer training.  |
| Electronic References, Websites                                 | Agricultural websites.  |